A FOUCAULDIAN ARCHAEOLOGY OF

MODERN MEDICAL DISCOURSE

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Dedications

For Sulaiman, my better half, the universe in which I live, love and laugh.

For Seyawash, the apple of my eye, and the ultimate joy of my life.

And,

for Foucault, the most fascinating thinker I have known to date.

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Homaira M. Azim

A FOUCAULDIAN ARCHAELOGY OF MODERN MEDICAL DISCOURSE

Medical education researchers have long been interested in understanding medical professional identity formation and its implications for the healthcare system. Various theories have been proposed to explain identity formation. Among them, Foucault's discourse theory maintains that it is the discourse of medicine that constitutes medical professional identities. This study deployed a Foucauldian archaeological methodology to analyze the structure of modern medical discourse and establish links between discourse and professional identity formation in medical students. A total of forty-six medical students at Indiana University School of Medicine participated in either individual or focus group interviews. Direct observation of the clinical and educational settings was also performed, which resulted in additional textual data in the form of fieldnotes. Archaeological analysis of discourse was undertaken in three levels of the statements, the discursive elements, and the discursive rules and relations. Results entailed a detailed depiction of the structure of medical discourse including discursive objects and modes of enunciation, discursive concepts, and theoretical strategies related to each object. Discursive objects are things that are talked about in modern medical discourse. This study identified four discursive objects as disease and treatment, the doctor, the human body, and the sick person. Modes of enunciation are the different ways in which people talk about objects of medicine, whereas concepts consist of the notions people draw from when talking about objects of medicine. Theoretical strategies indicate certain positions that people take in relation to the objects of medicine. Rules of formation and conditions of existence for each discursive element were also established. Since Identities are

entrenched through language and interaction, developing a systematic understanding of the structure of medical discourse will shed new light on medical professional identity formation. Results of this study also have profound implications for teaching professionalism and medical humanities in medical curricula. Furthermore, as a research methodology used for the first time in medical education, archaeology not only opens new territories to be explored by future research, it also provides an entirely new way to look at them.

James J. Scheurich, Ph.D., Chair

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List of Abbreviations

AK	The Archaeology of Knowledge (Foucault, 1972)
AMA	American Medical Association
ACGME	Accreditation Council for Graduate Medical Education
BC	The Birth of the Clinic (Foucault, 1975)
DO	Doctor of Osteopathic Medicine
FG	Focus Group
INT	One-on-one Interview
IU	Indiana University
IUSM	Indiana University School of Medicine
LCME	Liaison Committee on Medical Education
MC	Madness and Civilization (Foucault, 1988)
MD	Medical Doctor
MS1	First-year medical student
MS2	Second-year medical student
MS3	Third-year medical student
MS4	Fourth-year medical student
NBME	National Board of Medical Examiners
OBS	Direct Observation
OT	The Order of Things (Foucault, 2010)
USMLE	United States Medical Licensing Examination

Chapter 1: Introduction

This study is about medical professionalism, medical professional identities, and the way medical discourse functions to produce, shape and reshape both medicine and medical identities. These topics are so entangled that it is not possible to study their implication separately while attempting to understand the discourse of medicine. Further, a central claim in the present inquiry is that medicine needs theorizing. The word *medicine* evokes in one's mind the image of a unity that is formed based on necessity and convenience, not on proper theorization. The current, undefined unity of medicine is rather derived "from its autonomous historical development" (Webb, 2013, p. 73). It is not entirely clear what is meant and what is not meant by the word *medicine*. This might sound strange to those who are not sure why something as *familiar* as "medicine" should need theorizing. Let us try asking a few questions here to test this familiarity: What does medicine refer to as a profession? What is the goal of medicine as a social practice? What does medical professionalism mean? Who defines medicine? Which medicine? Practiced by whom? Legitimized by whom? In which era? Whose definition is best? Who is speaking? To whom? What's medicine to you? One can see that things are not as simple as they might seem to be under the shadow of familiarity. As Gutting (1989) affirms:

> Modern medicine is characterized by a continual conflict of competing theoretical interpretations. Even the modern period, therefore, has been unable to develop a coherent theoretical account of medicine. (p. 97).

It is worth mentioning that the intention behind challenging the unity of medicine is not meant to deny all value to its uses based on necessity; it is to show that it requires theoretical elaboration in order to be defined (Foucault, 1972, p. 71). So long as the unity of medicine is not theorized, its claim of being a science cannot be verified for the very

reason that “it does not examine its own concepts and objects carefully enough to see the dispersion within them” (Webb, 2013, p. 61). An archaeological methodological pursuit (Foucault, 1972) of the modern medical discourse insists to do just that. In other words, present archaeological study stipulates to define *medicine* as a field of coexistence for various concepts and establish “the rules to which this field is subjected” (Foucault, 1972, pp. 60-61)

Medical Professionalism

Professionalism is one of the few topics in modern medical discourse that continue to exist on abstract terms. To date, no concrete definition of *medical professionalism* has been conceived that can be deemed as universally acceptable. Teaching professionalism is nonetheless part of the formal medical curriculum in North American medical schools. Some scholars believe professionalism stands for medical morality (Huddle, 2005). According to this belief, professionalism refers to the capacity for moral reasoning and making ethical judgments among several other values (Inui et al., 2006). Medical professionals are expected to adopt professionalism to develop and represent their medical professional identity (Monrouxe, 2010). It needs to be noted that medical professional identity does not signify one’s professional title as a medical student or a physician, nor does it refer to a certain skill set once might possess. It is rather what one *does* as a medical professional that denotes one’s professional identity (Jenkins, 2008). Nonetheless, to define what thinking and acting as a medical professional actually look like remains to be a subjective call.

Medical Professional Identity

The notion of professional identity formation in medical students has profound implications for medical education, as the ways in which future doctors would make sense of medical profession–and of themselves in relation to medical profession–directly translate into their professional practice in the future (Monrouxe, 2010; Monrouxe et al., 2011). How doctors position themselves in relation to the patient and in relation to medicine in general makes all the difference in how they act towards their patients in professional settings. Medical students construct their professional identities as a result of their interactions with professional settings as they go through their medical training (Monrouxe, 2009b). These include formal and informal settings such as classrooms, laboratories, small-group sessions, hospital wards, libraries, and so on. Not to forget, "what is taught to, learned by, and evaluated in today's students and trainees will influence both practice patterns and the value system of the medical profession of tomorrow" (Cruess & Cruess, 2008, p. 756). It is also important to remind ourselves that medical students and physicians are human beings just like everybody else. They bring their life histories, multiple identities (e.g., race, ethnicity, gender, sexual orientation) and personal value systems with them as they enter the medical profession. Perhaps one day science will succeed in creating robots that can undertake medical activities (e.g., perform surgeries). Until then, we are stuck with human beings who are flesh and blood, have emotions, values, and judgments that can impact the way they go about doing medicine.

There is a vast literature suggesting the value-based judgments of physicians in clinical practice is seriously affecting patient care. Higashi and colleagues performed an

ethnography of two tertiary-care teaching hospitals in Northern California in 2013, and found that physicians were dividing up their patients into two major categories: those who are *more worthy* of the physicians' time and attention and those who are *less worthy* of these privileges (Higashi et al., 2013). Those who were classified as *less worthy* consisted of: drug addicts, homeless, defiant and rude patients, frequent visitors to the hospital, and the elderly. Physicians stated that they found working with these types of patients "less interesting" at best and "especially frustrating" at worst. Conversely, patients who were considered to be *more worthy* of the physicians' time and attention included: wealthy individuals, colleagues who are in the medical profession themselves, wives of important attending physicians, as well as patients who were young, educated, socially engaging and interactive (Higashi et al., 2013).

A good number of such groupings happen unintentionally as physicians try to keep things moving under the stressful environment of the hospital. After all, they only have a certain amount of time and need to prioritize things. For example, they have to decide who needs more attention in order to be more efficient with their time, and that is when the value-based judgments enter the picture. There is also the problem of implicit or unconscious bias (Fitzgerald et al., 2019; Marceline et al., 2019; Matthew, 2018). According to this concept, people may engage in discriminatory behaviors without a conscious intention for doing so. Implicit bias leads one to act in accordance to certain stereotypical schemas that one has internalized at some point in the past without actually being aware of it (Pritlove et al., 2019).

One's medical professional identity is also determined by professional relations that one maintains as a doctor. Appropriate interprofessional relations are crucial to

develop and maintain as they are fundamental parts of modern healthcare delivery system. In the clinical settings, patients are not treated by physicians alone. Rather, medical care is provided in the form of an interprofessional team-effort by physicians, allied health professionals, and social workers. Despite the fact that medical practice depends upon the huge body of healthcare workers for technical aid, the structure of healthcare teams is characteristically hierarchical (Lingard et al., 2012; Punshon et al., 2017). More often than not, physicians end up occupying their position right at the tip of the power-pyramid. It has been argued that the hierarchical structuring frustrates open and participative communication among members of interprofessional team, having serious implications for patient care (Bleakley et al., 2004). This can have serious implications for patient care.

For instance, one study based on the thematic analysis of 444 malpractice litigation claims as well as interviews with 38 surgeons indicated that 24–43% of surgical errors happen due to non-technical issues, such as miscommunication among surgical team members (Gawande & Zinner, 2003). Another study that examined 240 malpractice claims involving trainee surgeons found that 70% of medical errors were related to team-based miscommunication (Singh et al., 2007). The Joint Commission on the Accreditation of Healthcare Organizations in U.S. (2004) also placed the figure at 70%; while the Institute of Medicine's study To Err is Human puts the figure as 70–80% (Kohn et al., 2009). The latter study also suggests that 50% of these are avoidable mistakes and have nothing to do with technical knowledge or skills of the surgeons or other surgical team members.

In sum, students develop their professional identities based on their understanding of medical professionalism. As argued earlier, the way one defines the function of the doctor in medicine, the way one positions one's self in relation to other healthcare professionals and in relation to the society at large affects how one *acts* as a medical professional. In medical education, we care about students' professional identity formation process and factors that might affect this crucial process during medical school training. Looking at the big picture, what constitutes formation of medical professional identity is really the medical discourse itself. Let us now turn to discuss what discourse means and how it relates to medical professionalism and professional identity formation.

Medical Discourse

A "discourse" is "a historically evolved set of interlocking and mutually supporting statements that are used to define and describe a subject matter" (Butler, 2002, p. 44). Roughly put, a discourse is the language of the main intellectual disciplines (e.g., legal discourse, medical discourse, aesthetics discourse, advertisement discourse, political discourse). Discourses play a central role in social institutions. The regulation of institutional practices as well as valuing and justification of certain actions and not others within an institution are functions of the discourses that are present within that institution. In other words, a discourse is "an institutionalized way of believing, thinking and acting that includes allowing social boundaries to define what can and cannot be said about a particular topic" (Razack et al., 2015, p. 37).

There are many different definitions for the term *discourse,* provided by different theorists in different disciplines. Consequently, there are also different methods for discourse analysis. Michel Foucault's discourse theory, which is adopted in this study, is

but one way to analyze discourse. Foucault provides a succinct account of discourse theory in his studies of the history of practices in law, medicine and penal systems. Foucault's theory of discourse evokes that *reality* itself is constructed by discourses. This explains why there are multiple realities in the world, each constructed by the local and specific discourses. Foucault is captivated by the idea that at a certain conjuncture of time and space, certain ways of thinking are endorsed as *true* while others are not. Let us take religious discourse as an example. The institution of religion (Christianity, for instance) sanctions only certain types of assertions about creation of the world and rejects any other hypotheses as false. Thus, the competition between conflicting beliefs (e.g., religious versus the scientific discourse) becomes a political matter and part of a contest for power (Butler, 2002).

However, discourses are not always immediately visible and people are unaware of the ways in which a particular discourse constitutes their reality. Discourses also have a way of *naturalizing* themselves overtime. Thus, the more dominant a discourse is within a community, the more natural and commonsensical it would seem to the people in that community. The naturalization process explains why scientific biomedical discourse (as opposed to alternative medical systems) sounds like the most commonsensical way of making a medical diagnosis in mainstream U.S.-based hospitals today. It is due to this naturalization that we internalize the norms of discourses around us to the extent that those norms become innate parts of our daily language.

For example, it is unlikely that one would think of wearing a pink lab coat (instead of a white lab coat) in clinical settings. We tend to accept the discursive limits as though they were "facts about nature rather than psychologically and politically

motivated features of our talk about it" (Butler, 2002, p. 47). To take another example, it is unlikely for a college student to sit on their desk instead of a chair during a lecture. That is because the discourse of college classroom decorum suggests otherwise. The point here is not to say that people should or should not sit on a desk rather than a chair. It is only to say that most things we do or not do on a daily basis are not the results of our *personally* thought out ethical decisions. Rather, they are dictated to us by a discourse. It is important for medical educators to consider how medical students understand the essential purpose of medical practice and how those understandings might inform and influence their professional behavior as a physician in the future.

As mentioned above, there are various approaches to the analysis of discourse in the literature. Some scholars have pointed out that discourse analysis refers to interrelated sets of texts (e.g., written, conversational, observational) and practices of their production, dissemination and reception (McNaughton, 2013). Both formal and informal curricula in medical education are considered to constitute the kind of texts that have consequences for the way things are done in medical education (Bleakley et al., 2011; Hafferty & Franks, 1994). These include ways in which students make sense of themselves in relation to their institutions and in relation to the clinical professional settings, which is roughly the same as the definition for the professional identity formation (Monrouxe, 2009). As a result of such texts, different ideas about medicine as a social practice are taken to be both embodied and enacted by medical students.

A rather more complicated method for analysis of discourse is proposed by Foucault in The Archaeology of Knowledge [AK] (Foucault, 1972). Archaeology in a Foucauldian sense is a research methodology with its own specifically defined analytical

approach. The archaeological analysis of modern medical discourse, which the present study is deploying, focuses on medical identity as practiced, as well as language that is shaped within institutional settings through social relations. Thus, discourses can be investigated as "forms of social action that create effects in the world" (McNaughton, 2013, p.72).

It is worth pointing out here that the word medicine in this study does not refer to the body of medical scientific knowledge. Rather, the present study is interested in the structure of medicine as a social practice, a profession, and a discourse. Furthermore, we should note that discourses are sensitive to temporo-spatial changes. They undergo transformations at different eras and when making it into new spaces. Medicine has witnessed transformation of its discursive elements several times across the history, changing in multiple levels to the point that medical discourse itself and its borders with other disciplines were faced with the challenge of maintaining their definitions (Webb, 2013, p.61). For that reason, it is obvious that medicine in sixth century, sixteenth century, and eighteenth century were not the same as medicine in 21st century. It is not only the difference in their scientific character but also in the variety of the discursive elements in each period that sets them apart.

In addition, the discourse of medicine consists of various domains and therefore its claims to be based on empirical scientific knowledge alone needs further reassessment. Unlike strictly scientific disciplines that are often homogenous, modern medicine embraces a variety of nonscientific practices as well as scientific ones. The discourse of medicine consists of not only medical scientific statements but also the ideological, philosophical, commonsensical, and broadly subjective statements. In

Foucault's words, clinical discourse consists of groups of hypotheses "about life and death, of ethical choices, of therapeutic decisions, of institutional regulations, [and] of teaching models". Moreover, clinical medical practice is not universally homogenous or scientifically standard. Depending on its temporo-spatially marked features, clinical discourses can be controversial in character, open to philosophical and ethical options, and in certain cases quite exposed to political manipulation (Foucault, 1972, p.35). According to Gutting:

> Modern medicine sees itself as based on a body of objective, scientific knowledge (e.g., that of pathological anatomy). Moreover, it thinks it has achieved this knowledge simply by, for the first time, looking at the human body and its diseases with a clear and unbiased empirical eye. Foucault, however, sets out to show that modern medicine is no more a matter of pure observation than was, for example, the medicine of the seventeenth and the eighteenth centuries. In both cases, medical knowledge was based not on a pure experience, free of interpretation, but on a very specific way of perceiving bodies and diseases, structured by a grid of a priori conceptions. (Gutting, 1989, p. 4)

After all, regardless of the time and space, medical practice always happens under rule-governed conditions. That is, medicine is a social practice at its roots and therefore cannot exist independent of its worldly conditions since it is "utterly embedded in the world" (Webb, 2013, p. 107). It is a thing of this world, and as such, inescapably happens under the conditions of this world. The *ideal* medicine representing a "pure interiority" has never existed nor will it ever do in the future. Ideality in this case is nothing but a naive illusion (Webb, 2013).

Correspondingly, the body of medicine is made up of various types of statements (e.g., biomedical scientific, philosophical, ethical, religious, and political) with descriptive statements being "only one of the formulations present in medical discourse" (Foucault, 1972, p. 33). It is important to know which specific statements (linguistic or

behavioral) are emerging within the modern discourse of medicine and what kind of effects they might have on medical students' professional identity formation. Furthermore, given that medical discourse is made of different types of statements, theorizing the unity of its domain requires taking an interdisciplinary approach to inquiry. Put in another way, medicine is borrowing concepts and themes from various discourses, which need to be accounted for in an attempt to define the limits of modern medical discourse.

Let us look at an example to demonstrate the practical overlap between various unities making up the body of medicine. Certain disciplines such as sociology, anthropology, ethics and education have been recognized for quite some time now. Yet, those familiar with medical humanities[1] research will admit that there is extensive overlap between the topics explored by medical sociology, medical anthropology, medical ethics, and medical education. For example, the hospital environment is researched separately by scholars in the fields of medical sociology, medical ethics, medical anthropology, as well as medical education. Scholars of these subdisciplines keep re-inventing the wheel in their own terms since there is often minimal constructive and sustainable interdisciplinary communication among them at the formal level. For example, medical education researchers rarely cite research done in medical anthropology or even medical ethics. Thus, an interdisciplinary discussion of findings, which can be very relevant to medical education, is largely missing from the academic

[1] Medical humanities refers to an interdisciplinary field that includes humanities (e.g., ethics, philosophy, religion, and history), social sciences (e.g., sociology, anthropology, psychology, and cultural studies) and arts (literature, visual arts, films, and theatre), as well as their application to medical education and practice.

scene. For example, a medical education researcher sets out to study the hospital environment and the effects it might have on surgery residents. She looks into the research done in medical education literature, identifies a gap and designs her study. She may not look into the literature in medical anthropology and medical sociology but it is very likely that they contain a lot of useful literature relevant to the same topic that this researcher remains unaware of, and thus, sets out to reinvent the wheel that has already been spinning.

The overlap among research domains as described above complicates the job for the researchers in medical humanities, especially, of those who attempt to analyze and define modern professional or academic discourses. The fact that the borders between modern disciplines are "more like the result of messy negotiations rather than clean incisions" makes it hard to attribute a statement to any single discipline alone (Webb, 2013, p. 133). In a Foucauldian archaeology, a "statement" is taken as the smallest functional unit of enunciation. Problems arise when one comes across a statement such as the following: "surgery residents are often burnt out by their heavy schedule, which affects the quality of their performance". There are no clear-cut criteria for deciding whether this statement belongs to the realm of medical education, medical anthropology, medical ethics, medical sociology, or modern history of medicine. The point I am trying to establish here is that statements such as the one in the example above are part of the discourse of modern medicine at any rate, and they are important if we are to have a theoretical elaboration of what *medicine* as a social practice looks like. To further complicate the situation, the borders between the above disciplines are not only blurry at cross-examination, they are also constantly changing with time. After all, literature,

politics, and philosophy did not populate the field of medical discourse in the seventeenth or eighteenth century as much as they do now (Foucault, 1972, p. 22). That is because medicine is a discursive formation and the rules of all discursive formations are inexorably time and space-bound.

It is important to note that research produced by each of the subdisciplines mentioned above is related to the modern discourse of medicine, even though it is not often when this research is being used for achieving optimal medical practice. For instance, medical sociology, explores issues related to medicine as a social practice. One is tempted to wonder, then, is that not what medicine needs to know in order to define its limits and theorize its discourse? Do medical professionals typically read research done by medical humanities scholars? If not, what exactly is the use of medical humanities' research if its findings are not used by medical professionals to enhance the practice of medicine? Sadly, much of this research is developed to live and die within their own academic disciplines. This is but one example of the numerous instances where creating too many silos in the name of individual disciplines can become a major problem in itself.

Getting back to the discussion of discourse, it is known that discourses create limits for what can be said, done, and even thought about a certain object. Hence, "at a given period, there are, in total, relatively few things that are said" (Foucault, 1972, p. 119). We are all subject to social discourses that are present around us in our own time and space. One way to expand the horizon of our thoughts and actions in this situation is to take up an interdisciplinary approach to medical humanities research. This approach

can help medical education researchers see more events and instances that might need their attention. As Webb (2013) puts it,

> there is nothing to prevent old habits of thought and analysis from being shaken up to form new perspectives, with new objects in view, and that what Foucault presents as an invisible condition of experience might become visible (for example, patterns of regularity that only appear when one looks across several disciplines at once) (p. 113).

Therefore, the present inquiry takes an interdisciplinary approach to blend what is already known about medicine as a social practice and use that literature as basis for the present archaeological analysis. Archaeology is the specific Foucauldian approach to discourse analysis that is adopted in the present study. It is my belief that taking an interdisciplinary approach for defining the structure of modern medical discourse using archaeology can greatly augment the field of medical education research.

Problem Statement

People develop their personal values and beliefs as a function of dominant social discourses (Mills, 2004; Foucault, 1981). The point that I am hoping to establish here is that discourses set up the ways we do things in general. They set up limits on what we think is true, what is possible to say, and to do. We follow the norms of discourses as though they were common sense without always being aware of their socially constructed nature. People make sense of who they are and what they are supposed to do as a result of their interactions with the world around them. One example of this is formation of medical professional identities as a function of medical discourse. In medical education, we care about medical students' identities. Today's students are tomorrow's doctors, and the way doctors position themselves in relation to the world around them has a direct impact on how they perform their duties. Identities include personal and professional

value-systems that together create a lens through which one sees the world. Physicians' value-systems interact with those of their patients and the process affects patient care as well as the healthcare delivery system at large.

For these reasons, the structure of modern medical discourse needs to be analyzed and understood. Various objects, modalities of enunciation, concepts, and theoretical strategies about medicine that inform our medical talk need to be identified and examined for their impact on medical students' professional identity formation as well as both the practitioner's and patient's well-being. An expanded knowledge of how medical students position themselves in relation to medicine as a social practice can make invisible and unexamined assumptions that serve to reproduce problematic professional behaviors come to the surface. Moreover, medical students' positioning in relation to medical profession directly determines their position in relation to medical professionalism, which in turn establishes their professional identity.

Thus, as medical educators, we need to be aware of the medical student discourses. That is, we need to be aware of the ways in which they connect themselves to the essence of medicine as a social practice and the ways in which they define medical professional behavior. Furthermore, it is important for us as medical educators to reflect upon and challenge our own unexamined assumptions that are based on social discourses, our overall positionality in partaking in the professional discourse and the impact they might have on our students. An archaeological discourse analysis, such as the one undertaken by this study, can tremendously enhance the discussion of such concerns, all of which are vital in day-to-day medical education and practice.

It is worth reiterating here that defining what counts as "truth" in a certain age and within certain communities is a function of the dominant social discourses. The term "truth" here refers to certain belief that are considered to be true. As can be imagined, the "truths" constructed as effects of the dominant social discourses can be completely baseless even when they sound nothing less than commonsense due to the naturalizing effect of powerful discourses. Just like public and political discourses, healthcare education is not–and has never been–immune to the "slippery uses of fact and overtly manufactured truths" (Hodges, 2017, p. 235). One example of this can be found in American Medical Association's (AMA) president, Alfred Stillé's inaugural speech, delivered in 1871 (Stillé, 1871). In that speech, Stillé referred to women as being "totally unfit" to practice medicine because of their "uncertainty of rational judgment, capriciousness of sentiment, fickleness of purpose" and "a profound contempt for the logic of facts" (Stillé, 1871; cited by Hodges, 2017, p. 236). Stillé's way of addressing was clearly based on the dominant discourse of gender in his time and not grounded in research evidence.

Regardless of how baseless they might sound to some of us today, statements like the ones made above have reigned in their own era, have been accepted as truth by many, and have therefore brought about profound consequences for several decades to come. The echoes of similar themes related to the discourse of gender caused minimal or no participation of women in the field of medicine for several years after 1871. Becker, and colleagues performed a classic ethnography of the University of Kansas Medical School in 1961, which was published under the title Boys in White. Here is how they describe the student body in their book:

> In 1958, 94 new students entered the first year of the school… The overwhelming majority of students are men, but each class contains a number of women, ordinarily around five. Similarly, the overwhelming majority of students are native-born and white. Each class will contain a few students from such faraway places as Central America or Africa, as well as a small number of women and Negroes, possibly four or five. The small numbers of women and Negroes do not reflect any intent to discriminate. The school gets very few applicants of either category (Becker et al., 1961, pp. 53, 60).

Thus, they saw fit to focus on male students only, in their study (of medical education environment), hence the title of the work: *Boys in White*. The passage above makes it evident that we have come a long way in medical education since 1961. It also makes it possible to catch a glimpse of the power of dominant social discourse in shaping public opinions that guide public behavior and corroborations in relation to certain things that are accepted as "truth" within a specific culture.

What counts as truth, therefore, seems to depend on the discourses that are dominant in a certain era, more than anything else. Even when factually incorrect, an opinion can be firmly held in place by political, legal and academic institutions. Do such synthetic "truths" exist in our age? They certainly do; though they are much more difficult to spot since we are living in the same era as them and our opinions too are inevitably shaped by dominant discourses which legitimize those truths. To be sure, those who lived in 1871 did not find Stillé's words as odd and baseless as some of us will do today. That is because their opinions were shaped by the discourse on gender that was dominant in 1871. As Hodges (2017) puts it,

> just as it is valuable to watch for scientific untruths, false associations and unsupported claims in health care, it is necessary to be vigilant in order to stamp out, or at least point out, unsupported claims, traditions and beliefs in medical education (p. 236).

Indeed, medical education researchers can and should disrupt such commonly held notions of truth, first of all, by becoming aware of them through an archaeological analysis of medical discourse and identifying the ways in which this discourse is shaping our truths and our identity as people who are involved with medicine.

Purpose of the Study

This study aims at, first, analyzing the discursive formation of current medical discourse in Indiana University School of Medicine, and second, examining the ways in which these discursive practices condition the professional identification of medical students at Indiana University School of Medicine. It needs to be noted that an archaeological analysis of the modern medical discourse at the level of a medical school could have many implications for medical education. One important implication, which is emphasized in this study, is the way discourse shapes medical students' professional identities.

In archaeological analysis of discourse, "what is sought is not literally what something is, but the way that it … exists" (Webb, 2013, p. 99). Hence, this study is not looking to define what medicine is. Rather, the point of interest is in what ways medicine currently exists in Indiana University School of Medicine. That is, this study is exploring the conditions of existence for elements of medical discourse, rules and relations that bring about those conditions, and how those rules, relations and conditions play a role in forming medical professional identity in medical students. It is important for both medical educators and students to know what it is exactly that medical profession is engaged with and aiming for, what things are given the status of objects and concepts within this discourse, how are they being talked about, and what positions are possible to

be taken in relation to them. Such elements can become “manifest, nameable, and describable” only through an archaeological analysis of the medical discourse (Foucault, 1972, p. 41).

The primary focus in this study is to depict a clear illustration of the structure of modern medical discourse as a discursive formation. It is this discourse that constitutes medical students’ understanding of medicine as a profession as well as the language using which they speak about medicine. In other words, the present archaeological analysis embarks on questioning key aspects of medicine’s contemporary self-understanding. The main concern is to show how modern discourse of medicine is constituting professional identity of future doctors. It has been established (Monrouxe, 2010) that by navigating through the spaces in medical education, which are in turn shaped by the modern discourse of medicine, students change their identities and become more like the realm into which they move (Foucault, 1972; Foucault, 1975) Being in school for years, they learn to conform with the rules of conventional discourses on medicine and professionalism. It is like when “fire rises into the air, it undergoes a series of changes then eventually changes into air” (Gutting, 1989, p. 141). In this metaphor, fire represents the students whereas air represents the discourse of medicine that surrounds them from all sides as soon as they enter medical school.

In short, the basic premise of the present study is based on the Foucauldian discourse theory, which establishes clear links between discourse and identity. According to the discourse theory, it is the discourse of medicine which constitutes medical professional identities and therefore it is fundamental to study the discourse of medicine to understand the medical professional identities. Put in a different way, it is necessary to

understand (medical) discourse if we want to understand (medical) identities. Archaeology is the only methodology for analyzing a Foucauldian discourse, that is, the type of discourse that constitutes identities. However, Foucauldian archaeology is a fundamentally radical methodology with underlying philosophical assumptions that do not match most of the literature in medical education research. This is not to say that a Foucauldian approach is better than others, it is only to clarify that it is very different. Foucault's theories and archaeological methodology do not necessarily refute the literature, but they would look at the entire field of medicine from a radically different angle. That said, this archaeological study is not following the pattern set by other research and is therefore not filling a gap in the conventional structuralist research literature that is already there on medical education. Instead, it adds to the literature in medical education by providing new possibilities and exploring a new way of thinking about medical professionalism. Hence, this study is an application of the Foucauldian discourse theory in medical education.

Research Focus

This research is an exploration of the modern discourse of medicine at Indiana University School of Medicine, Indianapolis Campus, and the role of this local discourse in constitution of local medical student identities.

Theoretical Framework

The present study is largely framed on the basis of Michel Foucault's discourse theory (Foucault, 1972, 1977b, 1980, 1981) and archaeological methodology (Foucault, 1972). As such, this study is grounded in social constructionist research paradigm with postmodern understandings. This theoretical framework has played a fundamental role in

sketching the design of the present work (see Anfara & Mertz, 2015 for more on the fundamental role of theories in qualitative research). Foucault's archaeology has informed the focus of the study, research methodology, data collection and data analysis methods. His archaeological framework has guided the data analysis as well as data presentation. Archaeological analytical model used in this study is described in Chapter 3.

Overview of the Study Design and Methodology

Foucauldian archaeological methodology has been employed in this work. Data collection methods include direct observation of the clinical settings, one-on-one in-depth interviews and focus group interviews with medical students across all four years of undergraduate medical training (MS1, MS2, MS3, and MS4). Study site is Indiana University School of Medicine, Indianapolis Campus, which is a Midwestern U.S.-based medical school. Study participants included medical students across all four years of training, residents, doctors, patients and patient families. Details about study setting, participants, data collection methods, as well as the purpose and procedure for each of the data collection methods are provided in Chapter 3.

Overview of the Dissertation

Chapter 2 of this dissertation includes a review of the literature relevant to the present inquiry, including a brief review of the history of modern medical discourse, detailed descriptions of discourse, professionalism, and medical professional identity, as well as the discussion of how discourse induces the identity. This chapter also contains a detailed review of the literature related to archaeological methodology and its chief principles as developed by Foucault. Chapter 3 presents a methodological discussion of Foucauldian archaeology including descriptions of the statement, discursive elements,

discursive rules, relations and conditions, and discussion of general archaeological description. This chapter also discusses the study setting, study participants and participant selection methods, data collection methods, as well as a statement of my positionality as the researcher. Chapter 4 presents the results of the data analysis at three different levels: at the level of the statements, at the level of discursive elements, and at the level of archaeological rules, relations, and conditions. The final chapter of this dissertation, Chapter 5, will present the final discussion and conclusions of the study. This chapter also includes a general discussion of archaeological descriptions provided in Chapter 4, discussion of findings at the level of the statement, the level of discursive elements, and the level of rules, relations and conditions, and lastly, a discussion of implications of results for medical education as well as future directions needing to be pursued by research.

Chapter 2: Review of the Literature

This study explores the modern discourse of medicine and the medical professional identities. A good part of this chapter is dedicated to the review of discourse theory and archaeological methodology in the literature. Given that the present study draws heavily from discourse theory and employs archaeology as its methodological framework, a detailed discussion of these topics and how they are being adopted in this study is necessary. The present chapter begins with providing a brief history of the modern medical discourse as studied by Foucault. The reason for not consulting any other sources to contribute in providing the history of medicine is that working with Foucauldian theories requires one to develop a somewhat different sense of history, which is not consistent with traditional ways of historical description. Foucault's historical work is grounded in rejection of totalitarianism, transcendence, empiricism, chronological continuity, and the assumption that the human agent is the central figure in history. A detailed explanation of these characteristic will be provided toward the end of this chapter.

Next, the chapter progresses with reviewing the literature on the discourse theory and its rules and regulations; what is identity, what is identity formation, why they matter, and how they are inseparably linked with social discourses; approaches for analyzing the discourse, with an emphasis on the Foucauldian theories; structure and significance of discursive formations; and the difference between discursive and nondiscursive practices. In the last part of this chapter, I will provide a review of relevant literature on archaeology, which is a Foucauldian methodology for discourse analysis. This section will include an introduction of archaeology and its chief principles, as well as a

description of aspects that make it unique compared to other research methodologies and analytical approaches.

A Brief History of Modern Medical Discourse in Western Europe

The goal of this section is to review how medicine emerged as a social practice in Western Europe in the modern age. This section is based on the history of medicine in the eighteenth and nineteenth century as analyzed by Foucault (2003a, 2003b). The discussion includes an exploration of meanings that have been attached to medicine as a social practice in modern Western societies as well as three major discourses (i.e., political, urban, labor force) that have shaped the modern identity of medical practice from the eighteenth century onwards. Understanding how and why medicine came to be a social practice and the dominant discourses which drove it along the history is important. Without this basic understanding one will be unable to fit the present-day discourse of modern medicine in its appropriate context.

Looking at the development of the medical system in the West from the eighteenth century onward, three points need to be emphasized: *bio-history*, *medicalization*, and the *economy of health*. Bio-history refers to the effects of medical intervention at the biological level, which began in the eighteenth century. Medicalization denotes practices that brought several features of human existence–including human behavior and the human body–into an increasingly dense network of medical discourse. Medicalization also dates back to eighteenth century and is still a popular mode of medical social reasoning. Lastly, the economy of health signifies the integration and improvement of health, health services, and health consumption in the economic development of the privileged societies (Rabinow & Rose, 2003). The present discussion

focuses on the history of medicalization only, which is more closely linked with birth of the social medicine.

Medicine that was practiced before the rise of modern scientific medicine (sometimes called the Greek medicine) cannot be characterized as a collective or social form of medicine because it never had any social support systems associated with it (Foucault, 2003a). However, there are two important exceptions that were common practice in Middle Ages: the politico-medical actions that were taken in order to deal with cases of leprosy and plague. Upon their discovery, any cases of leprosy were immediately exiled out of the city in order to keep the rest of the population safe. This practice has sometimes been categorized as "a medicine of exclusion" (Foucault, 2003a) and it was mainly based on a religious model (Elden, 2017). A different and somewhat military-based mechanism was used to handle the epidemic outbursts of plague. In case of plague, the sick persons were not exiled but were put together in a compartment within the public sphere in order to be kept under observation. In these cases,

> medicine's political power consisted in distributing individuals side by side, isolating them, individualizing them, observing them one by one, monitoring their state of health, checking to see whether they were still alive or had died, and, in this way, maintaining society in a compartmentalized space that was closely watched and controlled by means of a painstaking record of all the events that occurred (Foucault, 2003a, p. 328).

The two systems of management for leprosy and plague, based on the religious and military models, respectively, were common in all European countries during the Middle Ages. They illustrate two forms of political power: negative and positive. The expulsion of lepers from the urban space can be considered a negative use of power, whereas, establishment of administrative strategies to control the plague was a positive use of

medical power. Nevertheless, the administrative process was based on strategies of selection, normalization, hierarchization, and centralization (Elden, 2017, p. 151).

On the other hand, the modern scientific medicine[2] is not medicine of the individual, rather, it is a social practice. The only aspect of modern medicine that involves some individualistic values–within the limits of capitalistic market relations, that is–is the doctor-patient relationship. Medicine evolved from a private practice to become a more collective, social endeavor with the rise of capitalism at the end of the eighteenth century to the beginning of the nineteenth century. In capitalism, as Foucault puts it:

> Society's control over individuals was accomplished not only through ideology but also in the body and with the body. For capitalist society, it was biopolitics, the biological, the somatic, the corporal, that mattered more than anything else. Human body was politically and socially recognized as a labor force. Thus, the body is a biopolitical reality; medicine is a biopolitical strategy (Foucault, 2003a, p. 321).

Formation of social medicine in this period can be reconstructed in the following three stages: state medicine, then urban medicine, and finally the labor force medicine.

State Medicine

State medicine was the first formal discourse of socialized medicine that developed for the first time in Germany at the beginning of the eighteenth century (Foucault, 2003a). At that time, in both France and England the only state attention put towards the health of population was through measurement of the birth and mortality rates. Beyond this, the state did not make any attempts toward the improvement of public health. The state medicine in Germany began with a program called the "medical police", was proposed between 1750 and 1770 (Foucault, 2003a). The term "police" did not

[2] Foucault defines the modern scientific medicine as medicine that was born at the end of the eighteenth century - between Giambattista Morgagni and Xavier Bichat - with the introduction of pathological anatomy. See Foucault, 1975 for more.

signify the institution of police in the modern sense, however. Reporting back at the state level, the institution of medical police performed the following functions:

- Investigating the presence of any diseases within the population–including epidemic and endemic ailments–and documenting them based on the information collected from the hospitals and doctors.
- Standardizing the medical practice and knowledge, which used to be a matter of local discretion of the universities and medical scholars before medical police was established. As a consequence, medicine and physicians were the first objects to become standardized at the state level in Germany.
- Overseeing the activity of doctors by an administrative office.
- Developing medical officers who were then appointed by the government to take charge of a region. These medical officers operated by the authority of state as well as the authority inherent in medical knowledge.

Other models of social medicine in the eighteenth and nineteenth centuries were all less-expanded variations of this state-dominated administrative system introduced in Germany for the first time.

Urban Medicine

Urban medicine first appeared in France with the expansion of the urban structures as a consequence of urban life–by the end of the eighteenth century (Foucault, 2003a). The main objectives of urban medicine were three: first, identifying and analyzing the zones of congestion, disorder, and danger within the urban limits. Examples of this is the relocation of graveyards and slaughterhouses from the center of Paris to the outskirts of the city. Second, controlling circulation of water and air as these elements

were considered to have pathogenic capacity for the population. Third, dealing with the organization and distribution of elements such as sewers, pumps, river washhouses, and so forth in order to prevent them from causing any public health issues within the urban spaces. According to Foucault (2003a), learning about medicalization of the city–that is, the practice of urban medicine in the eighteenth century–is important for several reasons:

1. The need for analysis of elements such as water and air brought medicine in contact with sciences such as chemistry for the first time. It is important, then, to note that our modern scientific medicine was not born out of medical interest in the individual. Rather, it happened due to a politico-medical intervention in the health of the masses.
2. As discussed above, scientific medicine began with analysis of the environment, then the effects of the environment on human bodies, and finally analysis of the human bodies themselves. It was not the other way around.
3. Public health was born for the purpose of politico-scientific control of the environment. It was this notion that brought together all essential components of a social medicine.

The urban medicine was different from the state medicine of Germany in that the urban medicine was not associated with a specifically designated source of power and authority controlled by the state.

Labor Force Medicine

Labor force medicine was chronologically the third direction that social medicine took in Western Europe, and it can be examined best through the example from England. Towards the second half of the nineteenth century in England, poverty began to be seen

as a health and political hazard for the city and so it was decided for the first time to divide the urban space into rich areas and poor areas. As Foucault puts it, “first the state, then the city, and finally poor people and workers were the object of medicalization” (Foucault, 2003a, p. 333). Meanwhile, a new form of social medicine–in the form of a tax-supported welfare for the poor–appeared in England. This was mainly an attempt to protect the privileged class from the risk of epidemics that originated from the poor communities as well as protect the labor force, which became a necessity of the industrial age. To these ends, about one thousand Health Offices were established in England in 1875 with the following functions: control of vaccination, organizing the record of epidemics and disease capable of turning into an epidemic, and identification and destruction of the unhealthy localities, if necessary. This was a health service offered to the entire population without making a distinction between rich and poor.

Thus, the English model of social medicine was based on three main objectives: providing medical assistance to the poor, preservation and upkeep of the health of the labor force, and a general surveying of public health through which the privileged social classes were protected against possible dangers arising from the poor population. Further, it gradually established the three major medical systems of the modern world, namely, a welfare medicine for the poor, an administrative medicine to take charge of the general issues such as vaccination and epidemics, and a private medicine which served those who could afford it (Foucault, 2003a).

It is important to understand the politics of health in the eighteenth century because they illustrate the following main points:

- The modern scientific medicine did *not* grow out of a clinical interest in the body of the individuals to become a social and collective endeavor later. As a matter of fact, it went the other way around.
- The eighteenth century politics of health marks the emergence of a range of modern practices: development of a medical market in the form of private practice, establishment of qualified physician networks, increased demand for professional health care in the society in general, and the rise of an organized clinical medicine concentrated on individual patient with explicitly moral and scientific and implicitly economic motives.
- The social prestige of medicine as a general technique of health began to exceed even that of its value in caring for the sick. Medical men began to assume an increasingly significant social status being supported by the administrative system and the machinery of state. Social authority of physicians came from two important activities assigned to them by power: first, medicine's medico-administrative handling of the health and sickness, conditions of life, housing, and so on. This function of medicine became the basis of the "social economy" in the nineteenth century. Second, medicine's politico-medical grasp on the population through a series of remedies suggested not only to treat the diseases, but the general forms of human existence and behavior (e.g., food and drink, sexuality, fertility, clothing, inhabiting, etc.).
- The doctors began to be seen as the great advisors and experts (Foucault, 2003b; Elden, 2017) in the second half of the eighteenth century due to their

> function as the public hygienist–rather than therapist. This was marked by the increasing presence of doctors in academia, counseling, advisory, political institutions, and other prestigious social activities. The doctor functioned as a representative of power and administration that was qualified to take authoritarian measures in order to assure maintenance of a well-ordered society. The economic and social privileges bestowed on doctors became further increased as they began to develop their role as therapists as well as the hygienists–in the nineteenth century.

Foucault's principle claim in his tracing of the bio-history is that medicine has been a social activity at least since eighteenth century. Further, his emphasis on the capitalism working its way through the human "body" as a means to maintain the labor force and thus the socio-political economy is striking. In the next section, I will explore the relevant theoretical literature regarding the discourse theory in general, and how it relates to the modern medicine in particular.

What is Discourse?

The term *discourse* has been used in various academic disciplines, especially in last couple of decades. Since 1960s, discourse has been seen in association with French philosophical thought in general and with the works of Michel Foucault in particular. However, many theorists have used this term in a range of ways. Some scholars have provided complicated definitions of discourse whereas some others have defined it in ways that made the discourse theory more approachable for use in academic research. For example, some theorists have subsumed the discourse as a study of language in use (Wetherell et al., 2001). Also, another group of scholars have described discourses as

ways of conceptualizing "sets of practices, ideas and institutions" (Shirley & Padgett, 2004, p. 36) through language and social action (Sarangi & Coulthard, 2014). Grbich (2013) suggests that discourses are ways of speech, writing, thinking, and doing.

Similarly, Monrouxe and colleagues (2011) define discourse as simply what we do. They provide an example of how discourse theory can be employed to analyze minutiae of language as a set of *signifiers* (e.g., words) representing something that is *signified* (e.g., concepts). These authors maintain, however, that it is easier to infer distinct meanings from physical objects compared to abstract ones. For instance, when someone talks about a pencil, a chair, or a door, it is easy to locate what meanings/concepts are signified by these words. Whereas words like philosophy, education, and medicine are not simple signifiers. Medicine, for one, signifies an abstract concept that encompasses several other signifiers within itself (e.g., bioscientific competence, professionalism, altruism) with each of them referring to equally variable notions. Wear and Nixon (2002) for example, demonstrate the copious ways in which terms such as "altruism" are understood and played out across a complicated range of clinical situations. There is no easy definition even for the term "competence" that could be deemed equally plausible by everyone in medical education and practice (Lingard, 2009).

This study conforms to the ways in which the term discourse is used in the works of Michel Foucault. According to the discourse theory, as defined by Foucault, there is no intrinsic order to the world other than the ordering which we impose on it by our description of it through language (Mills, 2004). As such, our only access to reality is through discourses. In Foucault's words:

> We shall call discourse a group of statements in so far as they belong to the same discursive formation… it is made up of a limited number of statements for which a group of conditions of existence can be defined. Discourse in this sense is not an ideal, timeless form that also possesses a history; the problem is not therefore to ask oneself how and why it was able to emerge and become embodied at this point in time; it is, from beginning to end, historical - a fragment of history, a unity and discontinuity in history itself, posing the problem of its own limits, its divisions, its transformations, the specific modes of its temporality rather than its sudden irruption in the midst of the complicities of time (Foucault, 1972, p. 117).

Thus, discourses are constructed locally; they are self-enforcing and productive of our views and attitudes regarding all worldly phenomena.

Discourses have certain characteristics that are important to be accounted for (see Figure 2.1). The first of these characteristics is the *institutional nature* of discourse and its situatedness in its social context. All discourses are context-bound and follow the local rules and limitations, hence the terms political discourse, religious discourse, technological discourse, medical discourse and so on (Butler, 2002). Analysis of discourse is dependent upon understanding the roles played by institutions and social context in the development, maintenance and circulation of discourses. Diane Macdonell (1991) has described the institutional nature of discourse based on her analysis of the uses of discourse in the works of Foucault and other scholars. In Macdonell's words,

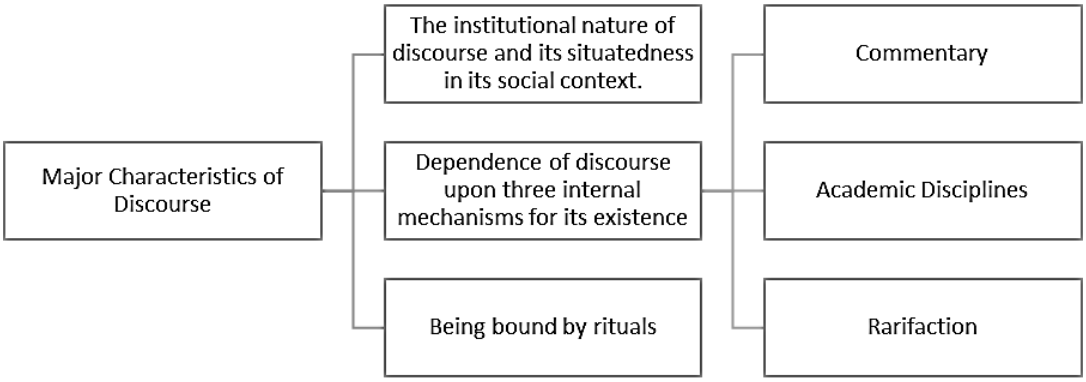
> a discourse is not a disembodied collection of statements, but groupings of utterances or sentences, statements which are enacted within a social context, which are determined by that social context and which contribute to the way that social context continues its existence (1991, p. 10).

Based on this definition, medical discourse is a combination of utterances/statements that are enacted within the context of medical education and profession. These statements are produced and shaped by a professional medical context, and they contribute, in turn, to the way professional medicine continues to exist. It is important to note that discourses

do not form in void; rather, they are the products of constant power struggle and the site of endless contestation of meanings (Pêcheux, 1982). As such, they are not fixed entities. All discourses are modified and updated over time.

Figure 2.1

Major Characteristics of Discourse



The second characteristic of discourse is the dependence of discourses upon a number of *internal mechanisms* for their existence. In The Order of Discourse (1981), Foucault discusses three major internal mechanisms to the discourse: *commentary*, the notion of *academic discipline*, and *rarefaction*. The mechanism of *commentary* suggests that discourses that are frequently commented upon by others are viewed as more valid/worthy. As Foucault puts it,

> we may suspect that there is in all societies, with great consistency, a kind of gradation among discourses: those which are said in the ordinary course of days and exchanges, and which vanish as soon as they have been pronounced; and those which give rise to a certain number of new speech acts which take them up, transform them or speak of them, in short, those discourses which, over and above their formulations, are said indefinitely, remain said, and are to be said again (Foucault, 1981, pp 48-78)

The second internal mechanism of discourse is the *academic discipline*. Academic disciplines determine what can be said and what can count as knowledge within a certain

academic domain. New propositions can be articulated to an academic discipline only if they are within certain discursive limits of that discipline. For example, attempts to discuss valuable ideas in a paper that is not formatted in a certain way (within the dominant discursive limits) often remain unfruitful. It is not only the form, but also the content of thought that is limits-bound within a certain academic discipline. Thus, academic disciplines often exclude other ways of thinking and knowing–which could have been possible–simply because they lie "outside" the boundaries of that discipline (Mills, 2004; Foucault, 1981).

One example of how academic disciplines limit what can be said or thought related to medicine is the difference in research topics and methodologies employed by scholars who undertake research in biomedicine, medical anthropology, medical psychology, medical sociology, and medical education. Even though all of them are essentially looking at the same type of issues and populations, interdisciplinary communication between them is at its minimum even when they are situated in the same university campuses. What keeps them from sharing common research frameworks and reinforcing each other's methodological and substantive focus are the discursive limits set within each of those disciplines.

The third internal mechanism of discourse according to Foucault is *rarefaction*. Rarefaction refers to the fact that utterances [or texts] produced within a certain discourse are "remarkably repetitive and remain within certain socially-agreed upon boundaries" (Mills, 2004). This is in spite of the fact that theoretically, any one person has the choice to produce an infinite number of utterances related to any given situation. Rarefaction means that the choice of topics of conversation and even the choice of words one can

make within a particular domain or discipline are fairly restricted by discursive norms. Moreover, people learn to put limits to their own feelings of need or desire when operating within a certain discursive framework. One example of rarefaction is the ritual of wearing a white coat in clinical settings. There are no intrinsic reasons for the physician's coat to be always white, but it is so because it has been determined by the discursive rules of modern medical practice. Furthermore, even when thinking about becoming a physician someday, medical students tend to structure their desires within the boundaries of what is available. A medical student is unlikely to dream of wearing a pink coat on morning rounds as a doctor. That is because it would be incompatible with the rarefaction constrains of the medical professional discourse. In The Order of Discourse (1981), Foucault explains how our choices are restricted by discursive limits. He suggests that people speak and act within bounds of what discourses map out for them, even though the choices they make within those limits often feel personal. Surgeons do not, for example, wear jeans in the operation theatre unless wearing jeans has been established as discursively acceptable and possible in medicine. The discursive limits always need to be authorized by an "institution" of some kind (Foucault, 1981; Milles, 2004).

One final characteristic of the discourse, in addition to its contextual nature and dependence upon internal mechanisms, is that discourses are bounded by certain rituals. Rituals tend to restrict the number of people who can speak certain type of statements with the same type of effect, and the number of settings at which such statements could be deemed as acceptable (Foucault, 1981). For instance, only a judge in the courtroom has the authority to make a legal judgment and put someone in prison according to the legal discourse. If another person speaks the same words as a judge in the courtroom, it

would not produce the same type of effect because his words are not backed by the authority of legal discourse. Moreover, if a judge makes a legal statement outside the courtroom, in a marketplace, for example, it is not counted as a legal statement because the setting of the marketplace lies outside the discursive limits of legal discourse. By the same token, only a priest can lawfully marry a couple (based on the limits set by the religious discourse), only a physician can perform surgery (based on the limits set by medical discourse), so on and so forth.

The implications of the above restrictions for an educational institution such as a medical school are numerous. In Foucault's words,

> what, after all, is an education system, other than a ritualization of speech, a qualification and fixing of the roles for speaking subjects, the constitution of a doctrinal group, however diffuse, a distribution and an appropriation of discourse with its powers and knowledges? (Foucault, 1981, p. 64)

Thus, medical schools as sites of specific educational systems are also sites of complex discursive regularities. There are strict speaking rights within medical schools (e.g., students must not speak to each other during a summative examination) as well as strict rules about what counts as knowledge. Attempts to express one's ideas without referring to previously accepted knowledge (e.g., citing relevant literature), or to express ideas in unconventional formats that are not endorsed by one's academic discipline are generally classified as groundless and futile. Consequently, only forms of knowledge that are endorsed in academia are those which operate within the discursive constrains while correctly obey all discursive rules of the medical discourse. Essentially, all of the above noted mechanisms for structuring, constraining and circulation of information have a similar effect: they bring about the production of discourse and only certain types of

discourse. They draw limits for what can be said, what can pass as knowledge, and even what can be thought or desired by a certain group of people who are subjects of a certain discourse. They ensure that everything occurs within the boundaries of those discursive limits (Mills, 2004).

To summarize, discourses are powerful structures that create limits for what can be said, thought, or done by people (Butler, 2002). What is more, we are not always aware of the discursive structures that bound us to a certain way of existence. Foucault's discourse theory and his proposed archaeological methodology can help us become aware of the structures within which discourses are produced, supported, and maintained. Attention to discursive practices "forces us to consider the provenance of the very apparatus within which we think" (Mills, 2004). Discourse theory is deemed as insightful in social sciences because it explains the constraints within which we operate - rather than assuming people are free to express whatever they wish (Gee, 2014; Mills, 2004; Monrouxe, 2010; Monrouxe et al., 2011; McNaughton, 2013; Hodges, 2017; Hodges et al., 2008). Not to forget, discourses not only limit what we can do, they also shape who we are. In a later section I will discuss how discourses shape the very identity of those who are governed by them. Before getting into that discussion, however, let us first explain what is meant by *identity* in general and in medical education in particular.

What is Identity and Why it Matters?

Jenkins (2008) defines identity by stating "it is not something that one can have or not; it is something that one does" (p.5). Nonetheless, identities develop, form and transform through language. It is important to note that identity is not a fixed or static entity. Rather, it is constantly transforming through the process of *identification*; that is,

as we act and interact with the world around us. This brings us back to the action-oriented definition of human identity. In Monrouxe's (2010) words: "identities are not fixed cognitive schemas; rather, identities are what we *do*" (p.44). Identity formation is a two-way process that is affected by a combination of *internal* and *external* definitions. Internal definitions of identity consist of our perceptions about who we are, whereas, external definitions consist of our perceptions about who others think we are (Monrouxe, 2010). Then again, identities are both constructed and perceived through language (e.g., speech, writing, and thought) and artifacts (e.g., clothing items and accessories). Through *identification*, we embody who we *are* and who we *are not*. One exception to the two-way process of identity formation is identifications that we embody early in life, such as, gender, race, ethnicity and so forth. Embodiment of such identities occurs under the vast influence of external definitions. As youngsters, we receive those definitions from our parents, families, caregivers and others who are closely in touch with us. For instance, a three-year-old girl might wear pink and play with dolls because those are items that are made available to her by her parents. Regardless of who made the decision for having this little girl wear pink and play with dolls, this "gendered" identity is being embodied by her and responded to by others. Moreover, it has been argued that primary identities one embodies as a child often become one's default ways of perceiving the world; and they are not easy to change (Jenkins, 2008).

As medical educators, we need to be aware of medical students' identity formation process as it has momentous implications for both medical education and practice (Byram, 2017). It is important to keep in mind that medical students come to medical school with various primary and secondary identities. This can either facilitate or

impede their newly developing *professional* identities (Costello, 2005). Every person's unique mix of primary and secondary identities can have a significant impact on how they relate to others–defining their so-called "in-group" and "out-group" relations. This bears implications for several aspects of medicine as a social practice, including doctor-patient relationships and general healthcare delivery to the communities. As medical professionals, physicians are required to embody a *professional* identity - both ethically and practically (Monrouxe, 2010). Internalization of professional ethics through identification facilitates internal regulation of professionals (Freidson, 2004). Furthermore, embracing a professional identity is not always a smooth process. Bearing in mind every person's unique mix of primary identities, the development of a professional medical identity sometimes requires seeing the world from a new angle, adopting new values, and emotional orientations, which is also known as *identity dissonance* (Monrouxe, 2010). Furthermore, medical professional identities are constructed and enacted in the interactional spaces in medical schools and hospitals (Richards, 2006). These institutions are places within which identification becomes consequential (Monrouxe, 2010).

Identifying with a mixture of internal and external, primarily and secondarily developed definitions about who we are, each of us is the bearer of multiple identities at the same time, at any given moment of our lives. Roccas and Brewer (2002) propose the following four models to explain how one structures one's perception of one's own multiple identities: intersection, hierarchy, compartmentalization, and merging. Monrouxe (2010) provides a hypothetical model of a black female doctor to understand the different relationships between one's multiple identities and their implications for

one's in-group and out-group relations in the society. Resonating with Monrouxe's description of four models mentioned above, I use the example of myself here to illustrate this point:

I identify as a white, Middle Easterner, female educator. One way I can understand my multiple identities is to focus on the *intersection* among them. To do so, I can represent myself using a single identity of a *white Middle Easterner female educator*. My intersectional way of dealing with my multiple identities will have implications for how I define my in-group and out-group relations with others. People such as an African-American male educator or a white Asian female nurse will be considered to belong to out-groups for me since they do not share my own unique intersectional identity. A second way I may understand my own multiple identities is to place them in a *hierarchy* of significance and to consider some of them as more important than others. I can place my professional identity as an educator above my gender and racial identities, which will lead me to believe that I share a common identity with all educators as my in-group people. However, because the identification is hierarchical, I might feel closer to white educators than I do with black educators, and even more with female white educators compared to male white educators. Those who do not share my dominant identity–people who are not educators, in this example–will be considered as members of the out-group.

A third way I can make sense of who I am is by making a practical compromise and *compartmentalizing* my multiple identities. That is, I activate each of my multiple identities within their right context: while at work, I will identify as in-group with all educators regardless of their racial and gender identities. Anyone who is not an educator will be considered as out-group members by me while I am at work. In other contexts,

however, different items of my multiple identities will dictate who I identify with (with females at the park, with whites in my son's school, etc.). The fourth and final way I can make sense of my multiple identities is through developing a *merged* in-group identity for myself that is inclusive of exceedingly diverse members. Identifying myself with the complex representation of a merged identity, I will refuse to accept inherent categorical divisions between people (Roccas & Brewer, 2002) and upgrade to identify with as many people as possible as my in-groups.

The point of the above illustration is to show that healthcare providers' multiple identities and the way those are comprehended can have serious relevance to patient care as well as many other aspects of practicing medicine such as interprofessional and intraprofessional communication and teamwork. The clinical setting is, then, a stage where multiple identities of people are played out through their actions toward and relations with one another. Interactions between doctors, nurses, other allied health professionals, patients, patients' families, hospital staff, so on and so forth all involve intragroup (e.g., doctor with doctor) and intergroup (e.g., doctor with others) communications. Successful teamworking among these people requires effective communication which, in turn, requires sound relations among them. Medical students who suffer from some sort of identity dissonance and do not succeed in achieving a merged identity during medical training will make incompetent physicians in terms of their professional ethics and behavior (Bleakley et al., 2011).

As I have stated several times already, it is important to remind ourselves that medical students and physicians, like all other professionals, are only people. They are individuals holding their own personal, emotional, and cultural lenses through which they

see the world around them. The way they identify as professionals impacts the way they act as individuals having the authority to practice medicine. In Monrouxe's (2010) words: "Identity matters. Who we are, and what we are seen to be, underlies much of what we do in medical education" (p. 41). Let us look at a few examples of how physicians' identities have impacted their performance with standardized patients' history taking, doctor-patient interactions, and patients' satisfaction over time. Patients are commonly reported to receive variable care based on factors such as their race, ethnicity and socio-economic status (Higashi et al., 2013; Moy et al., 2005). Various forms of health disparities exist across the United States (Gibbons, 2005, 2008; ACGME, 2018; Azim, 2020) due to healthcare providers' *implicit* perceptions of patients as their in-group and out-group members (Burgess et al., 2007). Van Ryn and Burke (2000) reports how doctors make assumptions about different patients' degrees of intelligence based on factors such as patients' race. Physician's feelings of affiliation towards patients are affected by whom they perceive as belonging to their in-group and out-group members. Such perceptions can lead to making strong assumptions about patients' likelihood of following medical advice (Higashi et al., 2013), maintaining physical activity, and risk-taking preferences (van Ryn & Burke, 2000; van Ryn et al., 2006). In sum, how physicians conceptualize their *own* identities can consciously or unconsciously affect the way they relate to others (Hewstone et al., 2002).

For these reasons, professional identity formation is one of the hot topics for research and a buzz word in medical education research today (Paradis et al., 2013; Byram, 2017). One way in which professional identification is being facilitated in medical schools is through teaching professionalism as part of the medical curriculum.

However, teaching professionalism has not been an easy task so far, chiefly because there are so many differing definitions of medical professionalism produced by policy makers and medical educators (Wagner et al., 2007). Furthermore, many of these definitions are time and/or context bound. It is often a hurdle for medical educators to come up with appropriate teaching materials and strategies that would suit their own local contexts (Swick, 2000; Cruess et al., 2004; Hafferty & Levinson, 2008; Cruess, 2006; Hilton & Slotnick, 2005). Swick (2000) defines professionalism by emphasizing on what doctors do, such as "how they meet their responsibilities to individual patients and to communities". This definition is attending to both internal (i.e., competency) and external (e.g., a commitment to scholarship) definitions of identity formation process. Arnold and Stern (2006) claim that professionalism is founded on clinical competence, good communication, and ethical and legal understandings. Therefore, medical professionals must attain wise application of the core principles of excellence, humanism, accountability and altruism (Arnold & Stern, 2006). The problem is, however, that constructs such as *wise application* can imply an array of subjective meanings. Also, depending on their cultural backgrounds, different people often have different understandings of the abstract notions such as *excellence*, *humanism*, *accountability* and *altruism* in the first place. The authors do not clearly define what may or may not count (in their eyes, of course) as a wise application of those notions either.

Hilton and Slotnick (2005), on the other hand, provide a definition of medical professionalism that has been based upon six domains: ethical practice, reflection and self-awareness, responsibility and accountability for actions, respect for patients, teamwork, and social responsibility. According to these authors, medical professionals

must thrive to acquire practical wisdom which they define as the so-called *phronesis.* The authors describe this practical wisdom (phronesis) in terms of "knowing which rules to break and how far to break them to accommodate the reality at hand" (p. 61). Phronesis is thought to be both an art and an intellectual activity. It has been linked to mindfulness (Epstein, 1999), tacit knowledge (Polanyi, 1958), and capability (Fraser & Greenhalgh, 2001). The problem with phronesis is that it assumes an individual subject who can practice high levels of self-awareness, self-regulation, and personal autonomy without being influenced by what is spoken, written, conceived and done in the world around them. This is an example of how liberal humanistic philosophy can sometimes be deceiving by suggesting abstract notions based on pure human agency that are at best confusing when applied to the real world.

Attending to the above concerns, some researchers have acknowledged the complexity of professional identity formation processes (Fraser & Greenhalgh, 2001; Plsek & Greenhalgh; 2001). Fraser and Greenhalgh (2001), for example, encourage medical education to focus on helping students become more capable than competent. They define *competence* as "what people know or are able to do in terms of knowledge, skills and attitude", and *capability* as the "extent to which individuals can adapt to change, generalize new knowledge and continue to improve their performance" (p. 799). Moreover, some researchers have tried to come up with new interpretations of medical professionalism by using inductive approaches (Wagner et al., 2007; Jha et al., 2006; Kearney, 2005; Hasman et al., 2006). Although many in medical education research continue to yearn for a standard and universal definition of professionalism that can be applied to all medical professional contexts, I would like to question the very possibility

of any such definitions. Developing careful, accurate, local definitions and strategies might end up being a more realistic alternative to look for.

As a consequence of somewhat vague but popular definitions of medical professionalism, many medical students and physicians seem to be confused when it comes to translating principles of professionalism into their day-to-day practice. For example, several studies focusing on medical students' professional identity formation found that their study participants expressed high levels of agreement with all principles of professionalism as presented to them, whereas, their actual professional behavior failed to comply with those same principles (Blue et al., 2009; Blackall et al., 2007; Tsai et al., 2007). These findings are in line with another study's results reporting 50% of the 3504 doctors who took a survey about medical professionalism did not comply with the principle of self-regulation which makes the basis of phronesis (Campbell et al., 2007). Such findings demonstrate the complexity of medical students' identification processes that are largely impacted not only by the individual students' pre-existing primary and secondary identities, but also by a range of institutional, interpersonal, and environmental factors in the context of medical education (Monrouxe, 2010). I am placing the problem of unsuccessful professional identity formation at the level of undergraduate medical training, as that is the time when doctors begin to develop their medical professional identity. Further, in this study the definition of medical professional identity largely overlaps with that of medical professionalism–as both of these concepts refer to the same thing, which is *acting* as medical professionals.

Before moving on to the next section, I would like to point out that all of the discussion on identity formation provided in this section is based on the conventional

modernist frame, not a Foucauldian frame. This explanation is essentially different than the way Foucault conceptualizes identity and identity formation. For Foucault, the dominant discourses are largely constructing what identity can be. This is especially relevant to the discussion of how one could make sense of one's identity in one of the four ways proposed by Roccas and Brewer (2002), discussed earlier in this section. Although I have used the example of myself to illustrate the difference among the four models in that discussion, none of those are actually how I would make sense of my identity in real life as well as in relation to the present study. Given my work with Foucault, I do not make sense of my identity in those conventional or modernist ways, nor do I think medical students involved in discursive formation of modern medicine are able to make sense of their identities in those ways. My position in relation to identity formation process is that of Foucault's, which I now turn to discuss in the next section.

How Discourses Induce Identity Formation

According to Foucault, discourses entail, impose and demand a particular kind of identity for all those who are subjected to them (Butler, 2002). It is well-known that being in a sports team or military requires one to act and behave in particular ways (e.g., wear uniform, act and speak about particular things in a particular way) in order to "fit in'. However, Foucault goes one step further by arguing that "we do not just play roles in such cases, but our very identity, the notion we have of ourselves, is at issue when we are affected by discourses of power" (Butler, 2002, p. 50). What we call "self', then, is the sum total of one's positions with regards to the discourses one has been exposed to. Humans are social beings; and there is practically no one in the world who is not being affected by social discourses since nobody lives in a vacuum. We form our individual and

social identities through social discourses. From religion and race to biomedical science, fashion, and advertisement–all discourses put us in our place that we occupy as individuals in the society (Butler, 2002). It is important to recognize the formative powers of discourse to understand how deeply discourses function on the psyche of individuals as well as societies. Discourses are not simply certain ways of thinking and acting. Foucault argues that discourses bring both our sense of reality and our notion of our own identity into being (Foucault, 1981). Discourse is the ontological condition of language and as such nothing we ever say, write or think happens outside the discourse. To understand this better let us zoom in to the unique interplay between subjects and objects of discourse in accordance with the discourse theory.

The *subject* of a discourse is anyone who is affected (or subjected) by that discourse (Butler, 2002). The fact that we are constituted in a broad range of subjected positions makes each of our identities a unique combination of racial, ethnic, regional, generational, sexual, class and gender positions. Discourse theory refuses to account for the possibility of the individual subject not getting shaped by social discourses. An individual, according to the discourse theory, is: "not a unity, not autonomous, but a process, perpetually in construction, perpetually contradictory, perpetually open to change" (Belsey, 1980, cited in Butler, 2002, p. 53). Foucault's analysis of relations between power and discourse has led to a distinctive view of the *nature of the self.* This remains a challenge to the individualist rationalism that emphasizes on personal autonomy, as described by many humanist liberals. In discourse theory the *self* is preferably referred to as the *subject*. Foucault sees the individual as an effect and a product of discourse. Thus, a subject is one who is "subjected', "controlled" or

"constituted" by discourses that predominate in the society one inhabits, whether one knows it or not (Butler, 2002). In Foucault's words, we need

> to dispense with the constituent subject, to get rid of the subject itself, that's to say, to arrive at an analysis which can account for the constitution of the subject within a historical framework… that is a form of history which can account for the constitution of knowledges, discourses, domains of objects, etc., without having to make reference to a subject which is either transcendental in relation to the field of events or runs in its empty sameness throughout the course of history (Foucault, 1980, p. 117).

Discourse theory suggests that people are not directly faced with the material reality of the world. Rather, we have access to reality only through discourses and discursive frameworks. Discourses are our mental filters passing through which material objects and events become meaningful to us. Therefore, every object in the world is constituted as an *object* of discourse; furthermore, it cannot constitute itself as an object outside the discursive formations (Laclau & Mouffe, 2001). As Mills (2004) puts it, "what we perceive to be significant and how we interpret objects and events and set them within systems of meaning is dependent on discursive structures" (p. 46). In short, according to a discourse theoretical view nothing lies outside the discourse and discourses are "practices that systematically form the objects of which they speak" (Foucault, 1972, p.49). Being characterized as such, discourses are productive of themselves, and productive of the individuals who adopt them (Mills, 2004).

Whereas philosophy does not support the claim of representation being possible without a consciousness to relay it, Foucault believes human sciences are able to prove this notion as possible. He believes "meanings (signs), functions, and conflicts can all be represented without appearing to consciousness, merely through their organization by norms, rules, or systematic principles" (Gutting, 1989, p. 212). For example, human

sciences can investigate the function of social practices, individual psychological conflicts and meaning of the myths, all without appealing to the awareness of society, individual, or culture in question. In Gutting's words,

> through unconscious functions, conflicts, and meanings, the human sciences are, according to Foucault, able to develop an account of how man represents (though not consciously) the fundamental realities of life, labor, and language (Gutting, 1989, p. 212).

Hence, the very forces of life, labor, and language that work as determinants of man as an empirical object, in Foucault's view, can provide a coherent representation of man as a representing subject–when seen from human sciences' perspective. Therefore, Foucault concludes that human sciences have succeeded where philosophy failed in "constituting man as a coherent object of his own thought" (Gutting, 1989, p. 213).

To summarize, we are *subject to* and the *object of* discourses at the same time. We say the things we say, think and act the way we do as a function of our *subjectivity* and *objectivity* in relation to certain discourses. Simply put, discourses structure our very sense of the reality (Mills, 2004). It is important to recognize the extent to which one can think and act within certain parameters of the discourses at a certain historical conjuncture (Foucault, 1977a; Mills, 2004). Foucault argues that "discourse causes a narrowing of one's field of vision" (Mills, 2004, p. 46). When we are under the spell of a certain discourse, we tend to exclude a wide range of concepts as untrue, unworthy of our attention, or simply as non-existent (Foucault, 1977a). In other words, for us to consider a phenomenon as true, worthy of our attention and real, that phenomenon needs to be embedded within the parameters of a discursive formation that we have adopted. Ironically, this active process of selection and rejection happens at the subconscious level without us being aware of the extent to which we are being loyal to a certain discourse.

Let us now try to connect all this to our initial concerns regarding the relationship between discourse and medical students' professional identity formation. The short answer to this problem provided by the discourse theory is that: modern discourse of medicine circulating in the context of medical schools as well as clinical settings not only constitutes student identities but also structures their sense of reality, narrowing it down for them to see and appreciate only things that fit within certain discursive limits. Hence the need for medical education research to identify the structural elements, conditions, and relations which define the limits of modern medical discourse. In other words, to understand the process of medical students' professional identification, which undoubtedly determines their future professional practice, we need to dissect their medical language and behavior. Particular attention should be paid to the interactional settings where linguistic rituals are played out. Archaeological examination of the linguistic rituals and behaviors in medical education, such as the one carried out in the present study, can reveal specific discursive elements that define students' ways of thinking, speaking and acting like a *doctor* (Monrouxe, 2010).

What is Discourse Analysis?

Various forms of discourse analysis have been used in many disciplines including linguistics, psychology, education, information technology, sociology, health, management and administration, and communication (Grbich, 2013). There are different ways to approach discourse analysis such as: k. Some sources have subsumed the Foucauldian discourse analysis as a critical analytical approach (Hodges et al., 2008), whereas others (Grbich, 2013) see Foucauldian discourse analysis (FDA) to be different than critical discourse analysis (CDA). The most important difference between critical

discourse analysis and Foucauldian discourse analysis is that the former is critical theory-oriented, whereas the latter is not. Regardless of the varying approaches, a discourse analysis in its most general form is rooted in the study and analysis of social uses of language. For example, discourse analysis can be employed to analyze texts (writings or conversations or even events as "texts") in order to find similarities across a range of texts. Common data sources for a discourse analysis include transcripts from interviews, focus groups, fieldnotes, samples of conversations (audio or video), preexisting documents, videos, observations (what is seen in the observation is considered a text) and online material. In critically informed discourse analysis, such texts are looked upon as the products of a particular set of power relations. The latter type of analysis not only examines the texts but also "the ways in which the very existence of specific institutions and of roles for individuals to play are made possible by ways of thinking and speaking" (Hodges et al., 2008, p. 2).

Discourse analysis has become common practice in medical education research, especially in the last three decades. Interestingly, it was embraced by the nursing education discipline long before medical education. To investigate the extent to which researchers in health professions education (including medicine, physician assistant, nursing, physical therapy, occupational therapy, etc.) education have used discourse analysis, Hodges (2017) conducted a quick inspection of the existing literature by entering the keywords "discourse analysis" + "education" in PubMed. The results brought up numbers of published papers as three in the 1970s, seven in the 1980s, 84 in the 1990s, 239 in the 2000s, and 393 from 2001 to 2016. These results proposed that there will be more than 750 publications involving some form of discourse analysis in

health sciences education available by the end of the decade. Hodges concluded based on the above results that health professions education "has gone from having absolutely no interest in discourse analysis to demonstrating an exponential rise in its use" (p. 235). Hodges ascribes the rise in use of discourse analysis partly to the effects of a new group of social scientists (e.g., sociologists, anthropologists, linguists, etc.) getting involved in medical and other health professions education research lately (Hodges, 2017).

More specifically, discourse analysis has been adopted in medical education research to address various educational and clinical topics. For example, Stone (1997) studied various discourses found in the education literature for diabetic patients–i.e., "patient self-care" and "autonomy"–versus the discourses found in medical literature in general–i.e., "compliance" and "adherence". Shaw and colleagues (2005) performed a discourse analysis of the many ways in which the research itself can be defined (e.g., by lay people, by a medical editor, by hospital, etc.) showing how each of those definitions are linked to power relations and specific objectives of the institutions. In another study, Speed (2006) employed a critical discourse analysis to investigate how different discourses about modern mental health services construct individuals' identities as "patients", "consumers" and "survivors"; and how those discourses were supported by specific institutional practices. More recently, researchers in medical education have been using discourse analysis to study topics such as interprofessional education (Haddara & Lingard, 2013; Wong et al., 2016), validity (St Onge et al., 2016), international education (Ho, et al., 2015), professional behavior (Monrouxe et al., 2011), emotion (McNaughton, 2013), caring (MacLeod, 2011) and even the entire corpus of the journal of *Medical*

Education (Rangel et al., 2016)[3]. Let us now focus on the Foucauldian discourse analysis. First, I will describe the structure of a discursive formation and explain how it relates to discourse and to archaeology as developed by Foucault.

What is a Discursive Formation?

A discursive formation is a vehicle for discourse. In other words, it is the system of formation according to which all statements in a particular discourse are organized. According to the discourse theory, a group of statements is considered a discourse so long as they belong to a particular system of formation, which is also called a *discursive formation.* Discursive formation constitutes the law of discourse. Knowledge produced by the analysis of a discursive formation is a rather unique type of knowledge. Take medicine, for example. Contemporary medical discourse gives rise to a discursive formation which this study aims to analyze. The discursive formation of medicine comprises much more than merely scientific medical knowledge. An analysis of this discursive formation, then, attempts to define the elements in modern medicine that have become *objects* of enunciation, the *forms of enunciation* in medical discourse, the *concepts* that are employed in these enunciations, and the *theoretical choices* that are made in them (Foucault, 1972, p. 194). Therefore, describing the discursive formation of modern medicine, which is the central objective of the present study, would reveal a body of knowledge that is *regularly* formed by the *discursive practice* of contemporary medicine.

[3] The studies mentioned here are based on the structuralist frames of formal linguistic discourse analysis, empirical discourse analysis, and critical discourse analysis, which are very different from a Foucauldian discourse analysis that is the focus of the present study. To the best of my knowledge, a robust Foucauldian analysis of discourse has not been yet published in medical education research.

A discursive formation not only demarcates the *discursive elements* (i.e., objects, modalities of enunciation, concepts, and theories) that regularly emerge in a discourse, it also describes the *relations* between these elements. In the analysis of discursive formation (also known as archaeology), one looks to find patterns that emerge within these relations–also known as *regularities*. Regularities may appear in various forms such as: in the order between the elements, in their correlations with each other, and in each element's position, function, or transformation (Foucault, 1972). A discursive formation is also subject to the *rules of formation* for each of its elements. These rules (and the relations among them) constitute the *conditions of existence* for their respective elements. Webb, 2013, p. 60). Ironically, the laws governing discursive events (rules of formation for discursive elements) are formed within the discourse to which they apply, and therefore, they are not preconditions for the discursive elements to emerge (Webb, 2013, p. 84). The rules of formation can never reach their "terminal stages" as they are constantly getting modified or transformed (Foucault, 1972). Being governed by a fixed number of specific laws, a discursive formation signifies only "a limited system of presence", and as such, it does not represent a totality. In Foucault's words, discursive formation is rather "a distribution of gaps, voids, absences, limits, [and] divisions" (Foucault, 1972, p. 119).

In the remainder of this section I will elaborate on the nature of discursive formations and discuss how they are different from sciences and disciplines, and the specific type of knowledge that they produce. I will then turn to elaborate on the difference between discursive and nondiscursive practices, explain how they are linked together and why these links need to be established by the analysis of discursive

formations. Further details about the discursive elements, rules, relations and conditions will be discussed in Chapter 3.

Discursive Formation is Neither a Science nor a Discipline

This study aims to define the discursive formation of modern medicine as a social practice. It is essential to understand the nature of a discursive formation before attempting to analyze it. Discursive formations, as defined by Foucault, are neither sciences nor disciplines. For example, the discursive formation of medicine is neither the same as modern medical science nor medicine as the discipline. Let us first elaborate on how discursive formations are different from disciplines. Foucault defines disciplines as:

> Groups of statements that borrow their organization from scientific models, which tend to coherence and demonstrativity, which are accepted, institutionalized, transmitted, and sometimes taught as sciences (Foucault, 1972, p. 178).

For example, the discipline of medicine, for instance, borrows from sciences though it is not a scientific discipline in the strict sense of the term. At any rate, discursive formations do not coincide with "disciplines of any sort" regardless of their scientific status (e.g., scientific, pseudoscientific, or prescientific) (Gutting, 1989, p. 250). Foucauldian methodology for the analysis of discursive formations, which he calls archaeology, does not analyze disciplines (Foucault, 1972, p. 178). Instead, archaeology analyzes discursive formations, which goes well beyond the boundaries of any single discipline and has a unique structure of its own.

Let's take the example of psychiatry discipline versus the discourse of madness to illustrate the point made above. In Madness and Civilization [MC] (Foucault, 1988), Foucault studied the history of madness in the Classical Age (from the mid-seventeenth century to the end of the eighteenth century) by analyzing the discourse of madness. As

expected, the discursive formation of madness was widespread and beyond the boundaries of psychiatry discipline. That was because the Classical discourse on madness not only included the scientific/pseudo-scientific psychiatric elements of psychiatry as a discipline, it also contained every other statement related to madness that was found in the literature, philosophy, political and legal texts as well as in daily life. Furthermore, the discourse on madness had existed way before the discipline of psychiatry was even established in the nineteenth century. During the seventeenth and eighteenth centuries, for instance, despite the fact that there were no established disciplines related to madness yet, the discourse of madness existed as a perfectly describable system of formation with its own regularities, rules, and conditions (Foucault, 1972, p. 179). In sum, discursive formations are not the same as disciplines. They are more extensive than any single discipline in any specific period of time would be able to cover, encompassing many possibilities, like popular texts, that are not part of disciplines. Furthermore, discursive formations neither have the same contents and internal organization nor the same practical functions as disciplines (Foucault, 1972, p. 179). Thus, a discursive formation is not the same as a discipline; however, all disciplines emerge *out of* their respective discursive formations.

Now that the distinction between "discursive formations" and "disciplines" is established, let us turn to discuss how discursive formations are different from sciences. To begin with, it is important to distinguish between a scientific domain and an archaeological territory. As discussed in the example of madness above, an archaeological territory (defining the limits a discursive formation) incorporates not only scientific statements but also statements found in the literature, philosophy, and even

daily life, so long as they are related to that particular discourse. Furthermore, it is important to understand the unique relationship that exists between discursive formation and science. According to Foucault,

> discursive practice does not coincide with the scientific development that it may give rise to; and the knowledge that it forms is neither an unfinished prototype nor the by-product to be found in daily life of a constituted science (Foucault, 1972, p. 184).

In other words, a discursive formation is not a science, but it is a precondition for a science to emerge. That is, sciences emerge from the discursive formations, not the other way around. Though discursive formations give rise to sciences, they do not become sciences themselves no matter how much and for how long they develop. They are not some scientific prototypes on their way to become sciences. Rather, discursive formations are unique structures encompassing a lot more than their related science alone.

Another interesting aspect of the relationship between discursive formation and science is signified by the fact that a single science can be formed by borrowing elements from several discursive formations at the same time. Let's look at the example of "biology" here, which appeared as a science for the first time in the nineteenth century (Foucault, 2010). To constitute the new science of biology, elements were borrowed from various discursive formations at the time, such as the Natural History of the Classical Age, Analysis of Reflex Movements that was present in seventeenth and eighteenth centuries, theory of germs, and what was known about animal and vegetal growth to that date. All these elements were combined to make up the single science known as biology (Foucault, 1972, p. 180).

It should be noted, however, that the fact that discursive formations are not the same as sciences does not mean they are exclusive of science as a structural component

as well. The example of discursive formation of medicine can demonstrate this point well. We know that clinical practice does not comply with the level of rigor that is expected from robust sciences such as chemistry and physics. Rather, it is comprised of an amorphous mass of "empirical observations, uncontrolled experiments and results, therapeutic prescriptions, and institutional regulations" (Foucault, 1972, p. 181). Nonetheless, clinical medicine is not exclusive of sciences either. Various sciences such as physiology, chemistry, microbiology, and anatomy are obvious parts of the clinical medical practice.

A few questions that arise here are: if discursive formation is neither a discipline nor a science, what type of knowledge does archaeology produce by analyzing it and what is the significance of producing such knowledge anyway? What good can be expected of the elaborate apparatus of discursive elements (i.e., objects, enunciations, concepts, and theoretical choices), their relations and the rules governing them? To answer these questions, one needs to understand the two general forms of knowledge, namely, *Savoir* and *connaissance.* These two French terms are both translated as "knowledge" in English. To avoid unnecessary confusion, I will use the original French words when referring to them in this study. The good news is that an archaeological analysis of discursive formation does not merely create some heterogeneous items of knowledge that are piled up together. Rather, it begets the highly practical and functional type of knowledge that Foucault refers to as the savoir. Savoir refers to the "knowledge as the outcome of linguistic practices" that stands for a more general form of knowledge (Gutting, 1989, p. 256). It is the type of knowledge that is neither transcendental nor empirical. It does not signify "a lived experience, still implicated in the imagination or in

perception" (Foucault, 1972, p. 182). Furthermore, savoir is not the sum total of everything that is said in a discourse; it's rather a set of rules and sites into which new statements can always be added.

The savoir of clinical medicine, for instance, consists of various groups of statements such as those generated by observations, interrogations, decipherment, recording, and decisions made by physicians in the clinic (Foucault, 1972) as well as statements that are related to biomedical sciences. In Foucauldian archaeology, it is believed that knowledge (savoir) can be found not only in experience (e.g., empirical) but also in "fiction, reflection, narrative accounts, institutional regulations, and political decisions" (Foucault, 1972, pp. 183-184). In contrast to savoir, which is the knowledge of the discursive formations, a second form of knowledge is referred to as the *connaissance*. Connaissance denotes the knowledge of science and disciplines, such as, knowledge of nuclear physics, mathematics, geology, medical sciences, and so forth. As opposed to savoir, connaissance signifies the achievements of "individual or a group consciousness", and therefore, is a "subject-centered enterprise" (Gutting, 1989, p. 256). Here is how Foucault explains his usage of the terms savoir and connaissance in the context of discursive formations:

> By connaissance I mean the relation of the subject to the object and the formal rules that govern it. [Whereas,] savoir refers to the conditions that are necessary in a particular period for this or that type of object to be given to connaissance and for this or that enunciation to be formulated (Foucault, 1972, p. 15).

Thus, savoir precedes and enables connaissance.

The central point to make here is that a discursive formation can exist with or without a science or a discipline; but no science or discipline can exist without a

discursive formation to give rise to it. In this sense, savoir constitutes the *condition of possibility* for disciplines and sciences (connaissance) to emerge (Scheurich & McKenzie, 2005). In other words, "a discursive formation provides the pre-knowledge (savoir) necessary for the knowledge (connaissance) achieved by a science" (Gutting, 1989, p. 263). Let us look at a couple examples here to illustrate the distinction between savoir and connaissance in practical terms. Going back to the example of madness in the Classical Age, the scientific knowledge of mental disease comprising the discipline of psychiatry was the connaissance, whereas the knowledge comprising the discourse of madness was the savoir. Likewise, the bioscientific knowledge of medicine represents the connaissance whereas the knowledge comprising the discourse of medicine in general is the savoir. In the same way a specific relation between connaissance (knowledge of science/discipline) and savoir (knowledge of discursive formation) can be found in any discourse. The goal of the present archaeological analysis is to depict the savoir of medicine as a discursive formation. Owing to its disciplinary/scientific and subject centeredness, connaissance is not the type of knowledge that archaeology tries to achieve.

In this final part of the present section on discursive formations, I would like to define two important terms, *archive* and *episteme*, merely for the sake of completion. Foucault has named the complex that is composed of all discursive formations that exist in a given "society, culture, or civilization" the *archive*. As such, for a given society or culture the archive constitutes "the law of what can be said" (Foucault, 1972, p. 129). Without being a transhistorical condition on the history; the archive merely stands for the compendium of existing discourses at a particular point in time. *Episteme*, on the other hand, is the sum total of knowledge [savoir] that is produced by discursive formations of

a period. It is, thus, impossible for us to define the episteme of our own time as "it's from within those rules that we are speaking" (Foucault, 1972, p. 130).

To summarize, it is important to note that there are unique relations between the savoir and the connaissance related to a specific subject. The two different forms of knowledge are not exclusive of each other. As argued above, savoir can exist independent of the connaissance, but there can be no connaissance without a related savoir (Foucault, 1972). A Foucauldian archaeological analysis must demonstrate how connaissance functions in the element of savoir. Thus, this study is tasked to outline the ways in which biomedical science functions in the discursive formation of medicine. Moving forward, let us now address the question of why would one need to know about the structure and knowledge of discursive formations at all.

Why Do We Need to Know About Discursive Formations?

Just to reiterate, studying and understanding discursive formations are important because they provide the basic knowledge (savoir) that is the precondition of any formal/scientific knowledge (connaissance). As was discussed in the previous subsection, discourse is the ontological condition of thought, knowledge, and language in a specific culture such as that of medicine. It provides the grounds of possibility for the science and disciplines to grow. Take discursive formation of medicine as an example, which constitutes the basic framework on which emerges the possibility of certain ways of thinking, speaking, and acting. In other words, elements of medical discourse affect medical science, what medicine is about, and how it is taught, learned, and practiced - all of which define medical professionalism. Discursive formation of medicine provides the

forming elements of medicine as a subject to teach and a profession to practice, and as such, it cannot be ignored by medical education research.

What is the Difference between Discursive and Nondiscursive Practice?

In this section, I specify what is meant by the term "nondiscursive' and how it compares to discursive practices. We will also see how discursive and nondiscursive practices are linked together in real life and why it is important to distinguish between them. First of all, let us clarify some common terms that are often used in relation to nondiscursive domains. Nondiscursive *domains* are inclusive of nondiscursive *structures* where nondiscursive *practices* are carried out. An example of nondiscursive domains related to medicine are the "institutions" that include medical schools and hospitals. Nondiscursive structures within medical schools and hospitals include rules and regulations regarding doctors, patients, supplies and so on; whereas nondiscursive practices include all bureaucratic administrative work. A discursive practice is always housed within a nondiscursive structure and, as such, surrounded by nondiscursive practices. Nondiscursive domains include institutions, political events, as well as economic practices and processes in a particular period of time. The connection between discursive and nondiscursive then is inevitable to the point that the nondiscursive may form part of the discourse itself. While archaeology focuses on discursive formations, it is also, to some extent, concerned with connections between discursive and nondiscursive practices (Gutting, 1989, p. 256). In other words,

> archaeology is concerned not just with a given discourse in its strict sense, but also with 'a set of events, practices, and political decisions, a sequence of economic processes that also include demographic fluctuations' and many other 'nondiscursive' elements that feed into discourse in its wider sense (Webb, 2013, p. 132).

It is not until Discipline and Punish (1977b) in Foucault's own work that he begins directly addressing interrelations between discursive and nondiscursive structures. In his three preliminary archaeological studies, namely, MC (Foucault, 1988), BC (Foucault, 1975), and OT (2010), Foucault does not seem to be comfortable dealing with the issue of nondiscursive domain and establishing archeological links (that are different from causal links) between discursive and nondiscursive practices. In BC, he provides an epistemological analysis of clinical medicine without challenging the scientific status of medical knowledge itself. Furthermore, the one discursive element he focuses on is the concepts–and so there is not much discussion about the objects, modes of enunciation, and strategies related to the discourse of clinical medicine in the seventeenth century. Thus, Foucault refrains from discussing connections between clinical medicine and nondiscursive structures (e.g., institutions such as medical school and hospital) in the Classical Age. In The Order of Things (Foucault, 2010) too, Foucault is attending exclusively to the internal analysis of discourse. Although Foucault's early archaeologies were not comfortable discussing the place of nondiscursive practice in relation to discourse, according to the methodological reflections he provides in AK (Foucault, 1972) considering the interrelations of discursive with the nondiscursive practice is an essential part of the archaeological analysis (Gutting, 1989, p. 138) and so it will be carried out–to the extent possible–by the present study[4].

[4] Foucault does not elaborate on the nature of the difference between discursive and nondiscursive practices in AK (or his other archaeologies prior to the AK). The main sources consulted in this study, including Gutting (1989) and Webb (2013), are not clear about the nature of this difference either. Foucault begins to take the nondiscursive domains seriously only in Discipline and Punish (1977b), as he begins to get engaged with the interrelations of knowledge and power, and his methodology changes from archaeology to genealogy then.

My position in the present study is that the nondiscursive structures are part of the life of a discourse and thus they cannot be ignored. Take clinical medicine for example. The discourse of modern medicine has been contemporary with a number of political events, economic phenomena, and institutional changes ever since its birth at the end of the eighteenth century. As a result of this coexistence, there are certain links between the way medicine is taught and the political nondiscursive events of the time. Likewise, the way medicine is practiced in a society is also linked with the economic spirit of that specific time period in which it exists. The question is not whether such exist; it is rather how one might explain these links at a level that is proper to the analysis of discursive formations. Let us take a quick look at two analytical approaches that Foucault mentions in AK: 1) symbolic analysis, and 2) causal analysis (Foucault, 1972). These analytical approaches are often used by scholars to explain the links between discursive and nondiscursive domains.

If I were to use *symbolic analysis* in this study, it would have required me to assume that modern medicine and contemporary political and economic events all share a common meaning. That is due to symbolic analysis seeing discursive and nondiscursive events as symbolizing and reflecting each other, like two mirrors "whose meanings are caught up in an endless play of reflection" (Gutting, 1989, p. 256). In the present study, this would have led to the supposition that administration of medicine corresponds to the political and economic phenomena of the contemporary society in order to both reflect them and be reflected in them (Foucault, 1972). On the other hand, employing a *causal analysis* in this study would have led me to find out to what extent nondiscursive domain (e.g., political and economic phenomena) can determine the consciousness of physicians,

"the horizon and direction of their interest, their system of values, their way of perceiving things, [and] the style of their rationality". (Foucault, 1972).

Neither of the above analytical methods function at a level that is proper to the Foucauldian account of discourse. Thus, this study is employing archaeological method of analysis to partially explain the links between discursive and nondiscursive domains as they relate to modern medical discourse. In contrast to both symbolic and causal analyses, archaeology does not assume that the power of empirical events alone can determine the "structure and development of thought" in people (Webb, 2013, p. 135) Rather, archaeology suggests that relations between medical discourse and its related nondiscursive practices are more complex than a mere cause and effect process pointing to either direction (Webb, 2013). In Foucault's words, archaeology

> wishes to show not how political practice has determined the meaning and form of ... discourse, but how and in what form it takes part in its conditions of emergence, insertion, and functioning (Foucault, 1972, p. 163).

In archaeology, one neither treats the discursive and nondiscursive domains as "great cultural continuities" nor does one seek to establish a casual mechanism between them (Gutting, 1989, p. 138). Rather, one tries to determine the link between rules of formation of discursive elements and their related nondiscursive systems. Furthermore, one looks to reveal specific forms that such relations may take within a discourse. One does not allege that economic and political motives are running the show behind the framework of modern medicine. It is important to acknowledge that nondiscursive practices, such as the business-based model of administering medical services, do not bring about the modern medical discourse; they are merely part of it. Archaeology sees discursive and nondiscursive domains as inextricably bound to each other, while the relations between

them are considered to play a significant role in formation of discursive regularities (Foucault, 1972). Not to forget, in every discourse, there is a point at which the nondiscursive becomes discursive itself by becoming part of the discourse.

The relations among science, ideology, and discursive formations are also important to be considered. In Foucauldian archaeology one does not assume that ideology belongs to a sort of middle ground between scientific and nonscientific (Webb, 2013, p. 146). Rather, Foucault deems ideology as a natural companion of science. It is ironic that both science and ideology (e.g., political, religious thought) as nondiscursive practices can arise from the same discursive formation. Therefore, serious similarities as well as significant practical connections between science and political, economic, and religious ideologies of an era are inevitable. In summary, there are certain links between concurrent discursive and nondiscursive systems in every society. These relations are more complex than a causal or symbolic analysis could explain. In this study, it is important for us to understand how discursive practice of modern medicine is linked to contemporary nondiscursive practices such as political and economic phenomena as well as the ideologies of our time. Describing these relations is a significant part of archaeological analysis of modern medical discourse. In the next section, I will attempt to explain archaeology in some detail in order to denote its basic principles as they relate to the present study. For a full discussion of archaeological methodology see AK (Foucault, 1972).

What is Archaeology?

We know that the term discourse has been used in so many different ways by different theorists and authors. A Foucauldian account of discourse describes the term in a

completely different sense compared to other theorists, however. Naturally, Foucault's unique treatment of discourse required a unique methodology too for analyzing it. He became occupied with developing his new methodology for a good part of his scholarly life (1960 to 1972). This new methodology was named archaeology "in virtue of its need to discover structures beneath the surfaces open to ordinary historical scrutiny" (Gutting, 1989, p. 102). Foucault wrote three consecutive books, namely, Madness and Civilization (1988), The Birth of Clinic (1975) and The Order of Things (2010), signifying his initial attempts in characterizing this new methodology. It is only in The Archaeology of Knowledge (1972), however, that Foucault provides a detailed account of archaeology as a full-scale methodology for the analysis of discourse. He finally commits himself to lavishly defining the "enterprise" of which he says his earlier books were "very imperfect sketches" and "attempts that were carried out, to some extent, in the dark" (Foucault, 1972, pp. 15, 16).

AK (Foucault, 1972) introduces methodological signposts that are no doubt crucial for the notion of discourse as well as its analysis (Gutting, 1989, p. 102). Archaeology describes the occurrence of discourse. What archaeology articulates as a result is the discursive formation for a particular discourse. Archaeological analysis of discourse is important because people do not experience a discourse as a whole (Webb, 2013, p. 115). They only see bits and pieces of it depending on their own positionality as one string in the fabric of discourse. Archaeology puts the pieces together to illustrate a map of discourse, which is called a *discursive formation*. Further, archaeology is a methodological technique that works with both texts (e.g., written, spoken, or observation data) and practices. It is designed to be capable of functioning at a level that is "other and

more fundamental than those of ordinary hermeneutics, which seeks the meaning of individual utterances and actions" (Gutting, 1989, p. 102). Archaeology also "has a certain openness and revisability built into it." (Webb, 2013, p. 46). As Foucault puts it,

> the horizon of archaeology, therefore, is not a science, a rationality, a mentality, a culture; it is a tangle of interpositivities whose limits and points of intersection cannot be fixed in a single operation (Foucault, 1972, p. 159).

Archaeology sees discourse as a historically constructed process that is open to inspection (Webb, 2013, p. 128). On the other hand, archaeology is not independent of the events and processes that it investigates. An archaeological analysis establishes *rules* that emerge from the data itself, and *conditions* that do not precede their conditioned events. Thus, it counts as a methodology that is both dependent and "responsive to the domain in which it is applied" (Webb, 2013, p. 134).

Archaeological scrutiny begins with suspension of the unquestioned unities in a discourse. This is considered a necessary step for letting go of the "careless assumptions of other forms of analysis" (Webb, 2013, p. 128). Examples of unities needing to be suspended in medical discourse include "medical professionalism" and "medicine', as these are unities that do not have well-defined boundaries. As Foucault explains,

> we set out with an observation: with the unity of a discourse like that of clinical medicine … we are dealing with a dispersion of elements. This dispersion itself - with its gaps, its discontinuities, its entanglements, its incompatibilities, its replacements, and its substitutions - can be described in its uniqueness if one is able to determine the specific rules in accordance with which its objects, statements, concepts, and theoretical options have been formed: if there really is a unity, it does not lie in the visible, horizontal coherence of the elements formed; it resides, well anterior to their formation, in the system that makes possible and governs that formation. (Foucault, 1972, p. 72)

In the remainder of the discussion above, Foucault makes an effort to clarify that synthetic unities are not suspended with the intention to banish them "as if they were illegitimate illusions whose removal would clear a path to the truth" (Webb, 2013, p. 53). Rather, archaeology is interested in "how they came to be there, by what means they are sustained in existence, and with what effects" (Webb, 2013, p. 53). At any rate, for archaeology to be able to reveal the facts of discourse, it is essential to look at a set of events and their relations in their "non-synthetic purity" (Foucault, 1972, p. 26).

Suspending synthetic unities is a rewarding enterprise because as soon as one suspends them, there emerges an entirely new field of possibilities where it becomes possible to think again (Foucault, 2010). Archaeology can then begin to establish discursive elements (i.e., objects, modalities of enunciation, concepts, and theoretical choices) and the rules of formation for each of the four elements. Next, "archaeology follows suit in recognizing that the rules which govern a discourse, and the changes that shape it, are formed within the discourse itself." (Webb, 2013, p. 132). Lastly, archaeology attempts to highlight relations between discursive and nondiscursive practices. According to Foucault, nondiscursive practices include elements such as "an institutional field, a set of events, practices, and political decisions, a sequence of economic processes that also involve demographic fluctuations, techniques of public assistance, manpower needs, different levels of unemployment, etc." (Foucault, 1972, p. 157). Further details on how archaeological analysis is carried out as a step-by-step procedure is provided in Chapter 3. In the next section, I turn to discuss the chief principles of archaeology as a Foucauldian research methodology.

Chief Principles of Archaeology

Foucauldian archaeological studies adhere to the following seven principles:

1. suspension of transcendence
2. locality and relativity
3. having no claims on causality
4. decentralization of subject
5. treating language as a factual event
6. temporal pluralism
7. acknowledging discontinuity

The remainder of this section containing description of each principle is based on Foucault's discussions on archaeological methodology in his various archaeological studies (Foucault, 1988, 1975, 2010, 1972). These principles are interwoven with one another to the point that, more often than not, each one references the other(s) upon further scrutiny. Dividing them up into seven sections below is a compromise with the twofold aim of highlighting each point as well as putting them into a more graspable form.

Suspension of Transcendence: A Different Sense of History. In archaeology, one does not merely trace the continuity of a concept through time in order to determine its history. Moreover, the commonsensically familiar assumption that all concepts have a certain point of origin - where they were first born in their pure form - and have continuously progressed ever since needs to be suspended. In Foucault's words,

> the history of a concept is not wholly and entirely that of its progressive refinement, its continuously increasing rationality, its abstraction gradient, but that of its various fields of constitution and validity, that of its

> successive rules of use, that of the many theoretical contexts in which it developed and matured (Foucault, 1972, p. 4)

Thus, a different sense of history is required in archaeology; one that not only believes in *historicity* of concepts but also looks beneath solid continuities and searches for interruptions. Archaeology proposes to "move from a linear to a tabular model of history" (Webb, 2013, p. 45), which is, at the same time, a move from "total history" to a rather "general history". A total history organizes its observed phenomena around a single center (e.g., scientific progress, elaboration of maturity, advancement of mankind), whereas a general history embraces multiplicity and complications, following its observed phenomena through "the space of a dispersion" (Foucault, 1972, p. 10). Developing a sense for the latter type of history is only possible by

> suspending the continuous assimilation of knowledge, interrupt its slow development, and force it to enter a new time, cut it off from its empirical origin and its original motivations, cleanse it of its imaginary complicities; they direct historical analysis away from the search for silent beginnings, and the never-ending tracing-back to the original precursors, towards the search for a new type of rationality and its various effects (Foucault, 1972, p. 4).

Though archaeology suspends all types of transcendental conditions in discourse, it does not imply that analysis of discursive formations needs to be empirical either (Webb, 2013, p. 110). The word transcendental refers to transcendental idealism of Kant (see Stang, 2016, for more). In a few words, transcendental refers to the objects or practices that are beyond the ordinary and everyday experiences; things that are spiritual, otherworldly, pure, and beyond the physical realm. Thus, the discursive practice lies neither at "some deep, original level" of transcendence nor "at the level of lived experience" of empiricism (Foucault, 1972, p. 191). It is important to understand that rules that relate the elements of archaeology and govern discourse emerge from within the discourse itself. They do not

have transcendental connections and therefore do not and cannot seek to produce *ideality* (attaining a quality that is characterized by ideals such as purity and perfection).

On the other hand, discursive events should not be treated as lived experiences of the subject who enunciates them either. In Webb's words,

> discourse, then, is not the signification of what is, and its rules of formation do not follow the outline of some deeper ontological truth. Yet neither is it grounded in the speaking subject. All aspects of discourse will instead be regarded as constructions, the rules of which are the outcome of a complex historical process that is not just found in discourse but is the very condition of discourse itself." (Webb, 2013, p. 85)

Furthermore, in archaeology one does not look for the precondition of ideality in lived experiences when collecting one's data. To be precise, archaeology seeks to determine the precondition of discourse within the discursive events. As Webb puts it, "the axis that runs from consciousness through knowledge to science is thereby replaced by another which runs from discourse to knowledge to science." (Webb, 2013, p. 144). The point I am trying to make here is that the novelty of an archaeological analysis lies in its effort to show that knowledge of the discursive formation is irreducible to either the transcendental or empirical knowledge (Webb, 2013, p. 154). Archaeology seeks to delimit discourses "in their specificity" and show how the rules governing them are "irreducible to any other" (Foucault, 1972, p. 139).

Let us now turn to discuss how this chief principle relates to the present archaeological analysis of the modern medical discourse. The first and foremost implication of suspending transcendental conditions in the history of medicine is to accept the impossibility of the *ideal* and/or *pure* medical practice at any point along the trajectory of a human history. That is because, as we have seen, archaeology rejects the idea of continuity in discourse. Archaeology does not see medicine as a transcendental

unity which has travelled through time in a linear, continuous, and coherent manner and has reached our time as a perceptible totality. In other words, one does not assume that the discourse of medicine simply began at some point of historical origin, has progressively developed and refined its concepts and practices ever since, and therefore holds the potential to reach its stage of true fulfillment at some point in the future. Rather, medicine is seen as a local construction of discursive events caught up in relations with an accumulation of previous statements - all of which determine the existence of medicine as a discursive formation. In this view, medicine does not have a point of *genesis* in the history, it does not *grow* coherently and continuously, and therefore does not form a transcendental totality. As can be expected, archaeology also rejects any idea that implies medical discourse either began with - or has ever reached - its full potential at some point in the history. It's not that medicine is deteriorating in its purity and ideality with time. The point to be noted is that, there is no *ideal stage of fulfilment* possible for a discourse. That is because discourse, as described by Foucault, is inseparably bound to the "reality it constructs" (Webb, 2013, p. 135) and the reality is never perfect. As Gutting affirms, there is no such thing as the "ideal form" of a discourse (e.g., ideal medicine) that can be compared to the real-life exemplification of it (e.g., modern medicine) (Gutting, 1989, p. 216). I repeat, a pure, ideal form of medicine has never existed nor it can ever exist in the future.

Like any other discourse, medicine is believed to be a thing of this world and constructed by the people of this world. People and their actions are neither pure nor ideal because they always occur under specific worldly conditions that cannot be deemed as universally *ideal*. Medicine takes place under conditions defined by its time and place.

Moreover, being a social exercise, medical practice is executed by people who only work within the limits of *their* morality, personal judgments, and ideological assumptions. There has never existed a medical practice, nor a doctor, independent of the ideological and political conditions that are set by society in which they existed. Such conditions, therefore, are considered *intrinsic* regularities (or formative elements) of medical discourse and, as such, part of its discursive formation. Archaeology does not treat these conditions as *externally* imposed on an ideal body of medicine. In other words, they are not seen as external events disturbing the purity and ideality of medicine; rather, these conditions are deemed as formative elements of the medical discourse itself. To think that these societal conditions may "limit" or "restrict" medical discourse is to assume that there is a medical discourse that can exist separately from–or outside of–these conditions, which is against the archaeological principle denying transcendentality. Being an archaeological analysis, this study does not provide an account of medical discourse as a linear, chronological grouping of events. Rather, it analyzes medical discourse on the basis of its intrinsic regularities. Conditions making these intrinsic regularities possible are already blended in them and, as such, they are also analyzed as forming elements in the discursive formation of modern medicine.

Locality and Relativity. It is important to keep in mind that archaeological analysis does not deliver "exceptionless empirical generalizations" (Gutting, 1989, p. 105). As Foucault puts it, "far from wishing to reveal general forms, archaeology tries to outline particular configurations" and as such, "archaeological comparison is always limited and regional" (Foucault, 1972, p. 157). Archaeological findings are local,

provisional and relative due to archaeological elements–and their relations–also being specific, relative and locally constructed. That is because,

> every discourse is local, in the sense that it constitutes a number of cases, statements and events within a neighborhood that is discursive but also historical. Some discourses stretch to include more than others, but none has any claim to universality (Webb, 2013, p. 139).

Thus, rules established by archaeology are also local and specific to the discursive formation which it analyzes. Archaeology does not allow easy passages from particular to the general, and from local to the global (Webb, 2013, p. 133). As Webb puts it, "the pursuit of the unity of discursive forms does not translate into the pursuit of universal rules" (Webb, 2013, p. 77) in archaeological analysis.

Furthermore, archaeological analysis is not abstract because it is born out of the particular discourse it analyzes. In this study, for example, my analysis does not account for complexity and diversity of attitudes toward medicine throughout the modern society. As a matter of fact archaeology is not alone in being locally constructed and relative among other analytical approaches. If there are ever any analyses that actually claim universality, their "usual, simple unifying schemata do not sustain detailed scrutiny of the historical record." (Gutting, 1989, p. 105). Finally, it is important to understand that archaeological description is an undertaking that can never be "completed" or "wholly achieved" (Foucault, 1972, p. 131). It will always have room for revision and modifications. The reason for this is the fact that discourse, as Foucault describes it, is dynamic. Thus, discursive elements and relations between them are not fixed and static. Discursive regularities can never reach a stage of completion, calcification or termination because they are constantly changing and transforming, even "without appeal to an external cause" (Webb, 2013, p. 109). Consequently, discursive regularities (e.g.,

elements, relations, rules and conditions) established by archaeological analysis are "only ever partial, provisional, and already, if imperceptibly, in transformation" (Webb, 2013, p. 127).

Having No Claims on Causality. In a way, archaeological findings deliver a cross-sectional history of a certain concept at a certain point of time. However, it is very different from a standard history in the sense that archaeology does not explain political, social, and economic causes for the events of interest. Political, economic, and ideological phenomena are considered nondiscursive practices. While archaeology acknowledges the existence of links between discursive and nondiscursive structures, it has no claim on causality of any sort (Webb, 2013). This is not because the question of causality is considered to be "pointless or unanswerable". Rather, it is because Foucault thinks a phenomenon such as discourse must be described at a sufficiently deep level before its causes can profitably be sought out (Gutting, 1989, p. 163). Otherwise, an "historical explanation that traces causal links between empirical events will inevitably be shallow and ill-conceived" and cannot help but overlook the "layers of complexity that contributed to the events it purports" (Webb, 2013, p. 79). Thus, archaeology does not reject the question of causality, it only puts it in brackets. Alternatively, an archaeological analysis such as one conducted in the present study aims to determine the *conditions of possibility* for intrinsic elements of the (medical) discourse itself. A more detailed discussion of these conditions will be provided in Chapter 3.

Decentralization of Subject. Typically, qualitative (and quantitative) research tends to explain the world on the basis of individual human thoughts, beliefs, intentions, motivations, and meaning-making processes. Archaeology, on the other hand, is not

concerned with the *consciousness* that underlies individual's beliefs and intentions. Thus, it decentralizes the human subject from playing a pivotal role in discourse. For Foucault, the

> unquestioned acceptance of man as the ineluctable focus of philosophy is a new form of dogmatic slumber ("the anthropological sleep," 340). Our awakening from it requires the uprooting of anthropology through the elimination of man as a ruling category of our thought (Gutting, 1989, p. 207).

Decentralization of the subject in archaeology is an imminent but also promising act. Foucault sees it as a way for "exceeding a limit that defines the current possibilities of thinking" (Webb, 2013, p. 161). Hence, archaeology does not see the world through people's beliefs and intentions. Once these are suspended, the "void left by man's disappearance" becomes "the unfolding of a space in which it is once more possible to think" (Foucault, 2010, p. 342). Archaeology operates in *that* space.

Thus, decentralization of the subject is necessary in archaeological analysis. If one looks closely, though discursive formations have their own defined aims and systems, it is not a decidedly conscious process that sets them up. It is not a consciousness (single or collective) that gives rise to a discourse. Rather, discursive events happen according to discursive laws that consist of their rules of formation and conditions of their possibility and existence. In Foucault's words,

> enunciative domain refers neither to an individual subject, nor to some kind of collective consciousness, nor to a transcendental subjectivity; but that it is described as an anonymous field whose configuration defines the possible position of speaking subjects. Statements should no longer be situated in relation to a sovereign subjectivity, but recognize in the different forms of the speaking subjectivity effects proper to the enunciative field." (Foucault, 1972, p. 122)

Therefore, in archaeological analysis one does not see the world as expressions of some consciousness. One does not think in terms of a particular subject enunciating a statement. The statement is seen as a result of someone stepping into a position which already existed in the discourse. It is the discourse that creates and constitutes these positions, with the speakers completing the pattern for discursive regularities. In archaeology, then, one looks at the "various patterns into which they [statements] spontaneously fall or can be fitted". (Webb, 2013, p. 43). As Foucault puts it, in archaeology,

> one would not need to pose the psychological problem of an act of consciousness, instead, one would analyze the formation and transformations of a body of knowledge (Foucault, 1972, p. 194).

Hence, archaeological disregard for the psychological state of the speaker's mind (e.g., feelings, intentions, and motivations) is justified based on the principle of decentralization of the subject in the discourse.

Furthermore, given the long-existing philosophical tension between the status of man as an *object* in the world, and at the same time, as a *subject* constituting that world (Gutting, 1989, p. 212), archaeology proposes a move from the *philosophy of the subject* to the *philosophy of the concept* (Webb, 2013, p. 50). According to Webb,

> where connections are to be drawn, they should be between the works themselves and the ideas and patterns of thought that run through them; the connections need not pass through the subject as the ground of the true meaning of the work (2013, p. 51).

Archaeology favors what has been deemed as the "death of man as the central figure" in constitution of knowledge in the modern time (Webb, 2013, p. 158). The goal, however, is not to exclude the subject from discourse. It is only to recognize that the subject is not playing the central role either as a transcendental or empirical consciousness (Foucault,

1972)). It is important to note that Foucauldian discourse is not simply language spoken by a subject. In Foucault's words,

> discourse, at least as analyzed by archaeology, that is, at the level of its positivity, is not a consciousness that embodies its project in the external form of language; it is not a language, plus a subject to speak it. It is a practice that has its own forms of sequence and succession (Foucault, 1972, p. 169).

To conclude, in archaeology one believes that displacement of the role of subject in discourse not only makes new forms of inquiry possible, but also by modifying both position and function of the subject in relation to the discourse, it leads to what can be deemed as a somewhat radical freedom of thought (Webb, 2013, p. 153).

Treating Language as a Factual Event. In archaeology, the analyst is interested in the fact of the language and, as such, appreciates language in terms of construction, not disclosure (Webb, 2013, p. 33). Language is not seen as a representation of the mind of the subject who speaks it. Rather, it is assumed that statements occur as part of a discourse, and their

> occurrence is not linked with synthesizing operations of a purely psychological kind (the intention of the author, the form of his mind, the rigor of his thought, the themes that obsess him, the project that traverses his existence and gives it meaning) (Foucault, 1972, p. 28).

Archaeology operates at a level that is fundamentally different from that of hermeneutics and the analyses of thought that include all forms of interpretive activity. In analyses of thought, the question is always *what is being said in what is said*, and therefore,

> one tries to rediscover beyond the statements themselves the intention of the speaking subject, his conscious activity, what he meant, or, again, the unconscious activity that took place, despite himself, in what he said or in the almost imperceptible fracture of his actual words (Foucault, 1972, p. 27).

Thus, the analyst tries to discover what animates the language from behind, to read the invisible words that run in between the sentences and, in short, to discern the *meaning* that is *implied* by the text.

Archaeology, on the other hand, moves in the opposite direction. An archaeologist is not concerned with the question of "what is speaking through language", rather, one is concerned with "what language itself says" (Webb, 2013, p. 99). Language, then, is seen as the surface of discourse with the acknowledgment that there are no hidden truths lying behind or beneath it (Webb, 2013, p. 99). Discourse is the same as its surface, and, therefore, archaeological analysis refuses to be "allegorical in relation to the discourse that it employs" (Foucault, 1972, p. 27). The important task in archaeological analysis is to look for "relations and regularities within what is said" (Webb, 2013, p. 108), and one needs to do so "without reference to a cogito" (Foucault, 1972, p. 122). As Foucault puts it:

> this task presupposes that the field of statements is not described as a 'translation' of operations or processes that take place elsewhere (in men's thought, in their consciousness or unconscious, in the sphere of transcendental constitutions); but that it is accepted, in its empirical modesty, as the locus of particular events, regularities, relationships, modifications and systematic transformations; in short, that it is treated not as the result or trace of something else, but as a practical domain that is autonomous (although dependent), and which can be described at its own level (Foucault, 1972, pp. 121-122).

Hence, in archaeology one does not look beyond language of the statement in an attempt to reveal what might be *concealed* or secretly *implied* by that language. Rather, statements themselves are what constitute the discourse. In Webb's words, one sees discourse "as language in act, in itself, and not as something to be understood in terms of that which produced it (the subject), or which it produces (meaning)" (Webb, 2013, p.

99). This is probably the most distinguishing feature between Foucauldian archaeology and what is known as the "hermeneutics of suspicion" associated with analytical works of writers such as Marx, Nietzsche and Freud (Webb, 2013, p. 121).

Archaeological treatment of language is not the same as the structuralist or formalist linguistic analysis either. That is because, first, Foucauldian discourse is more than language; and second, analysis of discursive formations takes more than the analysis of language alone. In Webb's words,

> discourse carries out the ordering of word and thing and situates the subject in relation to what is said about them, and as such discourse cannot escape its function. Language apart from this ordering would not be discourse (Webb, 2013, p. 100).

Moreover, Foucault, like Heidegger, sees discourse as the ontological condition of language, thus language is the site of construction of what actually *is* (Webb, 2013, p. 99). It is the discourse that makes, unmakes, and remakes the worlds with nothing else lying behind or anterior to it. Just like Foucault, I

> would like to show that 'discourses', in the form in which they can be heard or read, are not, as one might expect, a mere intersection of things and words: an obscure web of things, and a manifest, visible, colored chain of words; I would like to show that discourse is not a slender surface of contact, or confrontation, between a reality and a language, the intrication of a lexicon and an experience; I would like to show with precise examples that in analyzing discourses themselves, one sees the loosening of the embrace, apparently so tight, of words and things, and the emergence of a group of rules proper to discursive practice (Foucault, 1972, pp. 48-49).

Although language is "a system for possible statements, a finite body of rules that authorizes an infinite number of performances", discourse is not the same as language since the field of discourse consists of a group of events "that is always finite and limited at any moment" (Foucault, 1972, p. 27). In Foucault's words,

> the question posed by language analysis of some discursive fact or other is always: according to what rules has a particular statement been made, and consequently according to what rules could other similar statements be made? The description of the events of discourse poses a quite different question: how is it that one particular statement appeared rather than another? (Foucault, 1972, p. 27)

Thus, there is a fundamental difference between the basic question that linguistic analysis and analysis of discursive formation pose as analytical fields.

Temporal Pluralism: A Different Sense of Time. Time is not directly addressed in the analysis of discursive formations. In other words, archaeology does not group events together based on their location on a predetermined timeline (Webb, 2013, p. 140). Moreover, discursive events are not lined up "immediately below one another" (Foucault, 1972, p. 171) following a chronological theme of succession or simultaneity. In archaeology,

> time is avoided, and with it the possibility of a historical description disappears. Discourse is snatched from the law of development and established in a discontinuous atemporality. It is immobilized in fragments: precarious splinters of eternity. But there is nothing one can do about it: several eternities succeeding one another, a play of fixed images disappearing in turn, do not constitute either movement, time, or history (Foucault, 1972, pp. 166-167).

Instead of grouping events based on their linear temporality, archaeological analysis seeks to discover the "general rules that will be uniformly valid, in the same way, and at every point in time" (Foucault, 1972, p. 166). It is important to understand that what is suspended by archaeology is not the sense of time itself, but the use of a calendar to formulate temporal relations between events (Foucault, 1972, p. 167). Hence, discourse is not "timeless", it's only that "temporality of discourse is not derived from a general and all-encompassing structure [time] to which events must conform." (Webb, 2013, p. 131). In archaeological analysis time is considered to be "a sporadic, local and ultimately

variable order established between the elements in question" (Webb, 2013, p. 142). In this sense, discursive formation is "not an atemporal form, but a schema of correspondence between several temporal series." (Foucault, 1972, p. 74).

Michal Serres (2011), who studied temporal pluralism as a central theme in several of his works, argues that we often confuse time with the measure of time, as though time only conformed to the single scale that we apply to it. For instance, two events that seem to be distant from each other might turn out to be close if time was measured according to a different scale. In archaeological analysis, how far or close discursive events are from one another depend on the pattern of regularity to which they belong (e.g., objects, concepts, relations between concepts and statements, etc.). Moreover, time as a unity is secured by the experiences of the subject, whereas, as we have already observed, the human subject does not play a central figure in the analysis of discursive formations. Therefore, "if discourse is not the expression of events in consciousness, then the time of discourse is not modelled on the time of consciousness" (Webb, 2013, p. 108). According to Webb, this "makes possible the reconfiguration of experience, and even the modification of its ontological conditions." (Webb, 2013, p. 153). One might object that regardless of our refusal to deal with it directly, time still operates as the transcendental condition for all discursive processes. However, Foucault rejects the very assumption of there being only a single form of time underlying all types of events. In archaeology,

> we must be ready to receive every moment of discourse in its sudden irruption; in that punctuality in which it appears, and in that temporal dispersion that enables it to be repeated, known, forgotten, transformed, utterly erased, and hidden, far from all view, in the dust of books. Discourse must not be referred to the distant presence of the origin, but treated as and when it occurs (Foucault, 1972, p. 25).

Thus, in discourse, one speaks of local discursive temporalities and recognizes time not as a liner continuity, but "as a pure multiplicity, as a patchwork or mosaic" (Serres, 1997, p. 116). For example, the modern discourse of medicine lives and exists only in the present; "a present that is fractured, complex, and about which we can know something, but not everything." (Webb, 2013, p. 119).

As argued above, in archaeology the flow of time is not linear; it is rather "complex, disordered and sometimes chaotic" (Webb, 2013, p. 110). Time can take different temporal forms "which may overlie one another and intersect, or just run parallel, and which together make up the *temporal pluralism* of discourse" (Webb, 2013, p. 131). As Webb puts it,

> time features in archaeology as an immanent property of a discourse, arising from the forms of relation by virtue of which it coheres internally, and by which it is linked to its own iterations, and ultimately to events at its borders and beyond. As such, archaeology is characterized by temporal pluralism (Webb, 2013, p. 123).

In a discursive formation time does not precede the formation of its regularities. A good example of this can be seen in the relationship between discursive *conditions* and events that are *conditioned* by them. In Foucault's account of discursive formation, "what is produced becomes in turn a condition, modifying, disturbing or even destroying the patterns of statements in which they occur" (Webb, 2013, p. 119). In this sense, conditions are formed, reformed, deformed, and unformed in a sort of cycle that feeds back to itself.

The arguments made above do not mean archaeology is indifferent to the fact of succession (Foucault, 1972). What is rejected is rather the idea of succession as an absolute–suggesting there is only one form and one level of succession in the discourse.

As an alternative to the linear sense of succession, archaeological analysis can reveal various forms of succession superposing one another in a discourse. Archaeology also provides an alternative to the way in which successions are articulated (Foucault, 1972, p. 169). While in the linear model of speech and writing, all events succeed one another without providing any information about coincidences and superpositions, in archaeology one must find a principle of articulation - other than chronology - to connect a series of discursive events. This principle is determined by regularities between elements in the discursive formation (Foucault, 1972, p. 169).

For example, to explore the history of medicine in a linear way would be to follow the traditional history of ideas aiming to answer questions such as: where, when and how did medical practice first begin, how did it spread, who invented what first, how every invention added to what was there before, and how it took a cumulative human effort to get medicine where it is now. In short, this type of empirical history "aims to trace when a new object has arisen, or when a new concept with which to present reality has appeared, and so on" (Webb, 2013, p. 124). One problem with this type of history is that, as Foucault identifies,

> the mapping of antecedents is not enough, in itself, to determine a discursive order; on the contrary, it is subordinated to the discourse that one is analyzing, at the level that one chooses, on the scale that one establishes. By deploying discourse throughout a calendar, and by giving a date to each of its elements, one does not obtain a definitive hierarchy of precessions and originalities; this hierarchy is never more than relative to the systems of discourse that it sets out to evaluate (Foucault, 1972, p. 143).

Thus, one cannot capture the discursive practice by mapping it on a calendar. It cannot be forced to fit in a chronological order. Since discursive practice does not follow a linear process and its time is not the same as our time, it does not matter which regularity

happens first and, therefore, chronological hierarchies are rather irrelevant in archaeology. The second problem with traditional history is that it tends to divide time into crude historical periods that encourages a selective reading of events (Webb, 2013, p. 127). Historical periods are at best "confused unities" ((Foucault, 1972, p. 148) that may provide us with a viewpoint from the distance; whereas, a "closer inspection" such as that of archaeology "will reveal threads of continuity and frayed ends that turn the borders of such periods into complex spaces." (Webb, 2013, p. 127)

Acknowledging Discontinuity. Letting go of continuity as an underlying condition of discourse is a fundamental principle in archaeology (Webb, 2013, p. 138). One way of establishing continuity is to search for the origin of discursive elements, which Foucault explicitly rejects. He proposes to disconnect with "the unquestioned continuities by which we organize, in advance, the discourse that we are to analyze" (Foucault, 1972, p. 25). We must renounce the idea, he says, "that beyond any apparent beginning, there is always a secret origin" and save the analysis from being led "through the naivety of chronologies" (Foucault, 1972, p. 25). Even though archaeology provides a historical account of discursive formations, it does not create this account by returning to the origins. In Foucault's words,

> the description of statements and discursive formations must therefore free itself from the widespread and persistent image of return. It does not claim to go back, beyond a time that is no more than a falling off, a latency, an oblivion, a covering up or a wandering, towards that moment of foundation when speech was not yet caught up in any form of materiality… It does not try to constitute for the already said the paradoxical instant of the second birth; it does not invoke a dawn about to return. On the contrary, it deals with statements in the density of the accumulation in which they are caught up (Foucault, 1972, pp. 124-125).

It is important to note that searching for origin is not the only manifestation of a tendency to seek continuity in discourse. According to Foucault, "we must rid ourselves of a whole mass of notions, each of which, in its own way, diversifies the theme of continuity" (Foucault, 1972, p. 21). Some of these notions may not be big enough to hold rigorous conceptual clarity but, regardless of how big or small they are, such notions play a "very precise function" that is seeking to maintain continuity in discourse (Foucault, 1972, p. 21).

One of the most obvious forms of continuity is one that is drawn by history. Most historians pick up the raw material in the form of dispersed events and weave them together in accordance with a transcendental, logical, and chronological sequence to form a unity (Webb, 2013, p. 44). It is the job of a good historian to build relations between what seems to be desperate events, as though they were expressions of a single consciousness, the follow up of a single goal, or manifestations of some eternal truth that connects all events to one another. Traditional history not only tends to "attribute to the discourse it analyzes a basic coherence" (Webb, 2013, p. 129), it also tends to maintain that coherence and to dismiss any contradictions that might come across as provisional and unimportant background noise. In traditional history, contradiction is something that needs to be resolved in order for us to see the underlying coherence of events. Therefore, this type of history is "bound within a circular practice that aims to restore a cohesion that it assumes was there at the beginning" (Webb, 2013, p. 129). Traditional history holds three major assumptions regarding contradiction: 1) Contradiction is believed to be always coming from outside of a discourse - as a foreign agent - to interrupt the ideality of discourse; 2) Contradictory text or speech is seen as unintentional or accidental

expressions that cannot challenge the underlying coherence of the discourse; and 3) Discontinuities are considered to be adding up toward an end goal of cohesion and progress in discourse, as though they were "a series of incremental changes, all contributing toward a finally achieved enlightenment" (Webb, 2013, p. 129). The basic assumption, in any case, is that individual events cannot lie outside the historical continuity without sharing a common principle or some hidden meaning that connects them to one another.

In contrast to traditional history, archaeology suggests a fundamentally different approach for looking at the history. It suggests looking deeper (at an archaeological level) into the events and acknowledging the disagreements, errors, dispersions, and discontinuities–taking them just as seriously as we take continuities. In this manner, archaeology

> seeks rather to untie all those knots that historians have patiently tied; it increases differences, blurs the lines of communication, and tries to make it more difficult to pass from one thing to another (Foucault, 1972, p. 170)

Taking contradictions seriously also requires approaching any ready-made unities with a different sense of the history and a different sense of time. (Webb, 2013, p. 51). Archaeology tends to break the magical cage of assumed unities, such as medicine, rip them off of their synthetic coherence, and thus disrupt their illusive totality. According to Foucault, after breaking free from the "ready-made syntheses" one can finally grasp that in reality "they concern only a population of dispersed events" (Foucault, 1972, p. 22). It will become obvious that their continuity is more synthetic than natural.

In sum, archaeology does not give way to any synthetic unities - including a historical linearity of events. It describes discursive events as constructed experiences and

not as some fixed external realities (Webb, 2013, p. 44) holding their own hidden meanings and continuity. According to Foucault, it is not only possible but necessary for archaeology to see events in their "pure dispersion" and without putting the mask of any synthetic continuity on them. (Foucault, 1972, p. 121). As a matter of fact, archaeology is willing "to speak of discontinuities, ruptures, gaps, entirely new forms of positivity, and of sudden redistributions" (Foucault, 1972, p. 169). In Foucault's words:

> Archaeology is a comparative analysis that is not intended to reduce the diversity of discourses, and to outline the unity that must totalize them, but is intended to divide up their diversity into different figures. Archaeological comparison does not have a unifying, but a diversifying, effect (Foucault, 1972, pp. 159-160).

Hence, archaeology analyzes discourse in search of "points of divergence and discontinuity, and the patterns of regularity that produced them." (Webb, 2013, p. 102).

How is Archaeology Different from Other Analytical Approaches?

In a nutshell, archaeology is a research methodology that is radically different from other approaches to research (Scheurich, 1994). Archaeology stands on the ground that it has discovered by itself and uses it as a platform for realizing its own destiny (Foucault, 1972). In archaeology, "one is forced to advance beyond familiar territory, far from the certainties to which one is accustomed" (Foucault, 1972, p.39). The goal is to produce

> a sort of great, uniform text, which has never before been articulated, and which reveals for the first time what men 'really meant' not only in their words and texts, their discourses and their writings, but also in the institutions, practices, techniques, and objects that they produced (Foucault, 1972, p. 118).

Archaeology offers to provide an account of the facts lying well "beyond the grasp of contemporary research" (Foucault, 1972, p. 43). In fact, the problem archaeology is

concerned with "is how to decide what made them [contemporary research] possible, and how these "discoveries' could lead to others" (Foucault, 1972, p. 43). Archaeology works at the more fundamental level of defining basic objects and concepts, cognitive authority of the scientists, and the social function of science. Moreover, compared to most other analytical approaches, archaeology employs a relatively heavy machinery of philosophical thought and analytical skills. No doubt it is new, unfamiliar, and overly complex at times, but it is worth the hardship,

> for however disorienting and unfamiliar the space may turn out to be, it will be full–of unexpected relations, fleeting objects, different subject positions, and concepts drawn more finely than before (Webb, 2013, p. 62).

No wonder Foucault devoted the first half of his author's life (1960 to 1976) to the development of this new and exciting methodology.

Let us now discuss the questions of "what, then, can this "archaeology" offer that other descriptions are unable to provide?" and "what are the rewards for such a heavy enterprise?", as Foucault puts them (Foucault, 1972, p. 136). To begin with, archaeology claims to describe the "differences passed over or concealed by other forms of analysis, interpretation and history" (Webb, 2013, p. 155). As an archaeological analysis of the modern medical discourse, this study aspires to get entangled with structures lying unnoticed or beneath those elucidated by standard research techniques (Gutting, 1989, p. 109). I have come to believe that the regular common quantitative and qualitative analyses are not adequate for the primary purpose of describing the complexity, diversity, and discontinuity of the modern discourse of medicine. Standard casual approaches in research, for instance, cannot provide a description of discursive formations as illustrated by Foucault. (Gutting, 1989, p. 210), Because other forms of qualitative research, such as

ethnography, fall short on analyzing discursive formations due to their treatment of human agent as the central figure in the analyses, archaeology is the only analytical approach that advocates for the move from a philosophy of the subject to a philosophy of the concept. This makes it the only methodology that is compatible with the theories of discourse proposed by Foucault (Webb, 2013, p. 81).

There are other ways to analyze discourses, of course. The orthodox approach to the analysis of discourse is the linguistic structural method, which seeks to discover the meaning of texts "and sub-textual groupings, institutions and practices extending beyond texts and between them" and charts the relation between these meanings in an attempt to create larger configurations (Webb, 2013, p. 105). In structuralist discourse analysis, the goal is to determine the totality of possible meanings in a given text. However, the space for interpretation is both limited and continuous. That is, the same text can be endlessly searched for new meanings through time but within the range of possibilities that is set by the language of that certain text. Moreover, "to choose one meaning is to deny existence to a second, or even to many others" (Webb, 2013, p. 105). Thus, structural linguistic analysis of discourse offers a field of endless - yet limited - possible configurations (Webb, 2013, p. 105). Structuralist discourse analysis cannot function at a level in which archaeology operates. Most importantly, the term discourse as defined by the structuralist linguists is not congruent with the Foucauldian theorization of the *discourse,* which makes up the foundation of the present study.

One can safely argue that by introducing archaeology, Foucault proposed what has been called a "radical change" to the usual conception of discourse analysis (Webb, 2013, p. 154). Archaeology is geared toward an entirely new dimension of discourse

which was opened up by the advent of archaeology itself. The goal was to develop a method that is "neither formalizing nor interpretative" (Foucault, 1972, p. 135); one that could navigate the path between structuralism and hermeneutics (Webb, 2013, p. 120). Moreover, Foucauldian archaeology lies in the common ground between the transcendental and the empirical, functioning as a "medium of their relation to one another" (Webb, 2013, p. 76). Foucault also sees human sciences–as opposed to natural sciences–to be "the primary source of contemporary constraints on human freedom" (Gutting, 1989, p. 4). By "human freedom" here Foucault means the freedom of thought, which he thought was trapped in the deadlock of modernist philosophical treatment of the subject as the center of all discourses. Thus, according to Gutting, the ultimate project of Foucault's archaeology is two-fold: "to show how particular domains of knowledge have constrained human freedom and to provide the intellectual resources for overcoming those constrains" (Gutting, 1989, p. 2).

In archaeology one is concerned with the dubious self-understanding of the human science subjects (Gutting, 1989). Foucault used archaeology in his subversive study of the modern experience of madness (Foucault, 1988) because he was suspicious of faulty self-understanding of the psychology and psychiatry disciplines. Based on my personal experience and following the Foucauldian notions of discursive formations, I too am suspicious of faulty self-understandings of *medicine* by medical professionals in modern U.S. society. Hence, this study is an attempt to describe dubious self-understanding of human sciences such as professionalism and medical ethics - as they relate to modern medical discourse. I follow Gutting in believing that,

> a correct grasp of the significance of these disciplines will not be forthcoming from a straightforward study of the concepts and theories

> they put forward. Such a study would remain at the surface and fail to uncover an underlying structure that reveals, beneath their scientific pretensions, the true nature of modern psychology and psychiatry [and, in the case of the present study: medicine]. Foucault's project therefore requires an archaeological approach (Gutting, 1989, p. 88).

It is worth reiterating here that the present archaeological analysis is not a challenge to the objective truths of medicine as a discipline (e.g., medical scientific knowledge). Rather, throughout the analytical procedure, I remain concerned with questioning the *self-understanding* of medicine as a discipline by following the discourse of those who are involved with it (e.g., physicians, medical students, patients and so on).

In this chapter, I have reviewed the literature related to theoretical, substantive, and methodological bases of the present archaeological study of modern medical discourse. This study analyzes contemporary discourse of medicine that is currently at work in the context of a medical school and the way in which it ultimately constitutes the professional identity of future doctors. The goal is to define the unity of modern medicine as a discursive formation. This is done by deploying a Foucauldian archaeological methodology in this study. Having reviewed the relevant literature in this chapter, I now turn to explore archaeology as a hands-on methodology for analyzing the discourse of medicine by setting out to demonstrate the system of relations that govern formation of the local medical discourse.

Chapter 3: Methodology

This research aims at defining the discursive formation of modern medicine as a social discourse. The Foucauldian archaeological methodology and analytical approach is chosen to investigate the structural elements, rules, and conditions that determine the formation of modern medicine as a discourse at Indiana University School of Medicine, Indianapolis campus. Perhaps the most important characteristic of social discourses is that they constitute the social identity of those who are subjected to them. That is, it is expected of the current discourse of medicine to determine medical students' professional identities. It goes without saying that physicians' professional identity is closely related to their professional behavior and ultimately the medical care delivery.

In this chapter, I will discuss the methods and procedures that were used to conduct this study. I will begin by introducing Foucauldian archaeology as the research methodology used in this study and will go on by defining concepts such as the statement, enunciative function, discursive elements, discursive rules, relations and regularities, and discursive conditions. Next, I will provide a description of the study setting, study participants and participant selection methods, and the data collection methods used in the present inquiry. Lastly, I will provide a statement of my positionality as a qualitative researcher to conclude this chapter.

Archaeology Methodology

Archaeology is a methodology that defines its own analytical method. It analyzes synthetic unities, such as that of social "medicine" that are often accepted without question. In Foucault's view, these ready-made unities reinforce the constraints within which modern thought and thinking is entrapped (Webb, 2013, p. 48). In archaeology one

seeks to reveal the construction and transformation of these unities with the goal of describing them at a level that is often hidden under a façade of unquestioned concepts and assumptions. This study is using archaeological methodology to explore how medicine presents itself as a discursive formation at Indiana University School of Medicine.

Archaeological methodology essentially owes its existence to Foucault's concern about not only changing the content of *thought* but also the terms and conditions according to which one thinks (Webb, 2013, p. 161). He wrote three books (MC, BC, and OT) that were claimed to be archaeologies before writing his detailed methodological account of archaeology in AK. Though not a unified project from the beginning, the three prior books gradually developed what became a distinctive approach to inquiry. After Foucault's death in 1984, archaeological methodology has received relatively less attention from the scholarly community, owing, to some extent, to its inherently complicated structure and Foucault's philosophical and uncommon use of language in describing his methodology. However, Scheurich and McKenzie (2005) contend that Foucault himself, till the end, considered archaeology to be important and relevant and that the scholarly community is making a mistake in devaluing or ignoring archaeology.

In a nutshell, archaeology seeks to define the four elements of a discursive formation, namely, objects, modalities of statement, concepts, and theoretical strategies; the rules for their formation; the relations between these elements and their rules of formation; and the conditions that make their existence possible. The analytical information collected in this manner then illustrates the discursive formation pertaining to a particular discourse (such as that of medicine, which is the focus of analysis in this

study). Foucault's conceptions of "discourse" and the "archaeological statement" are the foundations of archaeological analysis. Discourse is made up of a group of statements that belong to a single discursive formation. Archaeology is concerned with "actual occurrences [of these statements] and their effects" (Gutting, 1989, p. 228); it is obsessed with "the fact that words have happened" and that they have "left traces behind them" (Foucault, 1971, p. 201). Thus, statements are treated in a unique manner and with no regard for their hidden meanings, intentions, or motivation of the speaker.

How is Archaeology Done?

Archaeological inquiry begins by suspending the ready-made unities in discourse. To illustrate his point about what exactly is wrong about such unities, Foucault takes up the example of subjective unities such as that of the "speaking subject", the "author", the "book", and the "oeuvre" and discusses them in detail. He argues that as soon as one questions an assumed unity such as that of a book, for example, it "loses its self-evidence" (Foucault, 1972, p. 23). I this section, I will elaborate on the example of the book with the aim of showing how a simple unity (such as that of a book) can be questioned, analyzed, and suspended in order to reveal the complex relations hiding underneath its surface unity.

Subjective unities and subjective means of transmission, such as books, are often seen as self-evident and unproblematic harmonies. Foucault challenges this notion and reveals that they are actually not as unproblematic and self-evident as they may seem at the first sight. For instance, one might be tempted to think of a fiction book - that one is holding in one's hand - as a material unity residing within the parallelepiped[5] that

[5] A solid body of which each face is a parallelogram.

contains it. One tends to assume that all parts of the book, even the smallest fragments, are "the expression of the thought, the experience, the imagination, or the unconscious of the author" (Foucault, 1972, p. 24). Upon closer scrutiny, however, one can see that beyond this apparent unity, the book is rather "caught up in a system of references to other books, other texts, other sentences … [and that] it is a node within a network" (Foucault, 1972, p. 23). As Webb puts it, the human subject (that is, the author of the book, in this case) has *thought* using ready-made frames of mind in order to "organize an intention that is already there" (Webb, 2013, p. 157). He goes on to explain that

> *to think* [emphasis added] is to take part in a pattern of conceptual development, and to carry out the steps by which a demonstration unfolds or new concepts and objects are produced. As such, the act is itself conditioned by the history of the operation it performs, without being determined by it (Webb, 2013, p. 157).

A book, in this sense, is merely one node in a *network* of references to other works. Networks vary in accordance with the kind of text (e.g., mathematical, literary, and philosophy). Seeing a book in this way makes the definition of "a book" as a unity rather problematic (Webb, 2013, p. 52). One might conclude that the unity of a book is at best variable and relative.

The above discussion illustrates an example of our tendency to create face-value unities on regular bases. Thinking of events in terms of their surface unities blocks the possibility of exploring the actual complex relations that exist among them. There is a large number of historical, theoretical, and discursive unities constructed as part of the developmental process in social discourses. Foucault suggests suspension of such unities on the ground that they lack "a theoretical elaboration" (Foucault, 1972, p. 71). This is not to say that such unities are completely useless and should not be used in the literature

or practice. It is only to say that they require further theoretical elaboration so their limits can be defined at least at a local level (Webb, 2013, p. 80). In Foucault's words,

> these pre-existing forms of continuity, all these syntheses that are accepted without question, must remain in suspense. They must not be rejected definitively of course, but the tranquility with which they are accepted must be disturbed; we must show that they do not come about of themselves, but are always the result of a construction the rules of which must be known, and the justifications of which must be scrutinized: we must define in what conditions and in view of which analyses certain of them are legitimate; and we must indicate which of them can never be accepted in any circumstances." (Foucault, 1972, p. 26)

Synthetic unities are often underpinned by assumptions about continuity, such as that of medicine with assumptions regarding its origin and the possibility of a transcendental, ideal, and pure form of medicine. Once such a unity is suspended, as Foucault writes, "an entire filed is set free" that is made of actually existing statements and their relations, all revealed under a new light (Foucault, 1972, p. 26). Suspending such unities allows one to explore complex relations that will otherwise remain concealed. Webb (2013) uses a metaphorical example to illustrate this point. He says, it is as if one were to adjust the focus of the lens in a camera "to resolve blocks of color into unexpected detail" (p. 52).

Another way to imagine suspension of an established unity is to think of a building made of Lego pieces, as an example. The building may look like a single piece from a distance, but upon closer scrutiny, one would be able to detect the number, shape, and function of the Lego pieces that the building is made of. Moreover, one would be able to describe the *relations* between Lego pieces and reveal the often complex manners in which they are put together in order to build the unity of "the building". That is exactly what an archaeological analysis would aim for. In the present study, for instance, the Lego building is the modern discourse of medicine and its building blocks are

archaeological statements. My goal is to adjust the lens through which I am looking at this building in a way that it enables me to see the building blocks as well as the relations among them. First, I will attempt to describe the smaller unities (e.g., a rectangular piece as the front door of the building, a circular piece on the side as the window, etc.) that are created by a smaller number of Lego pieces. These smaller unities would be the *archaeological elements* (also known as unities of discourse) that consist of the objects, modes of enunciation, concepts, and theoretical strategies emerging from the medical discourse. Next, I will attempt to describe the *relations* among these elements (e.g., that of a door with the window, the roof with the chimney, etc.). Lastly, I will seek to determine conditions that make the existence of these building blocks possible in the first place (e.g., some Lego pieces only fit with specific other Lego pieces); and the rules for formation of each element (e.g., doors and windows; such as, the door must be on the front and windows on the sides).

Based on the discussion above, one can say that archaeology is a methodology through which it is once more possible to see each moment of discourse as a "sudden irruption" and following a certain punctuality (Foucault, 1972, p. 25). In other words, archaeology is a microscopic examination of discourse that "reveals many discrete events in even the smallest fragment". In archaeology, one draws back a veil to find multiplicity beneath the surface unity of a discourse (Webb, 2013, p. 52). As Foucault puts it,

> by freeing them [statements] of all the groupings that purport to be natural, immediate, universal unities, one is able to describe other unities, but this time by means of a group of controlled decisions (Foucault, 1972, p. 29).

Again, it is not that the ready-made unities have no legitimacy or use at all, it is only that we need to question the basis of their unity and the "links whose validity is recognized

from the outset" (Foucault, 1972, p. 22) In Foucault's words, they need to be "driven out from the darkness in which they reign" (Foucault, 1972, p. 22). It is important to understand, however, that archaeology is not concerned with the legitimacy of the discourse it analyzes (Webb, 2013, p. 57). In archaeology one does not seek to validate the truth claims in archaeological analysis. This is not to say that all discourses are either legitimate or illegitimate. It is only to say that archaeology does not concern itself with verifying their legitimacy.

In sum, Foucault takes up a critique of subjective unities in discourse and suggests their suspension to be the first step in an archaeological analysis. He recommends avoiding the use of unities "that are already overladen with conditions and consequences" (Foucault, 1972, p. 38) and replacing them by discursive unites. Let us take the example of medical discourse here to illustrate this point. In an archaeological analysis of medical discourse, once the ready-made unity of medicine is suspended, the newly emerging field of dispersed elements would allow one to ask questions such as: What exactly is this field of related statements? How can one define the limits of this field? What types of rules are functioning to give rise to this dispersed mass of interrelated statements? What sub-groups can this group of statements give rise to? What specific objects are being talked about? What types of statement are enunciated in this filed? And lastly, what concepts and themes are emerging from this field if one were to observe them and their relations closely enough - without regarding the synthetic unity of medicine to which they belong, the historical transcendentality of ideal medicine, and objectivity of the empirical medical practice?

Once the synthetic unity that binds them together is suspended, one is faced with a body of dispersed events. Thus, archaeology begins with a mass of statements piled up on top of each other as data. As Foucault puts it, "we must accept, in the name of methodological rigor, that, in the first instance, they concern only a population of dispersed events" (Foucault, 1972, p. 22). The point is that this field of dispersed statements about medicine requires a theory, and "this theory cannot be constructed unless the field of the facts of discourse, on the basis of which those facts are built up, appears in its non-synthetic purity" (Foucault, 1972, p. 26). The next step in the analysis would be to replaces synthetic unities by alternative, non-subject-centered categories known as the unities of discourse or *discursive unities* (see Chapter 1, AK, for more). The unity of a discourse as a whole, however, arises from the *rules* that govern emergence of discursive elements and *relations* that they are capable of having with one another. Thus, a discourse is not simply made by statements and discursive unities, but also the rules of formation for discursive unities and the relations among them. Moreover, the unity of a discourse is not given once and for all; it is not a fixed entity. Discourse is a highly proliferative field of new appearances, shifts, and transformations on a never-ending basis. The unity of a discourse arises from "the patterns of relations that establish how its various elements occur and combine" (Webb, 2013, pp. 81-82). After discussing synthetic unities and the need for suspending them in archaeology, I now turn to define the archaeological statement.

What is an Archaeological Statement?

A discursive formation is basically made of a group of related statements. It is through exploration of relations among these statements that one becomes able to define

the rules of formation for the objects, types of statement, concepts, and strategic choices in a discursive formation. Therefore, "the possibility of defining each area and level of regularity arises first of all at the level of statement" (Webb, 2013, p. 104). A key point in archaeological analysis is to be mindful of the fact that a statement can only exist and function in relation to other statements. In order to explain how statements become productive of various regularities, one must examine their positionality within the system in relation to which they function. Specific characterization of an archaeological statement, as is provided by Foucault in AK, is nothing less than a work of art. Foucault goes through painstaking explanations to make his point that what he means by the term *statement* is fundamentally different than the definition or usage of this term by linguists, logicians and analysts (Foucault, 1972, pp. 107-108). While I am summarizing the main points of his discussion below (see Foucault, 1972, pp. 80-87 for more).

First of all, one needs to realize that a statement is not the same as a sentence (Foucault, 1972). While every sentence is a statement, not every statement needs to be sentence. A statement can be made up of any group of linguistic elements such as: an incomplete sentence like "This doctor!", an adverb such as "Exactly", and a personal pronoun such as "Me!"; each of which can be considered a complete and fully functional statement in the discourse. Other examples of statements that are not sentences include: a genealogical tree, a journal of accounts, the algebraic formula of the law of a triangle, a graph, a historical timeline, and a statistical distribution curve, each of which counts as a perfectly functional archaeological statement (Foucault, 1972, p. 82). One may provide sentences to accompany a graph, but they will be either the interpretation of or a commentary on the original statement that is presented in the graph itself.

Second, an assertion also does not need to have a logically sound meaning in order to count as an archaeological statement. That is, one may be able to recognize an enunciative function in a sentence that logically makes no sense. For example, the sentence “our blood is wine” does not contain logically true information. However, if the same sentence is part of a poem, is a film’s title, or is pronounced by a political group’s leader then it makes sense. Thus, this illogical sentence counts as an archaeological statement. Moreover, it is possible that two assertions that are logically saying the same thing play completely different roles within their own network of related statements. In that case, they would count as two distinct statements (Foucault, 1972, pp. 80-81). For example, the sentence “you did that!” is logically the same as “I know you did that!”, but they mean different things depending on whether or not the speaker actually knows it or is merely guessing it.

Lastly, an archaeological statement is not the same as what English analysts refer to as a *speech act*. A speech act is simply an “act of formulation” with a clear function. However, speech act shares an extensive common ground with archaeological statement. Below are some of the similarities between archaeological statements and the speck acts as pointed out by Foucault:

> This term [speech act] does not, of course, refer to the material act of speaking (aloud or to oneself) or of writing (by hand or typewriter); nor does it refer to the intention of the individual who is speaking (the fact that he wants to convince someone else, to be obeyed, to discover the solution to a problem, or to communicate information); nor does it refer to the possible result of what he has said (whether he has convinced someone or aroused his suspicion; whether he was listened to and whether his orders were carried out; whether his prayer was heard); what one is referring to is the operation that has been carried out by the formula itself, in its emergence: promise, order, decree, contract, agreement, observation. The speech act is not what took place just prior to the moment when the statement was made (in the author's thought or intentions); it is not what

> might have happened, after the event itself, in its wake, and the consequences that it gave rise to; it is what occurred by the very fact that a statement was made - and precisely this statement (and no other) in specific circumstances." (Foucault, 1972, pp. 82-83).

The only characteristic that defines a speech act differently than the statement is that there is usually more than one statement (often several sentences, gestures or expressions) that are required to produce a speech act, such as "an oath, a prayer, a contract, a promise", each of which counts as a single speech act but consists of more than one statements (Foucault, 1972, pp. 82-83).

Thus, an archaeological statement cannot be defined by the models provided to us by grammar, logic, or analysis, because it is not the same as a sentence, a proposition, or a speech act. Using the definition of each of those models would only unnecessarily limits the archaeological statement (Foucault, 1972, p. 84). An archaeological statement is not an "additional category of language to place alongside the sentence, the proposition, the speech act, or anything else of the kind" either (Webb, 2013, p. 91). The fact that a statement is not a linguistic unit at all is an important demarcation between archaeology and regular linguistic discourse analyses (Gutting, 1989, p. 239). An archaeological statement, then, can only be defined "as a series of signs, figures, marks, or traces - whatever their organization or probability may be" that plays a function within a system of other signs (Foucault, 1972, p. 84). In other words, "a series of sings is a statement only if it is related to other series of signs, which constitute the statement's *associated field*" (Gutting, 1989, p. 239). As Foucault affirms,

> the statement is not therefore a structure… it is a *function* [emphasis added] of existence that properly belongs to signs and on the basis of which one may then decide, through analysis or intuition, whether or not they 'make sense', according to what rule they follow one another or are

> juxtaposed, of what they are the sign, and what sort of act is carried out by their formulation (oral or written) (Foucault, 1972, pp. 84-87).

Hence, one cannot define the structural criteria of unity for the statement, because the statement is *not* a structural unit. Rather, it is "a function that cuts across a domain of structures and possible unities, and which reveals them, with concrete contents, in time and space" (Foucault, 1972, p. 87).

Although language provides the most common system for constructing statements, it is certainly not the only one. As Foucault observes, "sentences, propositions, graphs, diagrams, formulas, maps, pictures, mere sounds, could all be statements if they belong to an associative field that is governed by the rules of the discursive formation" (Foucault, 1972, p. 91). In addition, it is not enough for a series of linguistic signs to become a statement to simply appear as a material existence in a moment of time and a point in the space. For example, letters of the alphabet arranged on a computer's keyboard do not constitute a statement –they are merely tools for producing statements. This is in spite of the fact that their materiality occupying space and volume is undeniable. However, the same order of letters A, S, D, F, G… written on the keyboard's manual or copied by a person on a sheet of paper is considered a statement (of the alphabetical order adopted by modern computer keyboards). Similarly, a series of letters in a random order that is written by a person on a computer screen, and a table of random numbers drawn for statisticians' use, each constitutes a statement. They are tables of elements chosen in a contingent way (Foucault, 1972, pp. 85-86).

The statement, therefore, neither has to exist in the same way as language (made by certain linguistic elements and structure) nor as a perceivable object (having a certain materiality with spatio-temporal coordination). A statement is neither a linguistic unit nor

any kind of material unit with its own limits and independence. What matters in archaeology, then, is not to find out whether a statement is long or short, original or a copy, strong or weak, so on and so forth. Instead, what matters is to describe how each statement is related to other statements in its associated field, define the relations it is capable of having due to its unique positionality, and finally, define the outlines of the field itself (Foucault, 1972).

As argued before, statements do not exist independently. In Foucault's words, "there is no statement that is not surrounded by a field of coexistences, effects of series and succession, a distribution of functions and roles", which allow statements "to follow one another, order one another, and play roles with respect to one another" (Foucault, 1972, pp. 99, 100). The associated field, writes Foucault, is "a space in which they breed and multiply" (Foucault, 1972, p. 100). Just like any group of statements and the relations among them, the associated field is not a stationary body of objects and relations; rather, it configures itself a little differently with the emergence of each new statement. At some point, the reconfiguration would be enough to cause destabilization of an old regularity and emergence of a new one, in which case the new field of statements will have different conditions of existence, coexistence and exclusion (Webb, 2013, p. 110). Foucault also describes the associated field as

> a network in which each point is distinct, distant from even its closest neighbors, and has a position in relation to every other point in a space that simultaneously holds and separates them all (Foucault, 2019, p. 149).

The associated field is also where one can find language in its "pure dispersion" (Foucault, 1972, p. 121). This field is where statements are examined in their purity and at a level before they even adopt their discursive function (Webb, 2013, p. 110). It is

important to note that Foucault's usage of the terms "pure" and "purity" in relation to statements is not a reference to the formal a priori of Kant. It is rather consistent with his own description of *historical a priori* as described in AK (Webb, 2013, p. 54).

In relation to the associated field, a statement can be compared to a particle. A particle exists only in relation to a configuration of other particles and so does a statement. It is these relations that define and sustain their existence in the first place. Furthermore, each individual particle is a condition of existence for the unity that the system gives rise to, just like every statement is a condition of existence for the discursive patterns (regularities) that emerge on the surface of a discourse (Webb, 2013, p. 87). Thus, statement is "a site of integration" already and therefore cannot be conceptualized as the smallest element of discourse that can only give rise to subsequent relations. Statement is not the atom of discourse as it is already relational at the moment it begins to exist and, as such, already discursive (Webb, 2013, p. 89).

The definition of the associated field as described above bears some serious consequences for archaeology. First, one can say a statement belongs to a certain discursive formation only if that statement can find a place for itself within the associated field of other statements belonging to this discursive formation. There are no predefined limits based on the necessities specified by the ideal or empirical forms of a discourse that hold the right to either include or exclude a statement from being part of a discourse. It is rather the discursive rules that govern relations between existing statement that can either allow or dispose of a statement depending on the position they occupy within the structure of an existing discursive formation (Webb, 2013, p. 70). It is the law of governing this *positioning* that is sought to be outlined by archaeology. Second, the

meaning of a statement is judged entirely by its *function* as part of an associated field. Foucault provides an example of the sentence "the present king of France is bald" to illustrate this point. If examined as an individual assertion, the above phrase is meaningless in terms of its factual information as it has no *referential* in our time. However, if the same sentence were to be examined as part of a history book that documents the days of Charles the Bald, or part of a fictional work such as a novel or a movie, or part of a mad man's assertions, or part of a dream, then it becomes perfectly meaningful. In Foucault's words,

> the referential of the statement forms the place, the condition, the field of emergence, the authority to differentiate between individuals or objects, states of things and relations that are brought into play by the statement itself; it defines the possibilities of appearance and delimitation of that which gives meaning to the sentence, a value as truth to the proposition. It is this group that characterizes the enunciative level of the formulation, in contrast to its grammatical and logical levels (Foucault, 1972, p. 91)

Thus, one can locate a referential for the above sentence only if one examines it as a statement playing its part in relation to an associated field.

The third consequence of defining the associated field in this manner is that the *value* of the statement is also entirely judged by the role it plays within its associated field. For example, a statement that has been originally enunciated might have the exact same archaeological value as its repetition several centuries later. Establishing the truth about who said what first is irrelevant to archaeology. What might interest archaeology instead is to seek whether the same rule(s) of formation gave rise to both the new and the old statements, and whether it was the same regularity that brought them both into existence (Webb, 2013, p. 125). In sum, what defines the existence, meaning, and value of a statement is the *function* that it plays within its associated field. In Foucault's words,

> instead of giving a 'meaning' to these units [statements], this function relates them to a field of objects; instead of providing them with a subject, it opens up for them a number of possible subjective positions; instead of fixing their limits, it places them in a domain of coordination and coexistence; instead of determining their identity, it places them in a space in which they are used and repeated. In short, what has been discovered is not the atomic statement - with its apparent meaning, its origin, its limits, and its individuality". (Foucault, 1972, p. 106)

Despite the fact that the associated field is a condition of existence and transformation for the statements, it does not determine their identity once and for all. This, according to Webb (2013) is the most decisive difference between associated field and what is conventionally defined as context (p. 96).

The question is, then, how is one to perform an archaeological analysis of the statements? It is important to note that archaeology is tasked to describe statements with regards to their positivity (Webb, 2013, p. 111). Although Foucault often refers to discursive formation as a positivity, discursive formations do not reflect either "objective data" or "real practices" (Foucault, 1972, p. 194). Foucault explains positivity of a discursive formation in terms of rarity, exteriority and accumulation of its statements (Foucault, 1972, p. 125). *Rarity* of the statements comes from the fact that at a certain point in time and in a certain discursive formation; there are only a limited number of statements that can emerge in discourse. In Foucault's words, "at a given period, there are, in total, relatively few things that are said" (Foucault, 1972, p. 119). Archaeology opts to analyze this rarity instead of searching for totalities (Foucault, 1972, p. 125). As Foucault puts it,

> the analysis of statements operates ... without reference to a cogito. It does not pose the question of the speaking subject ... it is situated at the level of the 'it is said'- and we must not understand by this a sort of communal opinion, a collective representation that is imposed on every individual (Foucault, 1972, p. 122)

Archaeology sees statements as rare events and explores "the occurrence that allows them to emerge to the exclusion of all others" (Foucault, 1972, p. 119). The principle according to which only a specific group of statements that were enunciated could appear is called the "law of rarity" (Foucault, 1972, p. 118). *Exteriority*, on the other hand, signifies the fact that statements are examined from the exterior since archaeology is not interested in transcendental qualities or forms that might be hidden within them (Foucault, 1972, p. 120). Archaeology does no attempt to discover what lies beneath the surface of language, which ensures maintaining the exteriority of archaeological statements. Lastly, *accumulation* points to the fact that discursive practices are "shaped by the history of their own construction" (Webb, 2013, p. 107). Archaeology tries to describe this constructedness, instead of searching for origin of the statements (Foucault, 1972, p. 125). In sum, archaeological analysis illustrates how a particular discourse presents itself as a positivity.

In archaeology, every statement is a "strange event" with a function. (Foucault, 1972, p. 28). Every statement is unique and yet "subject to repetition, transformation, and reactivation" (Foucault, 1972, p. 28). Furthermore, archaeological statements are not only linked to their immediate situation but also to their preceding and following statements (Foucault, 1972, p. 28). The statements are not linked to one another at the semantic, logical or psychological levels. That is, in archaeological analysis one does not try to group statements based on sharing a common syntactical structure (same words or grammatical appearance). Similarly, one does not attempt to establish coherence of meaning among a dispersed group of statements, nor group statements together based on the psychological status of the writer/speaker (e.g., categorizing data into: groups of

positive and negative comments, comments by those who experienced condition X more than Y times, comments by those who maintained their original stance on the matter X in more than Y encounters, comments by those who were able to think clearly versus those who were tired or angry at the time of the interview, etc.). Instead, in an archaeological analysis,

> one defines the set of rules common to all their associated domains, the forms of succession, of simultaneity, of the repetition of which they are capable, and the system that links all these fields of coexistence together… one can define the general set of rules that govern the status of these statements, the way in which they are institutionalized, received, used, re-used, combined together, the mode according to which they become objects of appropriation, instruments for desire or interest,[and] elements for a strategy (Foucault, 1972, p. 115).

Thus, to define a discursive formation one "divides up the general plane of things said at the specific level of statements" (Foucault, 1972, p. 116). One needs to focus on the function that a statement fulfills in relation to other statements (that is, the statement's enunciative function), which consists of four specific domains: formation of objects, formation of subjective positions, formation of concepts, and formation of strategic choices (Foucault, 1972, p. 116). I would like to conclude this section with the following passage by Foucault that succinctly sums up our discussion of the archaeological statements here:

> In examining the statement what we have discovered is a function that has a bearing on groups of signs, which is identified neither with grammatical 'acceptability' nor with logical correctness, and which requires if it is to operate: a referential (which is not exactly a fact, a state of things, or even an object, but a principle of differentiation); a subject (not the speaking consciousness, not the author of the formulation, but a position that may be filled in certain conditions by various individuals); an associated field (which is not the real context of the formulation, the situation in which it was articulated, but a domain of coexistence for other statements); a materiality (which is not only the substance or support of the articulation,

> but a status, rules of transcription, possibilities of use and re-use) (Foucault, 1972, p. 115).

Having laid down the basics of an archeological statement, I now turn to a more detailed discussion of the enunciative function of the statements in the next section.

The Enunciative Function

A statement is that which has an enunciative function and belongs to an enunciative field. In this section, I will try to further elaborate on these enunciative terms (for a more detailed discussion see AK, pp. 88-105). The enunciative function of statement, just like the definition of statement itself, is a novel and complicated concept. The foremost important thing is to understand the relation of an archaeological statement with its subject. First, the subject of an archaeological statement is not the first-person grammatical element within the sentence. As discussed earlier, an archaeological statement is not the same as a sentence and, as such, it does not follow grammatical rules. Moreover, sentences with no fixed first- or second-person grammatical elements still have a subject. For example, the statement of "I had two cups of coffee this morning" can have different subjects depending on whether my friend tells it to me, or I read it in a book.

Moreover, the subject of a statement is not necessarily the same as the person who proclaims it (Foucault, 1972, p. 92). For example, an actor who is performing as Shakespeare's Juliet on the stage is not the subject of every statement that she asserts. That is because she did not, write those lines and, as such, she "is not in fact the cause, origin, or starting-point of the phenomenon of the written or spoken articulation of a sentence" (Foucault, 1972, p. 95). To take this problematization another step further, the person who wrote those lines (Shakespeare himself) cannot be regarded as the subject of

those statements either; since he wrote them with the intention to express thoughts of his fictional character, a 13-year-old girl, Juliet. The question is, then, how can one define the subject of these statements? The answer lies in the chief principle of archaeology that advises us to shift the analytical attention away from the subject and towards the *function* a statement plays in relation to other statements within its associated field. According to Foucault, "the subject of the statement is a particular function… it is an empty function, that can be filled by virtually any individual when he formulates the statement" (Foucault, 1972, p. 93). To further explore the notion of subjectivity in statements let us now take the example of a mathematical statement, such as: 9 x 7 = 63. The subject of this statement is a strictly defined function that can be occupied by anyone who proclaims it. In other words,

> the subject of the statement is the absolutely neutral position, indifferent to time, space, and circumstances, identical in any linguistic system, and in any code of writing or symbolization, that any individual may occupy when affirming such a proposition (Foucault, 1972, p. 94).

As has been argued before, questions such as who came up with this mathematical proposition first, what is its origin, whether the information represents original or copied work by the enunciating subject, and even, whether or not the statement is true, are not relevant to the archaeological level of analysis.

It is important to understand that the original author of a statement does not remain the only subject of that statement through eternity. One may wonder, then, if a seventh-grade student is describing the second law of Newton, is that a statement? Definitely. Who is the subject of this statement, the student or Newton himself? The answer is: neither one of them. As explained above, the subject of an archaeological statement is not a person, but a *function* that can be assumed by anyone at different times.

This enunciative function was assumed by Newton at one point in the past and is now being assumed by a seventh-grade student. Foucault describes the subject of statement as

> a particular, vacant place that may in fact be filled by different individuals; but, instead of being defined once and for all, and maintaining itself as such throughout a text, a book, or an oeuvre, this place varies - or rather it is variable enough to be able either to persevere, unchanging, through several sentences, or to alter with each one (Foucault, 1972, p. 95).

Finally, let us take one last example of an academic paper here. Many authors write some version of the sentence "as we have shown before" in their research manuscripts. However, it would be a mistake to assume that the enunciative subject of this statement– the person who wrote the manuscript–is the same as the subject of the act of "showing". Whether she is referring to her own work done in the past or conclusions reached by others in the literature review section of her paper, she is not the lone subject of the act of showing. In either case, the author is stepping up to fill the "empty function" of *showing* something. The statement conveys the meaning that it does precisely because its functional vacant spot was claimed by this particular author. As Foucault points out,

> if a proposition, a sentence, a group of signs can be called 'statement', it is not therefore because, one day, someone happened to speak them or put them into some concrete form of writing; it is because the position of the subject can be assigned (Foucault, 1972, p. 95).

The same sentence would have a different meaning and would count as a completely different statement if a different person referring to a different set of literature were to state it. This takes us to the next characteristic of the enunciative function, which is its ultimate dependence on a preexisting associated field (Foucault, 1972, p. 96).

As we have seen already, an archaeological statement can only exist in relation to other statements in its associated field. For example, if two people were to proclaim the exact same sentence, it will produce two different statements because it is not the factual

content of an assertions but the associated field of each enunciation that defines its emergence as part of a discourse (Foucault, 1972, p. 89). The associated field of a statement, however, is not the same as what is traditionally referred to as a *context*. A context is "all the situational or linguistic elements, taken together, that motivate a formulation and determine its meaning" (Foucault, 1972, p. 97). A context is usually indispensable for examining the truth/validity of an assertion or for telling what it means. Archaeology disregards this type of context as it is not relevant to the analysis of discursive formation (see chief principles of archaeology, in Chapter 2, for more). The enunciative function does not come from individual statements–whether they are true or not and whatever their meaning maybe. Hence, the context of an archaeological statement

> cannot be explained simply in terms of the experience of the speaker, and the precedents of which they are conscious. Its conditions extend further than that, since the way that statements present themselves to the subject and are arranged, remembered or forgotten will itself depend on pre-existing demarcations between contexts (for example, conversation, science, literature), which are themselves determined discursively; that is, on the basis of rules of formation arising from the relations between statements (Webb, 2013, p. 95).

Again, we know that no statement exists in isolation; rather, it is always part of an associated field that defines both its status and meaning. A traditional context may help in establishing truth and meaning at the level of isolated sentences and propositions, but archaeology denies the existence of isolated statements altogether. In archaeology it is the "associated field that turns a sentence or a series of signs into a statement, and which provides them with a particular context, [and] a specific representative content". (Foucault, 1972, p. 98). So it is the associated field that makes a context possible in the first place.

In addition to figuring out the subject of statements, it is also crucial to understand the difference between the enunciative function (subject of the statement) and enunciative subject (the person who speaks the statement). For instance, establishing the identity of a statement through its various forms, repetitions, and transcriptions can be very confusing if one does not distinguish between the statement itself and multiplicity of its enunciations. According to Foucault, "an enunciation takes place whenever a group of signs is emitted… The enunciation is an unrepeatable event; it has a situated and dated uniqueness that is irreducible" (Foucault, 1972, p. 101). Let us take some examples here. When two people are pronouncing an exact same sentence at the exact same moment, we will have two distinct statements and two distinct enunciations, each spoken by a different person. Similarly, if the same person repeats an exact same sentence ten times over, we will have ten enunciations that are distinct in time. However, it needs to be noted that the statement itself cannot be reduced to the event of enunciation. One does not produce ten distinct statements when one repeats the exact same enunciation ten times over. Then again, the same sentence spoken by ten different people under different circumstances can still constitute a single statement.

Though identity of a statement is "susceptible to differences of material, substance, time, and place" (Foucault, 1972, p. 102), the unique materiality of statements is such that it permits certain special types of repetition. Let us take a few examples to see how identity of a statement can remain the same through multiple events of enunciations. If one writes the same sentence on five separate pieces of paper, the statement remains the same though it goes through five different enunciations. The same can be said about multiple copies of a book. Whereas each copy of a book is a distinct event of enunciation,

it continues to convey the same set of statements. Even though certain aspects of materiality changes with each copy (e.g., ink and paper etc.), for Foucault, "these 'small' differences are not important enough to alter the identity of the statement and bring about another" (Foucault, 1972, p. 102).

Identity of a statement is also dependent upon institutional and economic conditions. The fact that a set of statements belong to a single book creates an institutional authority that permits for multiple repetitions without change of identity for those statements. Further, as Foucault suggests, "the materiality of the statement is not defined by the space occupied or the date of its formulation; but rather by its status as a thing or object" (Foucault, 1972, p. 102). This status is always relative and dependent upon its special relations with the institutional and economic phenomena. For example, a copy of a book printed with a foreword from the author is privileged by a higher status compared to another copy of the same book that is published after the death of its author. Similar relations can be spotted among different copies of historical, religious and legal texts. This leads us to the conclusion that there is a difference of status between "the statements themselves" and "their reproduction" based on their relations with institutional and economic conditions (Foucault, 1972, p. 103). This only confirms that,

> instead of being something said once and for all - and lost in the past like the result of a battle, a geological catastrophe, or the death of a king- the statement, as it emerges in its materiality, appears with a status, enters various networks and various fields of use, is subjected to transferences or modifications, is integrated into operations and strategies in which its identity is maintained or effaced. Thus the statement circulates, is used, disappears, allows or prevents the realization of a desire, serves or resists various interests, participates in challenge and struggle, and becomes a theme of appropriation or rivalry (Foucault, 1972, p. 105).

Thus, it is safe to say that the statement cannot be identified with a certain piece of matter; rather, the identity of statement varies in accordance with the role it plays in relation to different material institutions. For example, a statement spoken by a medical student in this study remains the same statement when one listens to its audio recording (no matter how many times over) or when one transcribes it on several sheets of paper for analysis. Identity of the statements do not simply change by multiplicity of their enunciation and by a change in the material medium that conveys them. The role they perform in this study as data and the relations they have with the institutional and economic circumstances remain the same no matter how many times one reproduces them. Therefore, materiality of statement is a special type of materiality that "cuts across the categories of form and matter as traditionally understood" (Webb, 2013, p. 97).

Let us now look at an example of how identity of a statement changes when it is transplanted to a different associated field that would, in turn, change its role and institutional relations. A sentence spoken by a writer at the dinner table is not the same statement as when he writes that sentence in his novel and attributes it to a fictional character. The entire field of associated statements, the role and relations of the statement with other statements will be changed; and these changes are important enough to alter the identity of the statement and bring about an entirely new statement (Foucault, 1972). Foucault also discusses how, for example, the affirmation that "the earth is round" does not give rise to the same statement before and after Copernicus. The two affirmations constitute two distinct statements. Thus, identity of the statement changes because of the change in "the relation of these affirmations to other propositions, their conditions of use and reinvestment, the field of experience, of possible verifications, of problems to be

resolved, to which they can be referred" (Foucault, 1972, p. 103) . Similarly, the sentence "medicine is all about helping people" has been repeated through centuries. The affirmation of this sentence by an Arab physician in the eleventh century is not the same statement as the affirmation of it by a medical student at Indiana University School of Medicine in 2019. One can justify two distinct statements here because their "schemata of use, the rules of application, the constellations in which they can play a part, [and] their strategic potentialities" are completely different between now and then (Foucault, 1972, p. 103). As Foucault points out,

> the constancy of the statement, the preservation of its identity through the unique events of the enunciations, its duplications through the identity of the forms, constitute the function of the field of use in which it is placed (Foucault, 1972, p. 104).

Lastly, it is possible to have multiple enunciations - with different words, syntax and language - giving rise to only one and the same statement. For example, a paper written in French and its translation in English contain the exact same set of statements. Another example is printing a company's brochure in three different languages, which still contain "a single group of statements in different linguistic forms" (Foucault, 1972, p. 104). Foucault also provides the example of a certain piece of information transmitted in multiple ways including words, a simplified syntax, and in a code. He argues that "if the information content and the uses to which it could be put are the same, one can say that it is the same statement in each case" (Foucault, 1972, p. 104).

One important condition for a series of signs to be regarded as a statement is that it must have material existence. A sentence is not considered a statement unless it is spoken, written, or embodied by some element perceivable to the senses (Foucault, 1972, p. 100). Sentences that are thought out but were never spoken or those that reside in

someone's memory are not archaeological statements. The point is, unless somebody assumes the subjective position for an enunciative function, there cannot be a statement. In other words, not only is the enunciative function dependent upon the materiality of statements, it is also shaped, altered or transformed by it. As Foucault indicates,

> even if a sentence is composed of the same words, bears exactly the same meaning, and preserves the same syntactical and semantic identity, it does not constitute the same statement if it is spoken by someone in the course of a conversation, or printed in a novel; if it was written one day centuries ago, and if it now reappears in an oral formulation (Foucault, 1972, p. 100).

Thus, the repeatable materiality of the enunciative function characterizes the statement as what Foucault calls "a paradoxical object" (Foucault, 1972, p. 105). The statement, then, is neither an event which is bound to occur in a particular time and place, nor is it an ideal function "that can be actualized in any body, at any time, in any circumstances, and in any material conditions" (Foucault, 1972, p. 104). In Foucault's words, the statement is

> too repeatable to be entirely identifiable with the spatio-temporal coordinates of its birth (it is more than the place and date of its appearance), too bound up with what surrounds it and supports it to be as free as a pure form (it is more than a law of construction governing a group of elements), it is endowed with a certain modifiable heaviness, a weight relative to the field in which it is placed, a constancy that allows of various uses, a temporal permanence that does not have the inertia of a mere trace or mark, and which does not sleep on its own past (Foucault, 1972, pp. 104-105).

Thus, archaeological statement is an object that is produced, manipulated, used, transformed, exchanged, combined, decomposed and recomposed, and possibly destroyed by people along the course of their history (Foucault, 1972).

Having discussed the statement and the enunciative function, I now turn to discuss how statements are treated in archaeology with the goal of revealing their grouping patterns that give rise to formation of discursive regularities (e.g., discursive

elements). It is the enunciative function that relates various units such as sentences, propositions, series, signs, and fragments to "objects, subject positions and domains of coexistence in which they could be used and repeated" (Webb, 2013, p. 98). Plus, as discussed in the previous chapter, no statement can be deemed as a pure creation of genius as it always belongs to a certain regularity that gives rise to it and, in one way or another, makes it possible for the statement to say what it says (Foucault, 1972, p. 146). One might conclude that,

> what we have called 'discursive practice' can now be defined more precisely… it is a body of anonymous, historical rules, always determined in the time and space that have defined a given period, and for a given social, economic, geographical, or linguistic area, the conditions of operation of the enunciative function. (Foucault, 1972, p. 117)

It is these conditions of operation (existence) that archaeological analysis aims to describe.

Archaeological Treatment of the Statements

Archaeological treatment of data begins with the analysis of the statements. To describe a statement, however, one does not examine it in isolation (attempting to discern its meaning, context, truth, or where it came from). Instead, one is to look at the statement as part of an associated field and seek to define the set of conditions that has made it possible for this statement to exist and have an enunciative function. One looks at a statement as something more than "the result of an action or an individual operation… as more than an organic, autonomous whole, closed in upon itself and capable of forming meaning of its own accord, but rather an element in a field of coexistence" (Foucault, 1972, pp. 108-109).

Furthermore, the analysis of statements is "a description of things said, precisely as they were said" (Foucault, 1972, p. 109). It analyzes statements at the level of their existence and without worrying about the hidden intentions and meaning that might be buried in them. Archaeological analysis "avoids all interpretation" (Foucault, 1972, p. 109), and instead, tries to answer the question of existence for the statements: "what it means to them to have come into existence, to have left traces… what it means to them to have appeared when and where they did - they and no others" (Foucault, 1972, p. 109). At the same time, the analysis of statements is not confined to the fact of the statements that were actually spoken, written or traced. Rather, archaeology is interested in the "analysis of their coexistence, their succession, their mutual functioning, their reciprocal determination, and their independent or correlative transformation" (Foucault, 1972, p. 29). As Foucault points out,

> we must grasp the statement in the exact specificity of its occurrence; determine its conditions of existence, fix at least its limits, establish its correlations with other statements that may be connected with it, and show what other forms of statement it excludes (Foucault, 1972, p. 28).

It is important to remind ourselves that a statement is not a unity of any kind, grammatical, propositional, or analytical. Therefore, archaeology "characterizes not what is given in them, but the very fact that they are given, and the way in which they are given" (Foucault, 1972, p. 111). Analysis of the statement does not aim - like a linguistic/textual analysis - to question the language of research data in terms of "what particular words mean or how particular statements are logically or rhetorically connected" (Gutting, 1989, p. 243). Rather, the analysis of statement operates at the enunciative level, "it defines the modality of its appearance: its periphery rather than its internal organization, its surface rather than its content" (Foucault, 1972, p. 112).

On the other hand, the nature of language is such that it designates objects and refers back to subjects even if that subject is not present in the language. It "always seems to be inhabited by the other, the elsewhere, the distant; it is hollowed by absence" (Foucault, 1972, p. 111). However, in the analysis of the statements, one questions the very existence of the statement's language itself. One aims to

> question language, not in the direction to which it refers, but in the dimension that gives it; ignore its power to designate, to name, to show, to reveal, to be the place of meaning or truth, and, instead, turn one's attention to the moment - which is at once solidified, caught up in the play of the 'signifier' and the 'signified' - that determines its unique and limited existence (Foucault, 1972, p. 111).

Archaeology is also sensitive to the question of *enunciative homogeneity* (sameness) among statements. On one hand, it is totally acceptable if one decides verbal formulations that are linguistically and logically similar are giving rise to distinct archaeological statements. On the other hand, analysis of the statements "may ignore differences of vocabulary, it may pass over semantic fields or different deductive organizations, if it is capable of recognizing in each case, despite their heterogeneity, a certain enunciative regularity" (Foucault, 1972, p. 146). Given the central role of preserving discontinuity in discourse, archaeology does not follow the lead of traditional history of ideas in chronological organization of thought. Therefore, "the order the archeologist discovers in a set of statements may not correspond to the order in which the statements appeared temporally" (Gutting, 1989, p. 243).

All in all, the analysis of statement examines the statement in relation to the associated field to which it belongs, and which "it is able to reorganize and redistribute according to new relations. It constitutes its own past, defines, in what precedes it, its own filiation, redefines what makes it possible or necessary, [and] excludes what cannot

be compatible with it" (Foucault, 1972, p. 124). Let us now turn to examine how statements relate to one another in order to form larger groupings (discursive unities) that are known as discursive elements.

Discursive Elements

Archaeological analysis begins with collection of spoken or written statements as data. Statements belong to and are subject to the rules of a particular discursive formation. Discursive formation, on the other hand, is a vehicle for discourse (e.g., discursive formation of modern medicine for modern medical discourse). The term *discursive element* does not refer to the individual statements happening in a discourse; rather, an element is a group of statements that have a specific relation with one another and thus form a discursive unity. So, a discursive element is a discursive unity of more than one, related statements. Archaeological analysis is tasked to outline the discursive elements of a particular discursive formation. That is,

> one shows how the different texts with which one is dealing refer to one another, organize themselves into a single figure, converge with institutions and practices, and carry meanings that may be common to a whole period (Foucault, 1972, p. 118).

According to Foucault, a discursive formation consists of four basic elements:

A. Objects: constitute what the statements of a discursive formation are about.
B. Enunciative modalities: refer to the kind of intellectual status and authority that the statements have.
C. Concepts: those ideas on the basis of which statements are formulated as well as the notions that they draw from.
D. Strategies: consist of the theoretical viewpoints that are proposed by groups of statements.

The first step of archaeological analysis, after statements have been collected, is to define the discursive objects. In Foucault's words,

> to define a group of statements in terms of its individuality would be to define the dispersion of these objects, to grasp all the interstices that separate them, to measure the distances that reign between them - in other words, to formulate their law of division (Foucault, 1972, p. 33).

One needs to note that archaeological objects are merely social constructs and, as such, they are neither *discovered* nor *invented* by the discourse. Objects are constructed via operations performed by statements and the relations among them. Thus, the conditions of existence for any given object are at once specific, local and historical. The appearance of objects (and other discursive elements) are always independent of both empirical and transcendental condition (Webb, 2013, p. 67). It is rather "the interplay of the rules that make possible the appearance of objects during a given period of time" (Foucault, 1972, p. 33). Furthermore, it must be noted that the unity of a discourse "is based not so much on the permanence and uniqueness of an object as on the space in which various objects emerge and are continuously transformed" (Foucault, 1972, p. 32).

The next step in archaeological analysis would be to define the modalities (types or styles) of statement. Again, this becomes possible by identifying "a group of relations between statements: their form and type of connection" (Foucault, 1972, p. 33). Modalities of statements that Foucault found in his archaeological study of the clinical discourse in the nineteenth century (Foucault, 1975) included "qualitative descriptions, biographical accounts, the location, interpretation, and cross-checking of signs, reasoning by analogy and deduction, statistical calculations, experimental verifications" as well as "many other forms of statement" (Foucault, 1972, p. 50). Questions that Foucault asked about these modalities of statement were: "What is it that links them together? What

necessity binds them together? Why these and not others?" (Foucault, 1972, p. 50). After identifying the objects and modalities of statement, archaeological analysis proceeds to deal with the question of what concepts are the statements in this discursive formation based on/drawing from. In this process, it is important to understand that one does not aim to outline a concept that is "sufficiently general and abstract to embrace all others", rather, one would seek to describe and analyze the interplay of "appearances and dispersion" for a range of existing and possible concepts within the same discursive formation (Foucault, 1972, p. 35).

Lastly, after establishing objects, modalities of statement, and concepts, one needs to look for the theoretical strategies/themes that are emerging on the surface of a discourse. As Foucault states,

> such discourses as economics, medicine, grammar, the science of living beings give rise to certain organizations of concepts, certain regroupings of objects, certain types of enunciation, which form, according to their degree of coherence, rigor, and stability, themes or theories: the theme…Whatever their formal level may be, I shall call these themes and theories 'strategies' (Foucault, 1972, p. 64).

In archaeology one does not assume that themes and opinions can exist permanently through time. Moreover, different themes can coexist within the same discursive formation. It is possible for the same theme to be based on "two sets of concepts, two types of analysis, [or] two perfectly different fields of objects" (Foucault, 1972, p. 36). Before marking out the "dispersion of the points of choice" and defining thematic differences, one must try and define the "field of strategic possibilities" (Foucault, 1972, p. 37). This field is the discursive formation itself which is governed by the rules that make existence of such dispersion possible.

Thus, a discursive formation is defined by "the way in which these different elements are related to one another" (Foucault, 1972, pp. 59-60). It is important to understand that discursive formation provides a configuration in which different and even conflicting sets of elements are allowed to coexist (Gutting, 1989, p. 232). Put in another way, discursive formations constitute "systems of dispersion" for its elements (Foucault, 1972, p. 173). Moreover, the rules that govern formation of various elements are derived from the discursive formation itself. This study analyzes the discursive formation of modern medicine. It is crucial to note that discursive formation of medicine includes various scientific (e.g., biomedical) and nonscientific (e.g., legal, literary, philosophical, and commonsensical) statements that are all related to medicine as a social and discursive practice and, as such, archaeology deems "medicine" as much more than a merely *scientific* discipline.

Rules for the Formation of Discursive Elements

Once the elements are defined, analysis of discursive formation classifies the rules for formation of each element. Hence, there are four general categories of rules to be established.

Rules for the Formation of Objects. These are divided in three types:

1. Rules associated with social loci (e.g., family, classroom, and workspace), also known as the surfaces of emergence: these rules derive from social norms, "whereby objects characterized in a certain way are separated off from a social context and transferred to the domain of the discursive formation" (Gutting, 1989, p. 234).
2. Rules associated with authorities of delimitation.

3. Rules associated with Grids of specification, which is the system whereby discursive formation classifies and relates different kinds of an object.

The above three groups of rules are not independent of one another. One may discover various types of interaction including a hierarchical relationship among them. The relations between the rules need to be established by archaeological analysis. As Webb points out, defining a discursive formation begins with defining a field "in which objects are formed and their relations are established" (Webb, 2013, p. 62). Again, a discursive object is a group of statements that forms a discursive unity based on certain relations that connect them. The unity of this group, however, is not the same as ready-made unities that were described before. Foucault problematizes the unity of the object [as a group of related statements] by "shifting attention from the object to the rules of its formation" (Webb, 2013, p. 63). The rules for the formation of objects are local yet sufficiently general "to define the appearance of a group of objects within that locality" (Webb, 2013, p. 63).

For an object to receive attention and begin producing significant effects, it needs to be taken seriously by the "authorities of delimitation". In other words, only authorities of delimitation can establish existence of an object as a discursive element. Examples of authorities of delimitation that Foucault found in his study of madness in the nineteenth century include medicine, religious authorities and literary criticism (Foucault, 1988). Madness would not have become a significant object of discourse in the nineteenth century if it did not receive the attention and definitions that it did from these authorities. Thus, madness was taken seriously by society because social institutions such as medicine, religion, and literary critiques were providing commentaries on it and were

defining its limits. The purpose of the present study is to define such authorities of delimitation for each of the objects in modern medical discourse. Interestingly, the only qualification required for becoming an authority of delimitation for a certain object is to have the power to assert itself as such, and that "its doing so is accepted and taken up by others" (Webb, 2013, p. 65).

The last rule for formation of discursive objects involves the grids of specification for each specific object, which refers to a system by which different kinds of an object "are divided, contrasted, related, regrouped, classified, [and] derived from one another" (Foucault, 1972, p. 42). In case of medicine for example, if one assumes a certain disease to be an object of a local medical discourse, medical science and knowledge would constitute the grids of specification for recognizing that disease, contrasting it from other similar conditions, relate it to other similar conditions in terms of its etiology or treatment, classify its types, and so on. It is important to understand that by going through all of the above-mentioned processes of formation, "the discursive object is both constructed and real in the highest degree" (Webb, 2013, p. 67). Furthermore, the three rules involving surfaces of emergence, authorities of delimitation, and grids of specification make up a "positive" set of conditions that are "open to clear and direct examination–if one knows how to look" (Webb, 2013, p. 67). Even so, one needs to realize that asking questions such as "what led to the introduction of a particular object" (as though attempting to establish causality) and whether the same condition(s) can be reproduced elsewhere (worrying about empirical/objective generalization) are not relevant to archaeological level of analysis (Webb, 2013, p. 63). The question which

interests archaeology, instead, is: How is it that an object could appear within a particular discursive field? And the bounds for that field need to be established as well.

The point to be noted here is that the three types of rules described above do not by themselves create a "fully formed and armed" discursive object (Foucault, 1972, p. 42). For that to happen, relations among the three groups of rules need to be established as well. In Foucault's words, formation of an object is made possible "by a group of relations established between authorities of emergence, delimitation, and specification" (Foucault, 1972, p. 44). Moreover, it is important to show how this group of relations can give rise to different types of objects at once to appear in the same field of discourse. In other words, one needs to define the *conditions of existence* for every object (Webb, 2013, p. 65). Furthermore, relations among different objects emerging from the same discursive formation also need to be established. Relations between two objects that arise from the same surface of emergence (e.g., both arising from family) are not necessarily the same as the relations between two objects that appear on different surfaces of emergence (e.g., one arising from family and other from the workspace). Establishing relations between the latter pair tend to be more complex and even problematic at times (Webb, 2013, p. 65). In addition, it is important to note that "relations supported by the surfaces of emergence are local, with this locality giving rise to a complex space when viewed across a larger scale" (Webb, 2013, p. 65).

Perhaps the most important point to be noted about relations is that discursive "relations are not internal to the object, defining its 'internal constitution', but are rather the conditions of its existence alongside other objects, in relation to them" (Webb, 2013, p. 67). In summary, discursive objects are neither things that can be obtained by

analyzing empirical experience, nor substances that can exist independently of their relations. Rather, discursive objects exist and are defined only in relation to other things. As Webb points out, "the conditions of their emergence locate them [objects] in a group of relations to other things, each of which in turn exists only in relation to the phenomena with which they are placed" (Webb, 2013, p. 67). This is what Foucault refers to as being placed "in a field of exteriority" in discourse (Foucault, 1972, p. 45).

Rules for the Formation of Enunciative Modalities. In Gutting's words, "a statement's modality is a function of the context from which it originates" (Gutting, 1989, p. 235). Three types of rules govern the formation of enunciative modalities:

1. The rules defining certain people to have the *right* of using a certain mode of speech. For example, only doctors can prescribe drugs and only judges can issue a legal sentence.
2. Rules of the *institutional site* from which a statement originates. For examples, doctors need to obey the rules designated by hospital, pharmacy, laboratory, etc.
3. Rules that define *position of the subject* making the statement in relation to the objects of the discourse.

Even though archaeology decentralizes the role of human subject in analysis of discursive formations, it is still very much interested in "the way individuals become subjects, and in the form and texture of the experience given to a subject" (Webb, 2013, p. 69). To answer the question of how is it that different modalities of statements appear in the same field of discourse, archaeology poses three other questions: 1) Who is speaking? 2) From

what institutional site? 3) What is the subject's position in relation to the objects of discourse?

It is important to determine who is speaking (enunciating) the statement. As was briefly indicated in Chapter 1, there are only certain people in a society who have been given the status and the rights necessary to make certain statements in discourse. For example, only a physician can issue a medical prescription and only a judge can put someone to prison simply by asserting certain statements. Let us follow up with the example of physician here. It needs to be noted that the authority of the doctor is not simply stuck to their person; rather, it is the effect of the "doctor's position in a network of institutional and social relations, including legal conditions and criteria of knowledge and competence" (Webb, 2013, p. 70). Regardless of the difference in place, time, culture and historical settings, physicians in various societies hold a certain type of authority. There is a certain degree of internal consistency that leads to secure the authority of the doctor even when they are using quite different methods and operate based on different theoretical backgrounds (Webb, 2013, p. 71).

Furthermore, the institutional site from which the doctors draw their authority are also important to be established. The authority of medical discourse in general is associated with the institutional sites such as hospitals, private clinics, and labs–with each of them playing a different role in maintaining the internal consistency of medical discourse and therefore developing various types of relations with discursive elements. The institutions (which are, of course, nondiscursive structures) as well as the types of relations they develop regarding medical discourse are always local and can change over time as the new methods and practices modify or replace the old ones.

Lastly, the position of subject in relation to the objects of discourse needs to be analyzed by archaeology. For example, it is important to establish whether the statement is a perception, a conclusion reached based on evidence, a speculation made based on a theoretician's authority, by a doctor, by a classroom teacher, by librarian, etc., because there are certain rules defining and delimiting each of these positions. The speaker of a statement can assume the position of a "questioning subject", a "listening subject", a "seeing subject", and so on in relation to the object they are taking about. Furthermore, a subject maybe in a position to use certain instruments or develop certain perspectives in relation to the object in question. As Webb puts it,

> it may have different roles in the exchange of information about the object, preparing or receiving a variety of documents, and disseminating information and knowledge in a variety of ways to a variety of other parties (Webb, 2013, p. 71).

Thus, the special position of the enunciative subject regarding the object(s) of the discourse must be established by archaeological analysis. It is important to note, however, that subjective positions and roles in medicine are updated over time "as new methods or instruments are introduced, new systems of classification are adopted, and new kinds of relation to other theoretical domains or institutions are established" (Webb, 2013, p. 70)

The point to be noted is that, throughout the analysis, the goal is not to reduce the "disparity" of statements and their modalities of enunciation, as archaeology does not seek an organizing principle to give the scattered statements "their element of intrinsic necessity" (Foucault, 1972, p. 54). The necessity that binds these statements together "does not come from within, or from their adherence to a prescribed form, but from their relations to other statements, groups of statements and nondiscursive events" (Webb, 2013, p. 71). As a final point, the three types of rules for the formation of enunciative

modalities are also related to one another and so relations between them need to be established by archaeology.

Rules for the Formation of Concepts. These are also divided into three types:

1. Rules that establish logical, methodological, or other types of *ordering/succession* among statements.
2. Rules related to forms of coexistence among statements in a discourse. These are rules that *accept or reject* classes of statements by defining the following fields for the statements of discourse:
    a. *Field of presence:* classifies a range of statements as accepted, another range as rejected, and a third range of statements as needing to be critically evaluated before being accepted.
    b. *Field of concomitance*: consists of a range of statements that are borrowed from other discursive formations (e.g., models that are borrowed from business administration in medical care delivery).
    c. *Field of memory*: consists of a range of statements that are no longer accepted but still have historical connection with the accepted statements (e.g., using certain herbs to treat ailments that are no longer used by modern medicine).
3. Rules that specify various *procedures of intervention,* which may be applied to the statements in a discursive formation in order to produce new statements. Procedures of intervention include:
    a. Techniques of *rewriting* statements (e.g., from linear to tabular form)

b. Techniques of *transcribing* statements (e.g., into a formalized language)
c. Techniques of *translating* statements (into quantitative or qualitative form)
d. Methods of approximation, techniques for limiting the domain of a statement's validity, procedures for applying a statement to a new domain, and methods of systematizing statements.

Thus, the field of statements needs to be described in three parts that are concerned with 1) orderings of series of statements, 2) forms of coexistence that are in turn divided into fields of presence, concomitance and memory, and, 3) procedures of intervention.

Rather than attempting to discern the "deductive architecture" of a discourse, archaeology looks for different ways to establish order among various statements "by a succession of conceptual systems linked by a continuity in the problems they address; by a law that might account for the "emergence of disparate concepts"; and by a system that was not strictly logical (Foucault, 1972, p. 56). It's important to understand that what Foucault refers to as *positivity* applies at the level of the rules organizing a discourse, not at the level of the contents of discourse. The closer one looks at the data the more obvious it becomes that there is no possibility of discovering a unifying principle for the distribution of various statements in the field of discourse. In fact, Foucault uses this "dispersion" itself as a form of organization (Webb, 2013, p. 74). The main purpose behind establishing these rules, in Foucault's words, is rather to define

> a set of rules for arranging statements in series, an obligatory set of schemata of dependence, of order, and of successions, in which the recurrent elements that may have value as concepts were distributed (Foucault, 1972, p. 57).

Furthermore, it needs to note that, just like the rules for the formation of objects and enunciative modalities, the rules for the formation of concepts arise from within the discourse itself. In archaeology, one attempts to relate these rules neither to a "horizon of ideality, nor to the empirical progress of ideas" (Foucault, 1972, p. 63). Similar to the analysis of the enunciative modalities, the analysis of concepts is neither referred to "a formal account of the knowing subject, nor to a psychological individual" (Webb, 2013, p. 77).

Rules for the Formation of Strategies. As Gutting points out, "the range of possible theories in a discursive formation is specified by rules that underlie and implicitly control the efforts of individual thinkers" (Gutting, 1989, p. 249). Furthermore, the range of theoretical alternatives are determined by various points of diffraction found in a discursive formation. A point of diffraction is born when two or more strategies that are mutually exclusive of each other (both cannot be accepted at the same time) are present on the same level and are equally permitted by the rules of discursive formation (e.g., theory of evolution and the Christian idea of creationism). Often times, one does not find many points of diffraction in a discourse because there are factors and/or authorities that limit the number of alternative thinking in a discursive format***io***n. Rules that govern the formation of strategies are divided into two types:

1. Rules pertaining to the *economy of the discursive constellation* to which a particular discursive formation belongs. Several contemporary discursive formations belong to the same constellation; hence they serve one another as models of application (e.g., business administration theories adopted in medicine). According to Gutting (1989), "such relations may lead to the

elimination of points of diffraction that would otherwise exist within a discursive formation" (p. 249).

2. Rules pertaining to the *nondiscursive structures*: A second limiting factor for the formation of theoretical strategies is the fact that discursive formations are housed in a field of nondiscursive practices and structures (e.g., medicine is housed in a hospital structures, medical science is housed in medical school structures, etc.). A nondiscursive authority may limit the number of theoretical choices that can arise within a discursive formation.

It is important to understand that the above "authorities" should not be regarded as "disturbing elements" that are faltering the structure of an intrinsically complete discursive formation such as medicine. Rather, they are to be seen as "formative elements" of the discursive formation itself (Gutting, 1989, p. 238).

Moreover, theoretical strategies are forms of regularities that "establish lateral or diagonal relations between different discourses" (Webb, 2013, p. 77). Three basic features for the formation of themes are as follows. First, when two discursive elements (objects, modalities of statement, or concepts) are incompatible with one another, they become the starting points for divergent strategic choices within the discourse. Nonetheless, one can still draw the lines of relation between such elements by archaeological descriptions. Second, the particular location of a discourse within a constellation of other discourses in the same time and space can limit the number and types of diverging strategies in a discourse. In other words, a number of diverging strategies may simply not emerge because their emergence was restricted by what

Foucault calls the “economy of the discursive constellation” (Foucault, 1972, p. 66). Here is how Webb (2013) explains the term:

> the discourse studied may be based on a model of some kind, or have been developed in opposition to another discourse, or alongside another discourse, and these factors will influence the formation of the discourse studied from the subgroups it brings together (p. 78).

Thus, the interrelations between a cluster of discourses that belong to the same constellation can restrict the formation of certain statements in a certain discourse and therefore exclude them from being a part of the discourse in question. In other words, discourse is constrained by other discourses around it in a way that they do not allow it to give rise to certain types of objects, statement types, concepts, and themes that it might otherwise have done.

In this sense, then, every discourse "is essentially incomplete, owing to the system of formation of its strategic choices” that do not let it ever become complete to match with its actual potential (Foucault, 1972, p. 67). It is important to bear in mind that the constellation itself is

> formed by these relations [among its constituting members] and is not dependent on a predetermined space. Because the strategy of a given discursive formation is shaped by relations between existing discourses and their subgroups, it does not have its roots in anything that precedes discourse (Webb, 2013, p. 78).

This constraint is taking part in the formation of discourse by creating conditions in which only a specific form of discourse can emerge. That is why discourses change their form if they are transplanted in a different constellation. Take the discourse of medicine for example. It has a certain form in United States only due to its specific relations with other discourses in its constellation (e.g., capitalism, and business administration). Discourse of medicine located in a different constellation, for example in Afghanistan,

has a different set of objects, modes of enunciation, concepts, and theoretical strategies due to the absence of both capitalism and the use of business model for medical administration. This happens

> not because implicit content that was somehow there all along has found a voice for the first time; rather, the discourse itself has been modified due to a change in the exclusions and permissions in operation (Webb, 2013, p. 78).

Lastly, the third feature for the formation of theoretical strategies indicates that strategies and points of divergence that emerge in a discourse are also dependent on the field of nondiscursive practices to which they are related. Examples of nondiscursive structures that house discourses within them include medical schools and hospitals for medical discourse. These nondiscursive practices determine the way a discourse can function within them, the way it is perceived by society, and whether or not it is desirable - and by whom (Foucault, 1972). It is worth reemphasizing here that these factors are not extrinsic to the discourse, causing it to become something like a "secondary distortions of its true, real and always possible form" (Webb, 2013, p. 79). One must realize that in archaeology a "discourse only exists in its actual form and these factors contribute to making it" (Webb, 2013, p. 78).

In summary, emerging themes/strategies in a discourse are the consequences of the way discourse negotiates its form in relation to its neighboring discourses as well as its surrounding nondiscursive practices. In this sense, a theme is not "the expression of a worldview" nor of "an interest masquerading under the pretext of a theory" (Foucault, 1972, p. 69). Whereas certain interests that are served by a certain strategy may play a role in its formation, they are definitely not the only factors defining that theme (Webb, 2013, p. 79). Before ending this section, I would like to emphasize the fact that discursive

unities (elements) do not "spring into life fully formed"; rather, they are often made by a dispersion of subgroups within them (Webb, 2013, p. 79). Moreover, discursive elements that emerge on the surface of a discourse can be numerous and dispersed; thus, one will be faced with what seems to be an irreducible multiplicity of objects, statements, concepts and themes (Foucault, 1972, p. 72). There is no simple fusion that can synthesize them together in a way to get rid of their dispersion in discourse. The elements thus formed, come together to form a discursive formation.

Discursive Relations, Rules, and Regularities

Although the terms discursive relations, rules and regularities have been discussed throughout this chapter, I have not had an opportunity to discuss them specifically enough until now. This section is dedicated to explaining how these three terms define a discursive formation. Let us first define what exactly is meant by *relations* in archaeology. Foucault considers three types of relations to be relevant to archaeological analysis: primary, secondary and discursive relations. *Primary (real) relations* are those that exist between "institutions, techniques, social forms, etc." independent of all discourses (Foucault, 1972, p. 45). One example of primary relations is the relations between government and free market capitalism, which can be analyzed in its own right and independent of medical or any other discourses. Primary relations do not necessarily contribute to formation of relations that make the discursive objects possible. *Secondary (reflexive) relations*, on the other hand, are those that are formulated within the discourse. Secondary relations reflect what can be said about primary relations from within a discursive field. For example, doctors' statements about how relations between government and free market are affecting "medicine" give rise to a group of secondary

(reflexive) relations. This type of relations does not "reproduce the interplay of relations that make possible and sustain the objects" of medical discourse (Foucault, 1972, p. 45). The third type of relations, which is rather specific to the analysis of discursive formations, is called the *discursive relations*. These are relations that specify a discursive formation by essentially producing its objects. In Foucault's words,

> they offer it objects of which it can speak, or rather … they determine the group of relations that discourse must establish in order to speak of this or that object, in order to deal with them, name them, analyze them, classify them, explain them, etc. These relations characterize not the language used by discourse, nor the circumstances in which it is deployed, but discourse itself as a practice (Foucault, 1972, p. 46)

Archaeological analysis is tasked to describe the discursive relations as well as the interplay among the discursive, primary, and secondary relations as it relates to the discourse (Foucault, 1972, pp. 45-46).

Discursive relations are divided into four fundamental forms, all of which need to be established by archaeology: 1) relations between statements (that give rise to formation of elements such as objects and concepts), 2) relations between groups of statements (e.g., between various types of objects, between objects and concepts, etc.), 3) relations between statements and groups of statements (e.g., between a statements and a discursive object), and 4) relations between statements, groups of statements, and nondiscursive events (e.g., between a discursive object and its surrounding nondiscursive practices). Before moving on, let us back up a little in order not to lose the big picture here. In archaeology one collects data in the form of text–both spoken and written–statements. Once data is collected, analysis begins by getting rid of the synthetic unities that hold the statements together. This step is necessary for revealing forms of relations among statements that have previously been hidden from view. The next step is to

explore the (discursive) relations among statements with the aim of identifying a group of elements (objects, modalities of enunciation, concepts and strategies) and establishing the rules of formation for each one of them. The next level at which one analyzes the (discursive) relations is the level of relations among individual elements (e.g., relations between various objects) and relations between groups of elements (e.g., relations between objects and concepts).

Discursive relations also include relations among the rules of formation for discursive elements. Archaeological analysis is tasked to specify interconnections among various systems of rules (e.g., relations between surfaces of emergence and the authorities of delimitation) as well as interrelations between the four groups of rules for formation of elements (e.g., relations between rules for formation of objects and rules for formation of concepts). To give an example, Foucault suggests that the points of divergence in strategic choices are "determined by points of divergence in the groups of concepts" and "theoretical choices exclude or imply … the function of certain concepts" (Foucault, 1972, p. 72). This shows a set of reciprocal relations between rules of formation of concepts and rules of formation of theoretical choices (Foucault, 1972, p. 72). Similar patterns of interrelation among other pairs of systems of rules of formation for elements must also be specified (Webb, 2013). The point is to reveal regular patterns of relations that occur both within and between certain levels of discourse (e.g., objects, concepts, their rules of formation) (Webb, 2013, p. 140).

It is important to note that archaeology not only describes relations within the discourse but also relations between discourse and nondiscursive practice such as

"technical, economic, social, political" events (Foucault, 1972, p. 29). As Foucault affirms,

> to reveal in all its purity the space in which discursive events are deployed is not to undertake to re-establish it in an isolation that nothing could overcome; it is not to close it upon itself; it is to leave oneself free to describe the interplay of relations within it and outside it (Foucault, 1972, p. 29).

This is also to reemphasizes the fact that archaeological analysis extends beyond merely linguistic forms to generate an account of regularities emerging in different dimensions of life (Webb, 2013, p. 55). Thus, all these various groups of relations get together to form a system that governs the formation of the discourse in question. It must be noted that discursive relations are not empirical findings. They are not the outcomes of human experience; they rather form those experiences and therefore cannot be established by empirical data and analysis (Webb, 2013, p. 74).

Having defined what is meant by "relations" in archaeology, the next term I would like to define here is discursive *rules.* As discussed before,

> archaeology defines the rules of formation of a group of statements. In this way it shows how a succession of events may, in the same order in which it is presented, become an object of discourse, be recorded, described, explained, elaborated into concepts, and provide the opportunity for a theoretical choice (Foucault, 1972, p. 167).

It is important to note that rules governing a discursive formation do not constitute the conditions of possibility for the statements to emerge in a discourse. Rather, "the rules of the discursive formation are simply the description of the existing relations–thus they cannot exist before the rise of the statements themselves" (Gutting, 1989, p. 216). Moreover, "each statement contributes to the rule that governs its own existence" and therefore the rules of a discursive formation are "neither fixed, nor stages on the way to a final destination" (Webb, 2013, p. 127). Archaeological analysis tends to move "from

unity to multiplicity, from things to their relations, and from a defined form or relation to a variety of relations" in every step (Webb, 2013, p. 60). Moreover, the rules governing a discourse tend to change - and sometimes transform - with time. To illustrate this point, Foucault provides an example of how the hospital field changed after clinical discourse developed its relations with the laboratory in the nineteenth century (BC, 1975). He argues that the "body of rules that governed its working, the status accorded the hospital doctor, the function of his observation, [and] the level of analysis that can be carried out in it, were necessarily modified" (Foucault, 1972, p. 75) with the change of relations between clinical practice and laboratory in the modern age. It must be noted is that unity of a discourse lies in the discursive rules that emerge from it. In short, one can say that

> a group of relations can function as a rule in so far as they establish a regularity in the formation of objects (enunciative modalities, concepts or strategies) but at the same time they can be regarded precisely as the outcome of a regularity in the elements whose relations they describe (or determine). In this sense, a system of formation, viewed as a whole, is defined by a rule. But at the same time it owes its existence entirely to the series of interlacing regularities (rules) in the 'lower' level orders of which it is itself the rule. One consequence of this way of treating rules is that they do not precede the order to which they 'apply' but rather emerge from it (Webb, 2013, p. 83).

Just like discursive relations, "the rules cannot be determined empirically because they do not themselves have the status of things, or of phenomena, and they cannot be abstracted from experience because they are responsible for the construction of that experience" (Webb, 2013, p. 112).

The final term I would like to define in this section is discursive *regularity.* Regularity simply means existence based upon a "set of conditions" and also having "an effective field of appearance" (Foucault, 1972, p. 144). In other words, "a regularity is a pattern of consistency within a discourse" (Webb, 2013, p. 78). In archaeology one

defines these patterns as discursive elements, their rules, and relations. It is these regularities that make it possible to say what one says in a discourse (Webb, 2013, p. 103). Similarly, it is these regularities that "allow for significant variation in the boundaries of medical discourse and the rules governing the practice at any time" (Webb, 2013, p. 72). Regularities make up the law of discourse, which emerges from the existing relations in that discourse. We know that relations among statements change over time and so do the regularities that form based on those relations. Thus, the law of the discourse cannot be binding since it owes its existence to the very statements that it applies to (Webb, 2013, p. 75). A statement belongs to a discursive formation the way a sentence belongs to a text and a proposition to a deductive whole (Foucault, 1972, p. 116). Whereas the law of grammar determines the regularity of a sentence and the law of logic determines the regularity of a proposition, the regularity of a statement is determined by the fact of its belonging to the discursive formation itself. Further, one needs to note that "the fact of its belonging to a discursive formation and the laws that govern it are one and the same thing" (Foucault, 1972, p. 116).

It is crucial to understand that the term "regularity" is not defined as opposed to the "irregularity" of what might be called deviant statements (e.g., abnormal, pathological, or the product of genius). There are no irregularities in a discourse as that term would suggest presence of events that are not "rule based" as opposed to those that are "rule based" (Webb, 2013, p. 125). Furthermore, a regularity is not an "index of frequency or probability"; rather, it designates a set of conditions for the existence of every statement whether it is "extraordinary or banal, unique in its own kind or endlessly repeated" (Foucault, 1972, p. 144). As Foucault puts it,

> every statement bears a certain regularity and it cannot be dissociated from it. One must not therefore oppose the regularity of a statement with the irregularity of another (that may be less expected, more unique, richer in innovation), but to other regularities that characterize other statements (Foucault, 1972, p. 144).

It might be difficult, however, to establish all discursive regularities for a certain discursive formation as there are different kinds and degrees of regularity to be found in a discourse (Webb, 2013, p. 126).

I would like to emphasize that all regularities arising on the surface of a discourse have the same status and none of them have any type of privilege over the others. No regularity is absolute either. (Webb, 2013, p. 126). Ironically enough, discursive formations not only give rise to regularities that end up constituting rules governing the discourse, they also give rise to oppositions to those regularities, which are known as *contradictions* in a discourse. Contradictions emerge from specific forms of discursive relations, just like regularities do (Webb, 2013, p. 131). To conclude this section, let us say that it is the discursive relations, rules, and regularities that together define the unity and specificity of a discursive formation. In Foucault's words,

> whenever one can describe, between a number of statements, such a system of dispersion, whenever, between objects, types of statement, concepts, or thematic choices, one can define a regularity (an order, correlations, positions and functionings, transformations), we will say, for the sake of convenience, that we are dealing with a discursive formation (Foucault, 1972, p. 38)

Therefore, to define a discursive formation, one needs to establish the discursive regularities that emerge from it in the form of elements, rules and relations.

Discursive Conditions

As argued before, archaeological study of medicine goes beyond asking what it means for medicine to be a science. The main question here is to look for conditions by

virtue of which it exist as a science at all (Webb, 2013, p. 150). In general, there are two levels of conditions that are relevant to archaeological analysis: 1) conditions of existence, and 2) conditions of possibility. Conditions of existence are the same as rules of formation for the discursive elements. In Foucault's words, "the rules of formation are conditions of existence (but also of coexistence, maintenance, modification, and disappearance) in a given discursive division" (Foucault, 1972, p. 38). As we have seen already, they do not define what is possible to emerge in a discourse but "frame precisely the conditions of what has occurred" (Webb, 2013, p. 62). Moreover, like all discursive rules and relations, conditions of existence can change over time. For example, we know that medicine always takes place under strictly rule-governed conditions. Therefore, if the time and place change it will no longer be possible for medicine to work under its former set of rules and conditions. This means that conditions of existence of a discursive formation are sensitive to temporo-spatial changes and therefore they are constantly being updated.

Conditions of possibility, on the other hand, are to some extent determined by the *positivity* of discursive formation and what Foucault calls the *historical a priori*. Whereas no one can determine the exact statements which may or may not arise in a particular discourse, the law of coexistence as defined by positivity of a discourse can predict what may or may not fit within that particular discourse. Positivity of a discourse ensures that future subjects will be at least talking about the same things, will place themselves at the same level or at the same distance, will use the same conceptual filed, or oppose one another on the same grounds (Foucault, 1972, p. 126). In Foucault's words, positivity "defines a field in which formal identities, thematic continuities, translations of concepts,

and polemical interchanges may be deployed" (Foucault, 1972, p. 127). Hence, positivity of a discursive formation makes it possible only for certain types of objects to arise, certain positions to be assumed by subjects, and certain conceptual fields to be espoused. As such, positivity of discourse plays the role of what Foucault calls a *historical a priori* (Foucault, 1972, p. 127). It is the "historical a priori that determines the formal designation of the conditions of a discourse" (Webb, 2013, p. 118).

Foucault's usage of the term *a priori* is different from Kant's, however. What Foucault depicts is an

> a priori that is not a condition of validity for judgments, but a condition of reality for statements. It is not a question of rediscovering what might legitimize an assertion, but of freeing the conditions of emergence of statements, the law of their coexistence with others, the specific form of their mode of being, the principles according to which they survive, become transformed, and disappear (Foucault, 1972, p. 127).

For Kant, a priori knowledge constituted the basic understanding humans can reach through reasoning alone and without depending on prior empirical experience. The a priori knowledge typically consisted of human intuitions about time and space and categorization of human understanding. Kant assumed the a priori knowledge to be the product of "pure" reason and not a synthetic construction of prior empirical experiences (Webb, 2013, p. 54). To avoid any confusion with formal a priori as conceived by Kant, Foucault affirms that the two forms of a priori conditions - historical and formal - are neither of the same nature nor they belong to the same level. They occupy two different dimensions that may intersect at times (Foucault, 1972, p. 128). Foucault's historical a priori,

> is defined as the group of rules that characterize a discursive practice: but these rules are not imposed from the outside on the elements that they relate together; they are caught up in the very things that they connect…

> and are transformed with them… The a priori of positivities is not only the system of a temporal dispersion; it is itself a transformable group (Foucault, 1972, p. 127).

Thus, positivity of a discourse and the historical a priori can define only the most general characteristics of the "observable structures and the field of possible objects" in a certain discourse (Foucault, 1972, p. 147). Furthermore, it is the law of coexistence, not a condition of possibility that determines whether or not a statement is part of the discursive formation (Foucault, 1972).

Let us take an example here to illustrate how the law of coexistence among statements works. Imagine two physicians talking about a wildfire in California or the quality of Jimmy John's sandwiches. One can tell that these statements do not belong to medical discourse even if they are spoken by doctors inside a hospital. But how exactly do we know that? It is probably because we know that, in general, there is not enough talk about wildfires and sandwiches in medicine so they cannot be objects of a medical discourse. To be more precise, because these statements are not bound with other similar statements in a field of coexistence, medicine does not determine their mode of being nor the principles according to which they survive and, reciprocally, medicine is not affected by their transformation or disappearance. Thus, the law of coexistence cannot justify their status as belonging to medical discourse. However, this is an oversimplified example. It is not always easy to dismiss all objects, especially those that are more complex, as either belonging or not belonging to medical discourse. An archaeological analysis of modern medical discourse can enhance these conversations by defining the field of coexistence where various statements can find a place.

It is worth reiterating here that archaeological conditions lie in sharp contrast from both empirical and transcendental conditions. Empirical conditions are assumed to come before the conditioned– according to a certain temporal scale. Hence, the "temporal priority of condition over conditioned, and the irreversibility of their relation" is assumed (Webb, 2013, p. 114). Transcendental conditions too precede the empirical reality they condition. In either case, the *condition* not only precedes the *conditioned* but also exists independently of the conditioned and remains insulated from its feedback effects (Webb, 2013, p. 114). Archaeological conditions, on the other hand, not only coincide with what they condition (and thus do not precede or follow it), they are also not immune from the feedback effects of what happens with the conditioned. In Webb's words, "the 'conditioning' regularity falls together with the 'conditioned' regularity because a regularity as formulated in a law or rule is merely descriptive of the regularity that has emerged" (Webb, 2013, p. 104). Thus,

> any discontinuity or deviation in the regularity as it occurs will have an immediate impact on the law (or the principle of construction): there is no separation between them, or no separation that is not bridged by events. This can only happen because there is a two-way communication between conditions and conditioned (Webb, 2013, p. 104).

Thus, a key difference between archaeology and both empirical and transcendental conditions lies in the relation between the condition and what it conditions.

On the one hand, we know that in a discursive formation statements contribute to the regularities that they give rise to. Therefore, even the most general rules in archaeology have antecedent conditions (e.g., statements making conditions of existence for regularities) so "there can literally be no 'first principle' or necessary point of departure" (Webb, 2013, p. 127). On the other hand, what Foucault calls the "higher

order" regularities condition the coexistence of individual statement (see the *law of coexistence* as part of the discussion on historical a priori earlier, in this section, for more). In either case, the conditions do not exist in advance of what they condition; rather, they are situated at the same level as that of statements and the relations among them (Webb, 2013, p. 117). One can see that neither of these constitute conditions for the possibility of what is regulated since these conditions themselves are "caught up in the very thing that they connect … and are transformed with them" (Foucault, 1972, p. 127). One might therefore conclude that discourse "avoids both the priority of conditions over conditioned and the irreversibility of their relation" (Webb, 2013, p. 117).

Archaeology is also distinguished from an empirical history by the fact that the latter often relies on formal and even transcendental conditions for the possibility of experience (Webb, 2013, p. 124). In contrast, archaeology looks at the conditions of actual existence, not of possibility (Foucault, 1972). It sees discourse as "a complex configuration of relations in which events feed back into their conditions" (Webb, 2013, p. 134). In other words, and as explained above, discursive conditions coincide with the events they condition. In conclusion, the unity of a discourse is delimited by its conditions. In search of this unity, archaeology does not seek the "unity of an origin, but the complexity of the historical relations that constitute discursive formations" (Webb, 2013, p. 150). The unity of a discursive formation "defines a limited space of communication" (Foucault, 1972, p. 126) which is defined in itself by a set of describable, discursive relations. It is not expected of the subjects to know exactly what they are talking about since they are not the "masters" of their discourse and are rather all caught up within "a web … of which they cannot see the whole" (Foucault, 1972, p. 126.

Thus, discursive relations can be spotted, traced and described regardless of "who knew what about whom and when" (Webb, 2013, p. 111). At the end of the day, it is the positivity of a discourse that "defines the thematic continuities, the translation of concepts, and even the space within which such disputes and engagements can take place" (Webb, 2013, p. 111). Again, it is these conditions that are set up by positivity of a discourse that Foucault calls a historical a priori for the discursive formation.

Study Setting

The primary study setting in this project was Indiana University School of Medicine, Indianapolis campus. Before moving on, I would like to provide some contextual information about the school itself. Indiana University School of Medicine was first established in 1903, in Bloomington, Indiana. It became first accredited by Liaison Committee on Medical Education (LCME) during WWII. Today, Indiana University School of Medicine is the largest accredited school of medicine among 135 others nationwide. It includes nine medical school campuses located within the host schools in Bloomington, Evansville, Fort Wayne, West Lafayette, Muncie, Gary, South Bend and Terre Haute. All campuses offer third and fourth-year clinical work as well as the beginning two years of preclinical education. More than half of all physicians practicing in the state of Indiana have been trained as students and/or residents at Indiana University School of Medicine.

In the year 2019, 365 students (out of 6,683 who applied) were admitted to the MD program at Indiana University School of Medicine. This year-one student body consisted of 186 males, 179 females, and 58 members of the underrepresented minorities. Among them were 285 in-state and 80 out-of-state students. The average student GPA for

the class enrolled in 2019 was 3.81, with the average MCAT score being 511. In 2019, the distribution of total enrolled medical student body at Indiana University School of Medicine–across all nine campuses–was as follows: 848 students in Indianapolis, 85 in Bloomington, 65 in Evansville, 84 in Fort Wayne, 60 in West Lafayette, 54 in Muncie, 76 in Gary, 88 in South Bend, and 76 in Terre Haute, making up a total student body of 1,436 medical students across all nine campuses (according to the IUSM Fact Sheet 2019-2020).

The MD program's annual tuition is ~$35,503 for in-state students, and ~60,811 for out-of-state students. Indiana University School of Medicine houses 94 accredited residency and fellowship programs where 1,216 residents and fellows are currently being trained. There are 2,840 full-time faculty, 336 part-time faculty, 3,450 volunteer faculty, and 2,023 staff members currently employed at the Indiana University School of Medicine. The school also houses an array of research programs with most of them being located at or around the Indianapolis campus. The grants awarded to research projects at Indiana University School of Medicine–for IU fiscal year ending June 30, 2019–amounted to $362,115,081 (IUSM Fact Sheet 2019-2020)

Indianapolis campus, located within the Indiana University Purdue University Indianapolis (IUPUI) campus in downtown Indianapolis, hosts the largest number of medical students, faculty, and staff. All the same, medical education curriculum across all nine campuses share the same program objectives. Furthermore, medical students, faculty and staff in any of the nine campuses statewide adhere to the same policies and standards established by the school administration. At Indianapolis campus, classrooms range from large lecture halls to small-group study rooms. This campus has a convenient proximity

to some of the largest teaching hospitals and patient care facilities in the state of Indiana, where the clinical education portion of the medical curriculum, including third- and fourth-year clerkships and electives for those enrolled in the Indianapolis campus are currently being taught.

The point of providing a relatively thick description of the study setting, in general, is twofold: 1) lessening the issues of representation (Coffey, 1999), and, 2) enhancing transferability of findings to other similar settings (Mertens, 2015). It is a qualitative research tradition to provide as much contextual information as possible so that the readers can judge for themselves that in what ways and to what extent is another similar setting different from the one used in the current project. Hence, the burden of evidence is being put on those who might claim other medical students are different than those enrolled at Indiana University School of Medicine, and as such, the conclusions we draw from studying Indiana University School of Medicine's students do not have important implications for other medical students across the U.S. (Becker et al., 1961; Mertens, 2015).

Study Participants and Participant Selection Methods

All medical students enrolled in Indiana University School of Medicine, Indianapolis campus–regardless of the year of their study–were invited to participate in this study via email (see Appendix B). The goal was to recruit a total of 20 students for face-to-face interviews and a total of up to 28 students to participate in 4 focus groups. Having participated in a face-to-face interview was not used as an exclusion criterion against those who were willing to participate in a focus group as well. A copy of the

Study Information Sheet (see Appendix A) along with further information was sent to all actively enrolled medical students at the Indianapolis campus.

Self-selected volunteers who participated in face-to-face interviews included 8 MS1, 3 MS2, 5 MS3, and 4 MS4 students. Interviewees consisted of 12 men and 8 women (as self-reported by participants). According to their self-reported data, the race/ethnicity breakdown of the interview participants were as follows: 12 Caucasian, 2 South Asian, 2 African, and 4 multiracial students. Participants reported their social economic class as follows: 3 upper class, 1 upper-middle class, 10 middle class, 3 middle-lower class, and 3 lower class. All one-on-one interviews were conducted in February 2019 with the exception of one that was conducted in March 2019 (see Table 3.1). All interviews were held in a conference room on the Indianapolis campus and lasted for at least 60 minutes. Free lunch was provided to all participants.

Table 3.1

Interview Participants' Gender, Race/Ethnicity, and Social Class

No.	Student Code	Year of Study	Gender	Race/Ethnicity	Social Class	INT date
1	004	MS4	M	Caucasian	Middle class	Feb 13, 2019
2	012	MS2	M	South Asian American	Upper-middle class	Feb 4, 2019
3	023	MS3	F	Caucasian	Middle class	Feb 20, 2019
4	034	MS4	M	Caucasian	Middle class	Feb 11, 2019
5	043	MS3	F	Caucasian and Latina	Middle class	Feb 11, 2019
6	051	MS1	F	Caucasian	Lower class	Feb 20, 2019
7	063	MS3	F	Caucasian	Middle class	Feb 13, 2019
8	072	MS2	M	Caucasian	Middle class	Feb 4, 2019
9	081	MS1	M	Hispanic and Caucasian	Middle class	Mar 29, 2019
10	093	MS3	F	Caucasian	Middle class	Feb 11, 2019
11	103	MS3	M	Caucasian	Middle-lower class	Feb 13, 2019
12	112	MS2	M	Caucasian	Middle class	Feb 11, 2019

No.	Student Code	Year of Study	Gender	Race/Ethnicity	Social Class	INT date
13	121	MS1	M	African American	Upper class	Feb 4, 2019
14	134	MS4	M	Caucasian	Middle-lower class	Feb 13, 2019
15	141	MS1	M	South Asian	Middle-lower class	Feb 25, 2019
16	151	MS1	M	Multiracial: White, Hispanic and Filipino	Upper class	Feb 27, 2019
17	161	MS1	F	Caucasian	Lower class	Feb 18, 2019
18	171	MS1	F	Filipino and White	Upper class	Feb 4, 2019
19	184	MS4	M	African	Lower class	Feb 18, 2019
20	191	MS1	F	South Asian American	Middle class	Feb 11, 2019

Note. The information about gender, race/ethnicity, and social class were documented as self-reported by participants.

A total of 4 focus groups were also held on campus in the same conference room with each session lasting for at least 60 minutes. Participants in each focus group session consisted of: 7 MS1 students in first focus group (total of 7), 7 MS2 and 1 MS1 students in second focus group (total of 8), 2 MS3, 1 MS1 and 1 MS4 in third focus group (total of 4), and, 5 MS4 students in fourth focus group (total of 5). The initial plan was to hold one focus group session with each of MS1, MS2, MS3, and MS4 students due to ease of scheduling and creating a group interest for students to feel comfortable with other students from their own cohort. However, students who volunteered to join another cohort instead of their own were also welcomed [e.g., MS1 student joining MS3 focus group session because the date and time for MS3 session worked better with their personal schedule]. A total of 24 students participated in focus groups with each session lasting for at least 60 minutes. Focus group participants consisted of 14 men and 10

women (as self-reported by participants). According to their self-reported data, the race/ethnicity breakdown of the focus group participants were as follows: 13 Caucasian, 3 White Middle Eastern, 3 South Asian, 2 African American, 2 multiracial, and 1 Asian American students. Three out of four focus groups were conducted in April 2019 and the fourth one was conducted in March 2019 (see Table 3.2). Each focus group participant received a $10 Amazon.com gift card as an incentive. Thus, a grand total of 44 students enrolled at the Indiana University School of Medicine, Indianapolis, participated in interviews and focus groups.

Table 3.2

Focus Group Participants' Gender and Race/Ethnicity

Session Date	No.	Year of Study	Gender	Race/Ethnicity
		FG Cohort: MS1		
Apr 11, 2019	1	MS1	M	Multiracial
	2	MS1	F	White, Middle Eastern
	3	MS1	F	White, Middle Eastern
	4	MS1	M	Multiracial
	5	MS1	M	Caucasian
	6	MS1	F	Caucasian
	7	MS1	M	South Asian
		FG Cohort: MS2		
Apr 11, 2019	1	MS2	M	Asian American
	2	MS2	F	Caucasian
	3	MS2	M	Caucasian
	4	MS2	F	Caucasian
	5	MS2	M	Caucasian
	6	MS2	M	South Asian American
	7	MS1	F	African American
	8	MS2	M	Caucasian
		FG Cohort: MS3		
Apr 2, 2019	1	MS3	F	Caucasian
	2	MS3	F	Caucasian
	3	MS4	M	Caucasian
	4	MS1	M	Caucasian
		FG Cohort: MS4		
Mar 28, 2019	1	MS4	M	White, Middle Eastern

Session Date	No.	Year of Study	Gender	Race/Ethnicity
	2	MS4	M	Caucasian
	3	MS4	F	Caucasian
	4	MS4	M	South Asian American
	5	MS4	F	African American

Note. The information about gender and race/ethnicity were documented as self-reported by participants.

This study also employed direct observation as an additional method of data collection. Direct observations were conducted at various educational settings including lecture halls, small-group study sessions, laboratories, and hospital rounds. No specific participants were recruited for the observational activities. A total of 60.5 hours were spent on direct observations, out of which 40 hours were spent at the Family Medicine Department, IU Methodist Hospital, 10 hours at the Surgery Department, IU Health University Hospital, 7 hours at IU Health Simulation Lab, and 3.5 hours were spent observing surgery clinical lectures at IUSM, Indianapolis campus. Direct observation of these sites were conducted between January and July 2019. Table 3.3 summarizes the information about the sites and dates of the direct observations conducted in the present research.

Fieldnotes were written either on site (when possible and permitted by clinical circumstances) or immediately after leaving the site. A total of about 120 pages of fieldnotes were produced during this activity. With the goal of this study being to define the discursive formation of modern medicine at Indiana University School of Medicine - Indianapolis, it was considered to be rewarding to have student participants at all stages

of their medical training (MS1, MS2, MS3, MS4[6], Residents) as well as other participants including but not limited to medical educators, physicians, nurses, patients, and patient families.

Table 3.3

Direct Observation Sites and Dates

Observation Site	Number of Hours	Observation Date
Family Medicine, IU Methodist Hospital	40	June 3-14, 2019 Between 6:30 AM and 2:30 PM
Surgery, IU Health University Hospital	10	Jan 8-9, 2019 Pre and Post-Operative Ward 8:00 AM-12:00 PM (8 hours) May 1, 2019: Morning Rounds with Surgery Team 5:00 AM to 7:00 AM (2 hours)
IU Health Simulation Lab: Fairbanks Hall	7	June 6, 2019 8:00 AM to 3:00 PM
Surgery Clinical Lessons, Walther Hall	3.5	May 3, 2019 12:30-2:00 PM: Admission Orders (Lecture) by Nurse Educator 2:00-4:00 PM: Gall Bladder Disease (Case Studies) by Surgeon
Total Hours: 60.5		

[6] Some of the MS3 and MS4 students participating in this study spent their first two years of study at one of the regional IUSM campuses and came to Indianapolis only for their clinical years 3 and 4. I do not classify my MS3 and MS4 research participants based on whether they were a student at Indianapolis since the beginning of their training or came to Indianapolis as an MS3 student. Making a distinction like that would be irrelevant to the present study because this study is looking at the discourse of medicine at Indianapolis campus in 2019. All of my MS3 and MS4 student participants were there in 2019 and were actively producing the discourse of medicine at Indianapolis campus.

Data Collection Methods

Data was collected from a heterogeneous sample of medical students through one-on-one interviews and focus groups, and, through direct observation of a variety of educational and clinical settings. Multiple sources were used to elicit various types of data including observational, verbal, and textual information. In other words, I have used observational fieldnotes as well as interview and focus group transcripts as data for the present archaeological analysis. Data consisted of both *monological* data (collected unobtrusively through writing observation fieldnotes) and *dialogical* data (collected via interviews and focus groups in collaboration with study participants) (Grbich, 2013, p. 57).

Interviews

Procedure. A total of 20 interviews involving students from each of the years MS1, MS2, MS3, and MS4 were conducted in this study (see Table 3.1). The interview format was semi-structured (Mertens, 2015; Seidman, 2013). That is, although a set number of questions were asked of all students to guide the discussion, participants were allowed to talk about things that mattered to them even if they were not on the interview protocol (see Appendix C). Each interview consisted of two roughly divided parts. The first ~10 minutes were spent on building rapport between interviewer and the interviewee. Questions asked during this time mainly focused on student's demographic information and educational background. Remainder of the time (~50 minutes) was spent in discussing participant's views on the topics related to identity, professionalism, and medicine as a social practice. All interviews were audio recorded using Zoom

conferencing tool (https://zoom.us/) and were transcribed verbatim by myself at a later time. INT transcripts used in this study consisted of approximately 200 pages of data.

Rationale. Identities are constructed within medical interactional settings as we recount the events to ourselves and others (Monrouxe, 2009a; Monrouxe, 2009b; Clandinin & Cave, 2008; and Monrouxe & Sweeney, 2010). Further, as we try to make sense of previous events by telling a story, our identities emerge in those stories. In these narratives we position ourselves according to cultural and social expectations displaying the performative aspects of our identity (Schiffrin, 1996). Therefore, the concept of a narrative is a powerful way to understand how identities are shaped and re-shaped as people provide a sense of coherence to their lives by telling a story (McAdams, 2006) and recounting their actions and behavior (Ricoeur, 1992). It is not difficult to see the conventional codes and the allegiances to socially constructed discourses in anyone's speech when they are talking about themselves and others (Butler, 2002). For example, narrating stories about how they became interested in medicine as a profession, students made statements referencing several of the objects, modes of statement, concepts and theoretical strategies that are prominent in discursive formation of modern medicine. In these interviews, students also signified their views on what enables and what constrains actions in the face of a particular practice or event, which entailed further details about the rules and relations in medicine as a discursive formation.

Goals. The purpose of holding one-on-one conversations was to collect student statements regarding the discursive structure of medicine and how this structure is constituting their professional identity.

Protocol. The interview protocol designed and used in this study is provided in the Appendix C section of this dissertation.

Focus Groups

Procedure. A total of 4 focus group sessions were conducted in this study (see Table 3-2). Focus groups were held after all one-on-one interviews were completed. The discussion format was semi-structured. That is, although a set number of discussion prompts were provided in each meeting, participants were allowed to talk about things that they thought were important even if they were not on the meeting protocol (see Appendix D). Student discussions focused on the topics of medical identity and professionalism, as well as medicine as a social practice. All meetings were audio recorded using Zoom conferencing tool and transcribed verbatim by myself at a later time. FG transcripts used in this study consisted of approximately 150 pages of data.

Rationale. Similar to one-on-one interviews, this data collection method also aimed at collecting medical students' statements on discursive formation of medicine and students' professional identities through analysis of talk. As other researchers have found, narratives that instantiate identities do not just happen when we are recounting "big stories" about our lives. Such illuminating narratives can also be found in fleeting moments of ordinary conversational context (Monrouxe et al., 2009; Rees & Monrouxe, 2009; de Fina et al., 2006; and Georgakopoulou, 2007) as we establish our positionality toward an instantaneous prompt in a group discussion. It was these fleeting moments of rather natural conversation that I was aiming to reach by holding focus group meetings. The focus was on capturing the micro-processes that occur within and through language use. For example, Monrouxe (2009a, 2009b, 2010) shows that medical students draw on

a number of master narratives as they describe everyday events. These included "the privilege narrative" (the privileged position of being a doctor or future doctor), "the healing doctor narrative" (where the role of the doctor is to cure the sick) and "the detached doctor narrative (where the doctor is somewhat confused about his/her exact role and identity) (Monrouxe, 2010, p. 47; Monrouxe, 2009a; Monrouxe, 2009b). Careful analyses of the ways in which students talk about medicine as a profession also casted light on the process of developing their professional selves and achieving a medical identity through their interactions with medical school and hospital environments.

Goals. The purpose of holding conversations with groups of medical students in focus groups was to incite more students' statements regarding the discursive structure of medicine and show how those structures constitute their professional identities through archaeological analysis of the discourse.

Protocol. The focus group protocol that was developed and used in this study is provided in the Appendix D section of this dissertation.

Direct Observations

Procedure. Observations were performed in various educational settings such as lectures, labs, small-group study sessions, and hospital rounds. Random student groups from different cohorts (MS3 and MS4) were observed in didactic and/or clinical settings– on a random schedule. The observation focused on events that involved professional behavior of medical students as they go about their daily interactions in the medical school environment. Informal chatting with students, faculty, staff, physicians, and patients were had at times when the opportunity arose naturally. On other occasions, I was silently observing the overall setting and (sometimes) documenting the observation

in the form of fieldnotes. OBS fieldnotes used in this study consisted of approximately 120 pages of data.

Observations were performed either in overt or covert mode depending on the circumstances in different settings. Whenever possible, the observational data was collected through an *overt* process. That is, students, faculty, patients, physicians, and others present in the scene were notified of my identity as a researcher and the purpose of my presence, which was conducting my Ph.D. dissertation research (e.g., in the Family Medicine Ward at IU Methodist). Individuals present on site did not need to do anything to help with the process. They were asked to go about their routine as usual. However, there were times when this was not easy to do. For instance, when observing a hospital wards, there were too many people including physicians, staff, student trainees, patients, patients' family members, etc. who were in constant transit. Plus, the population in the scene tended to change partially or sometimes entirely every few minutes as I moved from one patient to another with the medical care team. In those circumstances, it was next to impossible to make sure *everyone* knew who I was and what I was doing - at all times. Furthermore, I wanted to cause as less of a disturbance to the normal clinical procedures as possible. When I went on morning rounds with teams of physicians and residents, I was quietly following the team trying my best to stay almost invisible to everyone. The last thing I wanted to do was to remind them of my presence every minute and distract them from their intensely focused job. The patients and patients' families often thought I was part of the team of doctors as I was wearing a lab coat and scrubs the entire time while I was at the hospital. Therefore, the observation process was at times *covert* (not everyone was aware of my identity as a researcher and/or that I am observing

them for research purposes) and unstructured descriptive data was more attainable in those situations (Grbich, 2013). One advantage of the covert observation is that researcher's presence becomes unobtrusive and thus observation of the authentic form of routine activities in social settings is a more likely outcome. In an overt observation, sometimes those present in the field consciously or unconsciously lose their natural contour due to the feeling of being observed (Atkinson & Pugsley, 2005). When observing overtly, I was using paper and pencil to document fieldnotes during the observations. When it was not possible to observe overtly, the observation was still carried on in a covert mode in which case I had to write my fieldnotes after leaving the setting.

I believe that there is no one "natural", "correct", or "best" way of writing what one observes when it comes to writing fieldnotes. I also agree with Emerson et al. (2011) that writing fieldnotes is not a matter of passively copying down "facts" about "what happened" (p. 9). Indeed, describing a setting involves selection and emphasis upon different features and actions while either consciously or subconsciously leaving out others. It goes without saying that different people have different ways of filtering and processing an exact same event, which is due to every individual relying on their personal lens to interpret, frame, and represent what they see. Besides, there are no absolute standards for determining a point after which one can say one has documented "enough detail" about a certain event (Emerson et al., 2011, p. 18). How closely one looks and describes a setting or event depends on what is "of interest", which varies according to researcher's positionality and theoretical concerns of their study. This is precisely why researcher's positionality matters in qualitative research.

While in the field, I paid special attention to processes and interactions through which members of a particular social setting create and sustain specific and local realities (Emerson et al., 2011). Writing authentic fieldnotes in this study was a way to capture and preserve the indigenous language of the statements circulating in the air. I made an effort to limit myself writing about preconceptions I had about the field members' roles and activities and rather attempted to capture what the field members were *actually* saying and doing. One well-known limitation of direct observation as a method of data collection is its character of being *selective.* The action and talking that occur in a social setting are always part of a "multi-channeled event" (Walker, 1986, p. 211), whereas writing is linear in its very nature and, as such, it can handle only one channel at a time (see Azim, et al., 2020, for more). The researcher has no way but to pick and choose among the multiple events all of which are happening at the same time (e.g., multiple people might be talking and multiple actions might be taking place simultaneously, yet, only one conversation thread or action can be documented in writing, which means having to leave others irretrievably out of the fieldnotes).

Rationale. It has been argued that identities are constructed and co-constructed within medical interactional settings as medical students go about the details of their daily routine (Lingard et al., 2003; Monrouxe et al., 2009; Rees & Monrouxe, 2009; Atkinson, 1995; Holland et al., 1998). With the focus of the present study being on the discursive structure of modern medical discourse and how it constitutes the professional identify of medical students, a direct observation of the details of the daily work within the medical interactional settings was necessary.

Goals. The purpose of observing small groups of medical students and other healthcare professionals within an interactional social setting was to get a feel for the situations and contexts medical students are getting exposed to in their daily encounters. Besides, direct observation of educational settings helped exposing many of the discursive regularities emerging in the discourse of medicine.

Data Management

Each interview participant was assigned an identification code to protect their identity. Any student, faculty, staff, doctor or patient names mentioned in the data presented in Chapter 4 are pseudonyms. However, names of those who neither participated in interviews nor were observed directly are left unchanged (e.g., if a student is talking about their mentor as their role-model and mentions that mentor's name]. All age-related information provided for patients are pseudo numbers. No Patient specific information or Protected Health Information (PHI) that could help identify individual patients are part of the data presented in this dissertation. All patient information was protected in accordance with Health Insurance Portability and Accountability Act (HIPPA). A Microsoft Word document containing the information about ID codes and pseudonyms for the study participants was stored under a random file and folder name in a secure Indiana University Box account. All data including audio-recordings of the interviews and focus groups were stored in a password-protected personal laptop connected to a personal Microsoft OneDrive (https://onedrive.live.com/) account that can only be accessed by myself as the researcher.

Researcher Positionality

Maxwell (1996) argues that "what the researcher thinks is going on with the phenomena" is brought to the study and that influences not only the purpose of the study, but also "what literature, preliminary research and personal experience" the researcher draws on in conceptualizing the study (p. 4). In other words,

> research is always carried out by an individual with a life and a lifeworld…a personality, a social context, and various personal and practical challenges and conflicts, all of which affect the research, from the choice of a research question or topic, through the methods used, to the reporting of the project's outcome (Bentz & Shapiro, 1998, p. 4).

Indeed, making even the smallest observation requires the acceptance of some background assumptions and some system of beliefs to organize what one is seeing. The claim here is that social research is a value-laden process. Application of a positivist logic to qualitative data with the expectation that the data directly support the hypotheses, or in the case of the present study, theory, would be a mistake. The fact is that data does *not* speak for itself (Luttrell, 2010). Ironically, the same data can be used to support contradictory hypotheses made by different researchers who are pursuing different purposes. The type of connections that are made between data and hypothesis/theory depends on the background assumptions underpinning the researcher's analytical approach (Longino, 1989). My assumptions in this study come from philosophical underpinnings of social constructionist and postmodernist research paradigms. The constructionist ontology, relativist epistemology, and value-laden axiology of the above two paradigms are making the backbone of the present work.

In social sciences research, the researcher cannot be separated from her background, life experiences and belief systems that inevitably filter impressions of the

actions and behavior of others (Grbich, 2013). It is crucial to recognize that researchers are human beings with their own life histories. As such, no researcher comes into their research study as a clean slate, and thus they all end up exerting an influence on their research processes. We interact, react, incorporate and shift in a never-ending process during every moment of our lives, which includes the time we spend in the research field. While tracking all aspects of one's person would be next to impossible, identifying a few major lines to draw a rough sketch of one's positionality in the world for the consumers of one's research is strongly recommended in qualitative research (Mertens, 2015; Denzin & Lincoln, 2018; Luttrell, 2010).

In this study, I am not claiming to speak from a position of "truth", as I am aware of the fact that I myself am *subjected* to social discourses and so am able to speak only within the limits of those discourses that are present in my corner of the world. That does not mean that I cannot be critical of my own surroundings as a researcher. What it does mean is that there are limits to my thinking, speaking, and writing, inside which I as the researcher am trapped–either knowingly or unknowingly. Providing a statement of positionality will help the reader understand some discursive limits that are determining my mode of existence. In the next few pages, I will talk about myself with the aim of exposing my personal "web of situated positionality" (Pillow, 2003, p. 187) to the reader.

Identifying myself as a 37-year-old, lower-middle class, white, Middle Eastern, heterosexual woman who is a medical educator and an anatomist, I would like to expound on: how I perceive my own positionality in the field, how I think others perceive me in the field, and whether I recognize any biases in myself that might be playing a hand in the process of conducting my research. I was born in a Muslim family in Afghanistan. I

am not a Muslim myself nor do I practice any other religions–based on personal and specific philosophical reasons. I am not an atheist, however. I have a firm belief in God though not in religions. I went to schools which were much different from those in the Unites States in terms of their available facilities, cultural context, and educational goals. I am not a native English speaker either. My first language is Farsi (Persian). I have been using English as my academic and social means of communication only since 2012 when I first came to U.S. Putting all these lines of difference on the paper, it's tempting for me to think I may be just too different from the people in this study; yet, I find it in my heart that this is not true–at least according to the way I understand the world.

I have a few links that connect me with the U.S. academia and social context, which have been strong enough to not let me feel "different" from others, especially among student population I have been involved with. The first and foremost link is created by the fact that I deeply respect any individual human being (though not humanity in general). That is one reason I see myself as a citizen of the world and not belonging to *any* specific group(s) of people. I do not find myself fitting in any particular boxes. I have serious problems with the notion of nationalism and ideological thought, as well as the politicization and social networking of religion. I do not mind communicating and even thinking in a language that is different than the one my parents taught me. In fact, my first language is something I have passively inherited, whereas my second language is what I have actively and willingly adopted as a result of my decided interactions with the world. I do not mind using any languages as long as I am saying and thinking the same things. I do not believe human beings are chained to the cultural context they were born in to. Besides, culture is not a static set of values, beliefs, and

habits that we inherit. I see culture as a rather fluid process of human development, and it does not need to be a group-entity. Culture can be individually defined and thus actively chosen–instead of being imposed upon one by others.

My life experiences are technically not as modern and comfortable as many people in the U.S., but this very fact makes them vividly rich. Having to leave my home as a 9-year-old in the middle of a dark night in order to cross an illegal border under the bombard of hundreds of missiles, I have experienced deep unsettlement and anguish that is unfortunately not uncommon in the world today. Growing up in what I like to call an eternally immigrant status, I have felt the emptiness of the ideas that I was supposed to cling to in order to remain loyal to the tribe both in Afghanistan and in the U.S. My life experiences have shaped me in a way that I now feel like I am able to connect with anyone in the world regardless of their race, gender, religion, culture, class, age, sexual orientation, and other social constructs, and I am happy to do so. In my mind, the only real connections between human beings are bridged by thoughtfulness and empathy for the suffering of one another.

Like many others, I am sensitive towards social injustice and oppression. I might be biased in sniffing for some sort of power dynamic playing a hand in almost any social practice, including education. Education, of course, is always political. I do not believe there exists/has ever existed a time and space where education is/was not political. This is one reason I am drawn toward Foucauldian analysis of the relationship between power and knowledge, which makes up the foundation of both his archaeological and genealogical methodologies as well as his general philosophical worldview. This specific outlook leads me to see students as generally playing a lower-hand in the practice of their

own education as opposed to educators and administrations who are often playing the upper-hand. Although I strongly believe in the discourse theory, I would not attempt to impose the theory on my data. Nonetheless, my results are bound to be value-laden due to my ontological, epistemological, and axiological stances based on the research paradigm I have chosen for this study. This is inevitable because it is simply impossible to separate how I feel and what I believe in my person from the ways in which I conduct my research and analytical work. It would be like asking my mind to analyze for somebody else's mind who *wishes* to remain value-neutral. The readers would have to judge for themselves as to how well the theory is connected to the actual data as I have provided thick descriptions of my data wherever possible. The readers also have a right to judge whether the results and conclusions I have drawn in this study make sense to them– bearing in mind that I claim neither objectivity nor value-neutrality in the research process.

Having provided a brief individual and social background of myself, I now turn to reflect on my positionality regarding my present research field, the Indiana University School of Medicine, Indianapolis campus, where I have been pursuing my second doctoral degree for the last 5 years. While I am familiar with the settings and the local culture, I am not a medical student myself, nor am I taking any classes with any of the four years cohorts as part of my Ph.D. program. Thus, being an "indigenous" to the setting itself, my position in relation to the medical student population who participated in this study is one of an "outsider's" (Banks, 2010, p. 46). I hold an M.D. degree but I do not practice as a physician. Hence, my position with regards to the population I observe at the hospitals is also one of an "outsider's". Not being a medical student, I do not have

any conflict of interests that could create bias when doing research that involves medical students' identity formation. The only formal contact I have had with two of the cohorts, the current MS1 and MS4 students, was as a gross anatomy instructor in the anatomy dissection laboratory (teaching medical gross anatomy to them in 2015 and 2018, respectively). I know some of the students by name and they still say hi (or sometimes just smile at me) when we see each other in the hallways. I was not assigned as an instructor in any of the courses they were taking, however, during the timeframe I was collecting data for the present study. Thus, there was no power asymmetry in my relationship with them as a researcher in this study that could have had the potential to affect their social or academic standing as medical students at Indiana University School of Medicine. I have not had any contacts with the two remaining cohorts throughout the time I have been at Indiana University School of Medicine (Aug 2015–Dec 2019).

In conclude, I would like to reference Grbich's (2013) interesting discussion on reflexivity here. She proposes three types of reflexivity to be practiced in qualitative research: 1) reflexivity as self-critique, which includes discussions of history, power, class, experiences, and so forth relating to the self, 2) reflexivity as a process, which emphasizes on diversity, connectedness and intertextuality, and, 3) subjectivist reflexivity, which references an epistemological positioning (p. 113). I would think (and hope) that my discussion of reflexivity in this section has involved at least some of these aspects.

Ethical Considerations

This study was reviewed and granted the "exempt" status by the Institutional Review Board (IRB) at Indiana University (protocol # 1810969045).

Chapter 4: Results

Chapter Overview

This chapter contains the archaeological analysis of modern medical discourse at three different levels: the level of statements, the level of discursive elements, and the level of discursive relations. The analysis at the level of the discursive elements in turn, is divided into four major sections: objects, modalities of statement, concepts, and theoretical strategies. Each section begins with description of a specific discursive element (e.g., discursive object) and then variants of that element are recognized (e.g., four different objects found in medical discourse: disease, body, doctor, sick person). Next, the rules of formation for each variant (e.g., the sick person) and relations between those rules are established. Lastly, the conditions facilitating the appearance of that particular variant on the surface of discourse (known as the conditions of existence) are discussed. Figure 4.1 is a simplified archaeological model of analysis that is employed in this chapter.

Data Presentation

Exemplary data provided in this chapter that are ending with a 3-digit number inside square brackets (e.g., [072]) are data that were collected through one-on-one interviews with medical students. The 3-digit number is a personal code that was assigned to each of the 20 students who were interviewed in a one-on-one format. The last digit of this number stands for the year of training that student was in when data was collected. For example, [072] was an MS2 and [004] was an MS4 student in Feb of 2019. Exemplary data ending with MS1, MS2, MS3, and MS4 inside square brackets (e.g., [MS3]) are data collected through focus groups with the respective student cohorts. For

example, [MS4] is a fragment of the data that was collected via focus group with mainly MS4 students. Lastly, data ending with [Obs] are data that were collected through direct observation conducted by myself in various educational and clinical settings. These pieces are pulled out of the field notes that were written during the observations. It needs to be noted that I have chosen only 2-3 exemplar data pieces related to each section in most places to illustrate the point. That is, the amount of data presented in this chapter makes up only a small portion of the original data pool that were used in the present archaeological analysis. Table 4.1 contains information about the eight headings levels that are used in this Chapter.

Table 4.1

Headings Levels Used in Chapter 4

Level	Format
1	**Centered, Bold, Title Case Heading** Text begins as a new paragraph.
2	**Flush Left, Bold, Title Case Heading** Text begins as a new paragraph.
3	***Flush Left, Bold Italic, Title Case Heading*** Text begins as a new paragraph.
4	**Indented, Bold, Title Case Heading, Ending With a Period.** Text begins on the same line and continues as a regular paragraph.
5	***Indented, Bold Italic, Title Case Heading, Ending With a Period.*** Text begins on the same line and continues as a regular paragraph.
6	Flush Left, Underlined, Title Case Heading, Ending With a Period. Text begins on the same line and continues as a regular paragraph.
7	*Flush Left, Underlined, Title Case Heading, Ending With a Period.* Text begins on the same line and continues as a regular paragraph.
8	Indented, Underlined, Title Case Heading, Ending With a Period. Text begins on the same line and continues as a regular paragraph.

Note. The first five levels are adapted from publication manual of the American Psychological Association (APA), 7th edition, 2020. The remaining three levels are developed by myself.

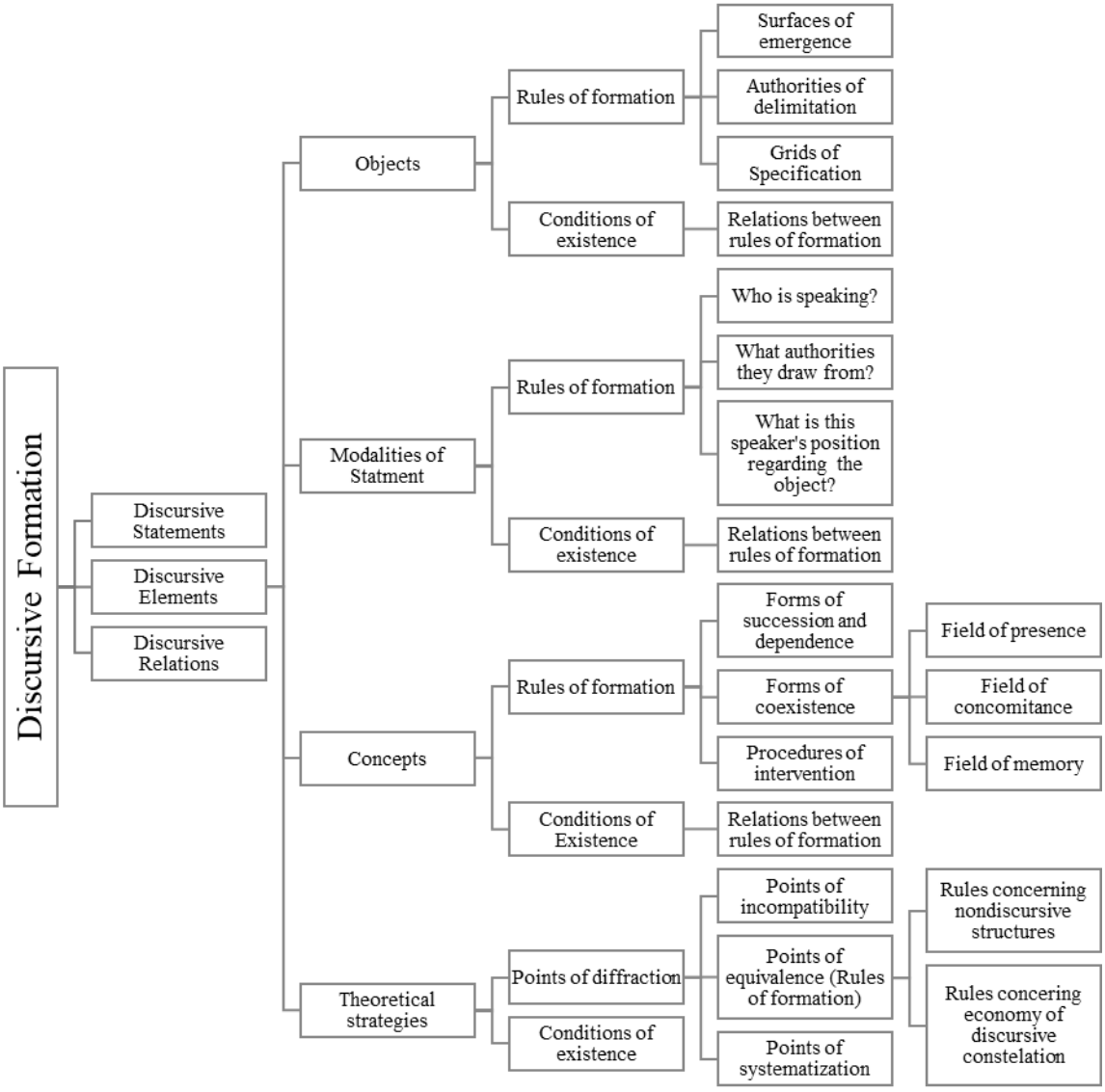
Archaeological Analysis at the Level of the Statements

Here, I would like to outline the process through which discursive elements emerged from the data at the level of the statements. Data analysis began with spotting and reorganizing the statements that had a special relationship with each other. This step was necessary in order to identify and define the elements of discourse, i.e., discursive objects, modalities of statement, concepts and themes. In other words, related statements were grouped together in order to identify discursive elements. As described in Chapter 3. Archaeological statements cannot be related to one another by grammatical (based on linguistic similarity), logical (based on coherence or conceptual connections) or psychological (based on the identity of speaker, constancy and frequency of her thoughts) links. Instead, statements were grouped together based on the associated field that they belong to, the common set of rules that govern that associated field, and the system of relations that link all associated domains together (Foucault, 1972, pp. 115-116).

This system is what defines the discursive formation of modern medicine. Thus, the goal of this chapter is to outline this system bit by bit and as divided into small comprehensible chunks that gradually give rise to the big picture of discursive formation of modern medicine. It is worth mentioning that the statements collected as data in this study were treated as *functions* rather than individual structural unities. The remaining of this chapter will talk about the fact of their existence, the conditions that make their existence and coexistence possible, the rules that govern their existence, and the general field of discourse in which they function.

Figure 4.1

Simplified Archaeological Model of Analysis



Archaeological Analysis at the Level of the Discursive Elements

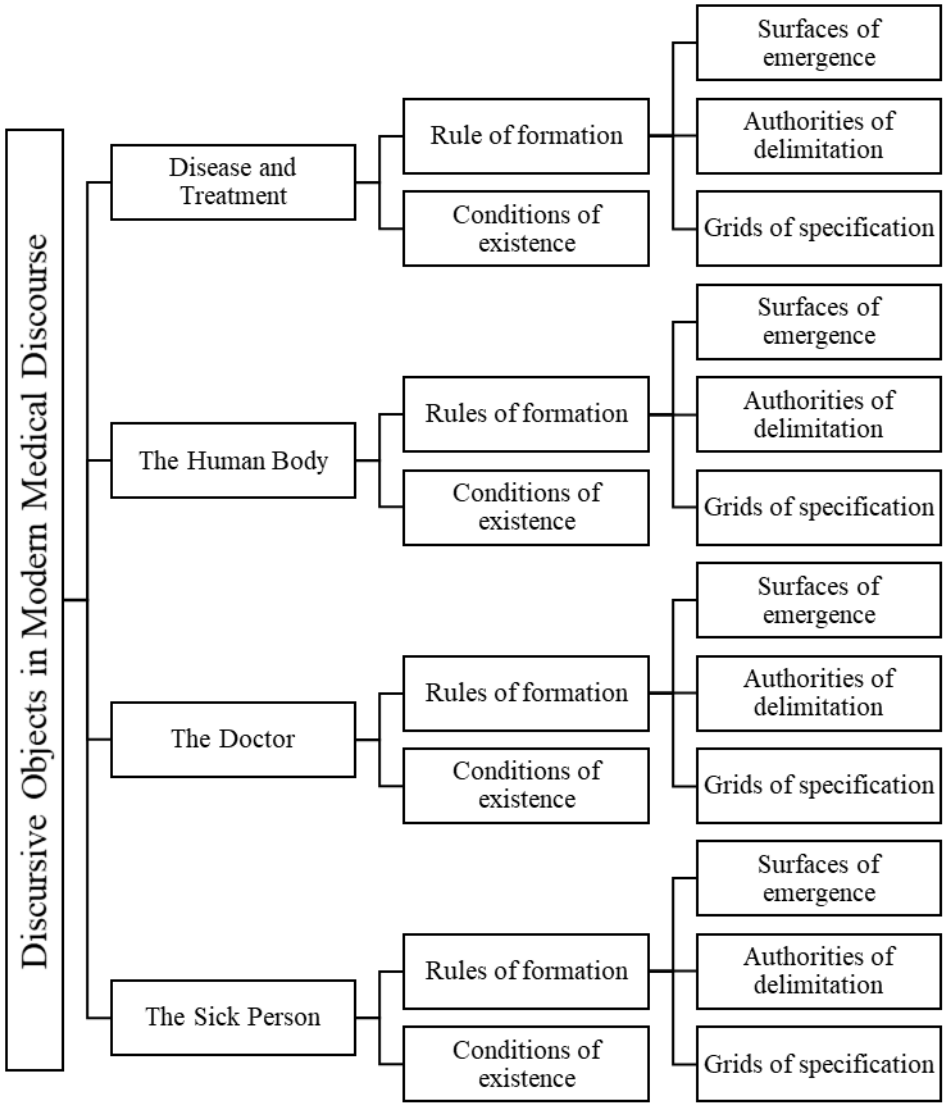
Objects

In a most general sense, the objects of discourse are what the statements in a discursive formation are about. Statements collected as data in this study were referencing the following four objects: A) disease and its treatment, B) the doctor, C) the

human body, and D) the sick person (see Figure 4.2). In this section, I will describe each of these objects and outline the rules governing their formation.

Figure 4.2

Archaeological Model of Analyzing the Objects of Modern Medical Discourse



Disease and its treatment. A large bulk of statements in medical discourse is about diseases and treatments. This includes the talk about nature of the diseases, their prevalence and prognosis; the talk about various bacteria and viruses; about various

drugs, their indication and dosage, etc. Examples of such statements are found in medical research reports, clinical textbooks, clinical lectures and podcasts, teaching materials across all four years of medical school, student assessments and board examinations; majority of talk in both didactic and practical clinical teaching and learning that happens at the hospital settings; as well as daily interactions between doctors, doctors and patients, and patients and their families inside the hospital. Since archaeological analysis is tasked not only to identify the objects of discourse but also outline the rules of their formation. There are three categories of rules that need to be established for each object of discourse: rules about the surfaces of emergence, rules about the authorities of delimitation, and rules related to the grids of specification.

Surfaces of Emergence. These are the social loci/norms that designate something as an object of discourse and justify the talk about it within that discursive formation. In other words, they characterize something in a certain way in order to turn it into an object of a specific discourse. Surfaces of emergence for disease and its treatment (as an object of medical discourse) include individuals, families and communities, where the signs and symptoms of a disease are first noticed. Social norms that assign the status of disease to certain characteristics of the way the body acts include certain degrees of rationalization, conceptual codes, and theories that are used by surfaces of emergence (Foucault, 1972, p. 41). Let us look at an example for the degrees of rationalization here. If you happen to sneeze once or twice today, according to your immediate social norms, it might be seen as normal. However, if you sneeze fifty times in a day while you are hanging out with your family or are sitting in a classroom at school, according to common social norms you will be considered sick. Likewise, when a child's growth chart does not match those

of her peers at school, the child's parents often see it as a problem with her growth. A family-friend suggests there might be a hereditary problem since one of her grandparents was also of a short stature. In this example, parents and the family friend are using certain conceptual/theoretical codes in order to assign the status of disease to a certain way the human body is acting. The social conceptual codes used in this example include "a normal child's growth chart should match that of her peers at a certain age", and, "when a child shows the same type of growth problem as one of her grandparents, a hereditary disease should be suspected".

It goes without saying that social norms can be different depending on the society and time period. However, they all have a designated threshold beyond which a certain behavior of the body will be accorded the status of signs and symptoms of a disease. In the United States 2019, sick persons who go to the doctor do so because either they themselves or someone in their family or immediate community notices something *abnormal* in them. The aberrant behavior can range from an unusually red eye or a paralytic arm to a major deviance from the commonly accepted social norms. Imagine if an adult person keeps jumping up and down in a formal setting and for a long period of time, they will be considered to have a mental problem by people around them. Not that there is anything wrong with the act of jumping itself, rather, the problem is that it is against the accepted social norms of a modern society for an adult to do that in a formal setting. Whereas surfaces of emergence characterize certain acts and behaviors of the body as the signs and symptoms of diseases, the burden of cure or at least explaining the condition is usually transferred from the surface of emergence (individual, family,

community, and society in general) to medicine, which is commonly perceived as a well-established and trusted institution in modern U.S. society.

Authorities of Delimitation. These are authorities that validate the existence of something as an object of a specific discourse. They give it attention and provide definitions for it. In the case of disease and its treatment, authorities of delimitation include doctors; other health professionals, such as nurse practitioners and physician assistants; lab and imaging technicians who validate the signs and symptoms and confirm the presence of the disease; biomedical research; media (television, newspapers, popular blogs that provide info as well as statistics such as mortality rate of a specific disease, etc.); and even politicians that give disease and its treatment enough attention to validate its significance as an object of medical discourse. The attention paid and definitions provided by the above entities make the disease and its treatment important to the society and urge people to take it seriously. Authorities of delimitation also includes practitioners of alternative medicine such as acupuncture, yoga, and natural healing techniques. It is all these authorities combined that define the limits of disease and its treatment as an object of medical discourse. It goes without saying that each authority of delimitation functions based on its own rules that are developed by the group of people who are involved with that specific authority and the body of knowledge and practices that justify its authority. Some of these authorities are only recognized by public opinion (e.g., an internet blog that talks about disease and treatments) whereas others may also be recognized by the law and government (e.g., physicians and medical scientists).

Perhaps the most interesting thing about the authorities of delimitation is that they do not need any qualifications in order to become an authority of delimitation for a

discursive subject besides having the power to assert themselves as such and the people who accept their authority. For example, a natural healer who claims to understand the signs and symptoms of certain diseases and their treatments, and has an entire village believing in his claim, is considered no less of an authority for delimiting, designating, naming, and establishing a certain way of treatment than a peer-reviewed medical research report–according to archaeological analysis of medical discourse. That is because archaeology is not after validating any of the authorities and the truth behind them. Rather, the purpose here is to merely acknowledge what is being practiced as *medicine* in real time.

Grids of Specification. These are systems according to which different kinds of an object are classified, related, and contrasted (Foucault, 1972, p. 42). For disease and its treatment, grids of specification include medical science (and knowledge) that recognizes and classifies different types of diseases and their treatments, relates them to other similar conditions in terms of a common etiology or treatment, contrasts between similar conditions, and so on. The excerpt below comes from my field notes observing an educational session that was led by an attending physician for his residents. The entire passage is referring to disease and its treatment as the object of medical discourse. Furthermore, it is a good example of how medical science has set up well-established grids of specification for certain diseases and their treatments.

> There are five types of viral infections of the liver - classified as hepatitis A, B, C, D, and E. A different virus is responsible for each type of virally transmitted hepatitis ... Treatment options are determined by the type of hepatitis and whether the infection is acute or chronic ... viral hepatitis must be differentiated from autoimmune hepatitis. Corticosteroids are used in the early treatment of autoimmune hepatitis. They're effective in about 80% of patients. Azathioprine suppresses the immune system, so it

is often included in treatment - it can be used with or without steroids. [Obs]

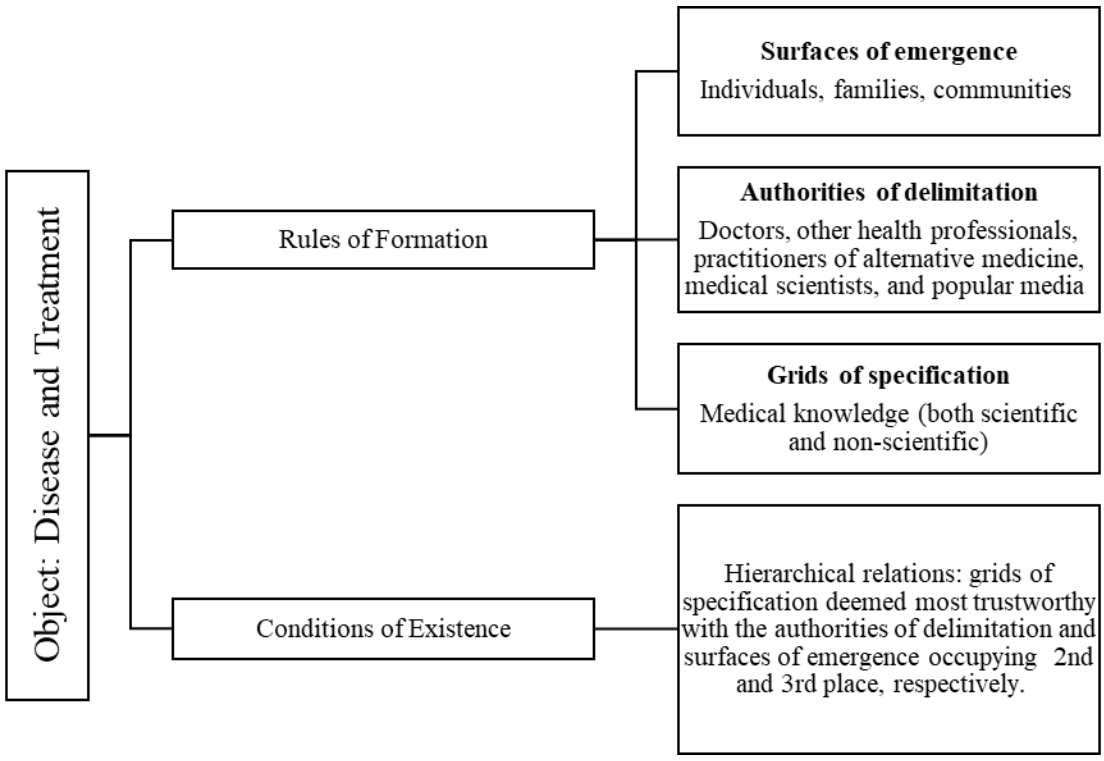
The more details you add to this information, the more precise the grids of specification for the viral hepatitis and its treatment will become. For instance, you can add more details about the choices of treatment for every type; the common medications used to treat every type; the indication, contraindication, and dosage for each drug, their side-effects, and so on. Fortunately for our generation, the modern medical science often provides precise grids of specification for most of the diseases and their treatments in the form of well-established scientific knowledge. Again, the rules based on which medical scientific knowledge classifies, relates and contrasts the disease and its treatment can be different than, let us say, the rules of medical knowledge used by an alternative medical practitioner for the same purpose.

Conditions of Existence for Disease and its Treatment as an object of medical discourse. Archaeological analysis not only defines the rules of formation for every single object, but also establishes the relations between those rules. Carrying out the latter task results in defining the conditions of existence for that specific object. There is a hierarchical relationship between the three rules of formation above. Grids of specification that is set by peer-reviewed scientific knowledge is considered to be the highest authority when it comes to disease and its treatment. Medical knowledge is often deemed as the most accurate way of recognizing, confirming, and categorizing diseases and their treatments, which is trusted by all authorities of delimitation (healthcare professionals, researchers and media) as well as surfaces of emergence (individuals, families and communities). In other words, the rules set by grids of specification bear the most weight among the three rules of formation for the disease and its treatment as an

object of medical discourse. The next most trusted set of rules are those that are set by authorities of delimitation (e.g., doctors). Finally, the last set of rules in terms of their accuracy and trustworthiness are the norms that are used by surfaces of emergence in order to recognize, confirm, and categorize the diseases and their treatments (e.g., degrees of rationalization, conceptual and theoretical codes used by family of the sick person). A summary of analysis for disease and treatment as a discursive object is presented in Figure 4.3.

Figure 4.3

Summary of Archaeological Analysis for Disease and Treatment as an Object of Modern Medical Discourse



The Doctor. Another large group of statements in medical discourse are about *the doctor*. For instance, majority of statements about medical professionalism refer to the

doctor as a significant object of modern medical discourse. Questions such as how should the doctors act as professionals, how should the doctor present themselves to their patients, how should the doctors establish the right type of relationship with their patients, what are the professional responsibilities of the doctor in clinical settings, what are the qualities of a good doctor versus a bad doctor when it comes to professionalism, and so on and so forth. This type of talk is relatively less blended in common scientific teaching sessions, didactic teaching materials, or summative student assessments.

Surfaces of Emergence. The formal surfaces of emergence, where individuals are trained and characterized to become *doctors* in the modern society are medical schools for their first four years of undergraduate medical training, and hospitals for their residency training (typically, three to five years, depending on the residency). Both localities characterize individuals who enter them in a certain way and put them on the path to become doctors. The combination of all norms in medical school and hospital gives rise to the emergence of what society accepts as the *doctor*. Again, the local norms include degrees of rationalization, conceptual codes, and theories that are used in these localities in order to assign the status of doctor to certain individuals. In this section, I will provide a general survey of the rules and regulations in the surfaces of emergence for the doctor that consist of the medical school and hospital environments. The data collected in this study mainly focused on three areas when it comes to rules and regulations in the above two localities: rules delineating the medical school environment, rules defining who is considered to be a *good* medical student, and rules outlining student relationships with the faculty. Figure 4.4 (at the end of this section) presents a summary of the analysis of the surfaces of emergence for the doctor as a discursive object.

Rules Delineating the Medical School Environment.

A. Medical school environment was considered to be overall welcoming, but not to everyone. This was mainly because students are classified into two major groups: those who know each other hang out in small groups, which results in collaboration and great friendships among them, and those who do not mesh well. The latter group contains some interesting character types. Personality clashes often happen between members of this group and they result in creating a sense of isolation and competition in the general school environment. Let us look at some data examples signifying the above themes.

    a. Students who know each other hang out in small groups, which results in collaboration and great friendships among them:

> Med school is much more like a high school where everyone kind of knows everyone. Like, I know the names of all my classmates. It's very intimate and you just kind of get in the same couple of groups with people and you become very close. ... My friends in med school are definitely closer to me than anyone else. There are people now here who went with me to IUB but I did not know them there, now we are very close. [012]

> I had the luxury of coming with a lot of people whom I knew from undergrad, I knew most of the class coming here, and so like out of 15 people that I was close to in the undergrad, like 10 of them are here with me in the class. I already had a fully developed support system, but at the same time, it was kind of hard to branch out from those people, toward the new people. [103]

    b. Students that do not mesh well as a group. This results in creating a sense of isolation and competition in the general school environment:

> Because I lived and worked here in Indiana for a year already, so for me it was a little easier. It was harder in the first year to get used to 9 hours of work a day, and friendships kind of under pressure and low commitment. Also getting used to that new culture of med students. ... So, within the IUSM you kind of get 3-4 different groups that do not mesh, you find people from IUB, Purdue, people from right around here, and then

> students who come from far away. I was fortunate that I already had a lot of friends coming from IU. [004]
>
> People in my class did not mesh well… There were a lot of strong personalities and there was tons of competition, there was a sense of "I am gonna do better than you because I am using this resource and not that", so, very early on we kind of separated into our own smaller groups and never really came back together. [134]

Personality clashes often happen between members of this group. The reasons students provided in this study include: cocky and standout-ish personalities, competitive and high-schooly behaviors, social class differences, racist behaviors, and macho/masculine student culture. Below are exemplar pieces of data pulled from one-on-one student interview transcripts.

i. Cocky, standout-ish personalities

> The first week of MCT course, and that's where I could see that they were already different cause that was the class where we had to interact with each other. And I had two white guys in our group and I could see that they were just ... they were so cocky, for sure. In other schools you kind of get that feeling that you're all students so you are all equal, but in med school I feel like people are cocky. They like to kind of do their own thing, and do not talk to each other, they like to be more independent, I guess. Like very condescending, like those two white guys that I remember from the MCT course. They like, finished quickly, they did not wait for anybody, and so the rest of the group worked together but they did not, and I could see that in my other classes too, like, there are people who you could feel that they are like flying up high, even though we are all in the same thing, like we are equal, we are all students. Like, I did not notice things like this in college or when I was taking my master's classes here at IU. [161]
>
> I guess the big thing that kind of took me by surprise was that… I did not really expect some of the med students to be like standout-ish or leaders, so to say, because we are all on the same boat now. Like, no matter what your GPA or MCAT, and what you did in college or anything, well, we are all here! Like, it's a blank slate again, whatever happened in college, it did its job, you're here! [151]

ii. Competitive, high-schooly

[Did you find other students warm and well coming?] No, not as well. More workload, and studying, you do not have a lot of time to socialize in med school. Culture-wise, I think early on there is kind of a competitive mood among med students, people want to do well, and sometimes that kind of comes on the way of social interactions. I think there were some difference between my master's in public health and medical classes' cultures. 1) Everyone was busier so you have less time to socialize. 2) You are like on a competitive edge ... I think it's a combination of things. I think it's also the students themselves, everyone is like…. So, I felt the culture was almost similar to high school, besides it's kind of weird, you are working hard just so that you can get competitive grades, you know. So, I think med school is more kind of, more cliquish, more high-schooly, and most of them are non-traditional students, or maybe I just was an old man [laugh]. So, to summarize, I'd say, less welcoming, more competitive. [184]

iii. Social class differences

A lot of people came from IU so they just obviously knew each other and they are all from Indiana. I did not know a single person here. But I know there is a lot of people like me who did not really know anyone. And plenty of people are from out of state. The culture is different for me being a person from the country. When I got here in med school, everyone here either have parents who are doctors or… and I was like, I have no idea on how to ... like, I was surprised by everything and I never knew what everybody else already knew. So that's just how I felt. It was just hard to find people who were probably kind of like me when everything is new. [051]

iv. Racist behaviors

I had a good friend from Hispanic descend, and one of the first questions she was asked was: oh, so you are an illegal?! It was a student from Indiana coming from a very privileged family who asked her that. To me, that's shocking, it's appalling… so I can see, depending on who you meet and depending on your cultural background, you know ... This friend had parents of Mexican origin and she had no control over that ... And she is a wonderful person. And it's a shame that someone from my home area can't figure that out. It'd be different for a Caucasian from California, for example, to them it's all friendly, and there is no racial interaction, so it's very much different depending on who you are. [004]

v. Macho/masculine behavior - gendered environment

In the first year, I felt some of the gendered aspects of being in med school already. I felt like there was this culture among students that, like, you have to wanna use the scalpel a lot, and you can never be grossed out or nervous, and every part of [cadaver] body is the same to cut through. Like, I mean this is not what people said directly, but that's what they are saying. ... It's like if you acted that way then you cannot be a surgeon. And the students have to act that way. If you want to be at the top of your class then you have to act that way. And then it's not a gender thing, anyone can act that way but there is this macho behavior that really got me sometimes. [171]

One donor actually recorded a video prior to her death, and that was played for all of us on the first day of anatomy… it would almost be like, weird, or would have been perceived as odd for someone to walkout. So, if I was the one who felt uncomfortable, I would not want to walkout, because I would be afraid of the perception of my classmates. Like, what would they think of me? Like, am I not strong enough to see this, am I weak? [134]

It's like this thing in medical culture that we are like, too scared to seek help because it would seem weak. It's so ironic. It's like the most ridiculous thing. ... We are afraid of like, showing any weakness. People forget about that we are still human. Partly because of the social hierarchy or whatever. I believe we are just regular humans and that's why I do not want to be defined by my profession. [023]

B. Medical school bringing all super-smart students together in one place, which creates high pressure and high anxiety in the overall environment

Med school is terribly different. So much more pressure than other schools ... You are in a cross section of people that is very hard to keep up with, unless you're just naturally brilliant. [034]

So, everyone has been like very nice, it's just the stress though, which is my favorite part, like, oh my gosh! Lots of anxiety. It was common also amongst top students in college, in pre-med and undergrad. So, when you have all of those people who are used to doing well and getting high grades, and who used to be like the top 10% of their class in undergrad courses, and then you put all those people in one place, and they basically take every class together and they spend so much time together, the anxiety has gone way up ... So, I was kind of expecting it, but I think it [students' anxiety level] was way more up than I thought it was gonna be like. It was like WOW!! Even some of my really good friends, I mean, I

love them to death, but I needed to space myself from them especially on the exam weeks. Like, in the week of anatomy finals I did not associate myself with most of them because it was like, aah! So, in my view this whole stress thing, I mean like, of course it's stressful, the workload ... it's been a surprise for me too, but like, a good surprise. But I think a lot of people, like, when they say "oh, I am stressed out", I think they are trying to get away with "oh you're stressed too so I'm not alone in this. Let's all complaint together", which is fine, I mean a vent session is fantastic, I do it all the time with my friends, but I think it becomes toxic when it spills around so much where everyone feels stressed because of it. Stress is not really healthy; I do not think it is. So, I want to tell some of them like, hey you need to chill, you need to relax, you are stressing out and you are actually just wasting more time. So that's been a negative, a bad surprise for me. I mean just the amount of it, like, WOW!! [151]

C. A lot of medical students cannot make time to do anything but study

So not what I expected, all you do every day is studying and there is not a lot going on. Especially for the first and second years… First year, it's like you are in a room with the book. And that was like all your life. [043]

In undergrad I had time to do [extracurricular] stuff, but here in med school I am barely getting enough sleep at night. Every other moment of my day I think about some exercise to better myself but I did not have time to do the social studying, group studying. [034]

In undergrad I always had a job and was part of a sports team ... but in medicine it's just so hard to add anything else because it already sucks so much time ... In med school, it's like all about medicine. [043]

D. Medical school is generally a closed environment. Everyday it's the same people, same topics of discussion, same activities.

One thing that I kind of overlooked was that, hey you're gonna be spending 4 years with the same 140 people in my cohort. I mean it's great, but when you all are doing it all and it's the same every day, I am like, I need some variety! In undergrad I had friends from my pre-med and I also had many other friends from my other classes, so it was great, like, we did not have to talk about medicine all the time… But here, like, I am not from here so I do not really have any other friends because I do not know anybody outside of school … I mean we are all in medicine now, but if I was in the law school too, everybody talking about the law all the time, I'd be like, ooh… just give me something else for a variety, just something else so I do not have to talk about medicine, just anything, like, trees, and leaves… ah. [151]

Sometimes it's like us talking about medical stuff among a group of friends from college, they are like, ok you can't talk about this, and no one knows what we were saying. So, sometimes I think there is a little bit of a barrier between us now. [093]

E. With people outside of medical school, students often like to show off how cool and smart they are but not anything that makes them look like they are emotionally vulnerable. Even when that's the truth.

[Did you ever share your experiences with your family and friends?] I told my parents some things. So, my parents and I do not share that much about our personal things, but I started to tell them about some things that excited me in the [anatomy] lab… So, I only tell my mom some positive things from school. I never really tell her anything about those negative aspects… But with friends outside of medical school, no, I do not think I wanna share the emotional part. I think the only thing they are interested in is like, "oh, you guys get to dissect people?!" and "how cool!" stuff like that. "Like, does it scare you?" And I feel like you put up that act to non-med students, like, "oh no, I am fine" [laughing]. Literally, I know that's not true but I do not feel like talking to people outside any other way. Cause that's what they are looking for [171]

I talk to my one friend that I have though. So, when he was using the bathroom or something, I pulled up a dissection video on his computer. And he walked in and he is like, "Oh my god! What are you watching? This is horrible". And I am like, "I am just studying". And he's like, "this is disgusting" And then I talk to him about the difference between things and really kind of bragging to him about how good of a job I did on my dissection, how I was able to "de-glove" the guy, which is where I removed the skin from his hand all in one piece. So, it was just like a glove. [081]

<u>Rules That Determine Who Gets to be Seen as a Good Medical Student by Their Peers.</u>

A. Students who demonstrate knowledge competency and are honest about what how much they know.

There is two sides to being a good medical student, like, being smart, on top of their stuff, organized, good at clinical stuff, good at the medical knowledge which is a big part of being a good student. Like, the traditional meaning of being a good student is "to know stuff" and be able to perform. But I think also as a medical student you need to be able to

work as an underdog in the team and to appreciate that you do not know everything, and you have a lot to learn and you are there to learn. [023]

Specific to first 2 years, simply having a good memory. Gosh, that's gonna help you do so much better on your boards ... I am a very conceptual person. It took so much out of me to do well on the boards because I do not have a brain that just holds on to everything. [034]

There are always things that you do not know. So, I think showing that you're willing to either look it up or ask about it, like, being honest about what you do and do not know. [063]

Like, has the ability to study and retain the information. Someone who can continually do that and stay on top of the material. [004]

B. Students who understand that school and hospital are two very different localities of education. Those who demonstrate adaptability and compliance to the rules in clinical settings.

The second 2 years are clinical so you have to have a different personality to excel in that. The school and the clinic are two very different localities of education… I think the best 3rd-year student would be someone who is ready at all times and is not seen until they are called upon. So, if you are told to stay out then just stay out of the way until you are needed. And when you are needed, you are prepared for whatever they need you for. [171]

Third year is less dependent on your memory and more dependent on your adaptability… So, [a good medical student in 3rd year is] someone who can take feedback in the clinical setting from an attending or resident, and incorporate that and actually change the way that they come up with a care plan or whatever it might be, not just spinning the wheels and get that over and over again. Being very dynamic and changing what you think you are supposed to do into feedback that they are getting from these experts. And trying to become more like them. I think that adaptability is a big part of becoming a good clinician. [034]

I think I find more value in how you perform in the clinic rather than on the exam. There is a lot of people who get high scores on the exams but they do not care about people, they can't talk to people. [043]

C. Students who demonstrate good people skills, such as: passion/motivation, good communication, professionalism, collaboration, respect, care, human-to-human skills, and other personal traits- especially in the clinical settings.

It's someone who not only has the academic excellence but also a collaborative nature. Also, there needs to be a greater calling, like, a service to your community, or something beyond your community. [141]

Having medical knowledge is one large component of being a good student, like, you have to know what you are talking about, but communication skills, professionalism, such as showing up on time, responding to emails, all of those things are also very important. Two key components would be medical knowledge and communication ... here are people who are brilliant medical students but they really struggle with human interaction in the later years. [004]

Good medical students dedicate a good portion of time to study. Beyond that, they also have to have people skills. There are people that I know who just study all the time, they go to whatever is required and then they go home, and they are by themselves and they do all the studying there. It might help them with learning the base knowledge, but I think a lot of what being a doctor goes into is interacting with other people ... A good med student makes sure to work with the team, making sure that everyone learns, and in the end it's a team sport ... So, a good medical student is able to have those people and team skills and is also smart and able to maintain the knowledge that they have been learning. And respect. [012]

D. Students who can create and maintain a good work-life balance.

I think a good balance is very important, I think it's been underestimated. I do wanna say that a good medical student is the one who studies the most, but it's also about incorporating part of that balance, for example, how much you study per day, and per week, and kind of… I know it's important to study but I know some people who study like 25 hours a day but they are like, you can just kind of see that it's had a toll on them because their hair is all crazy and they do not talk to any other human being outside of computers… So, I think what makes for a good student is that you do need to be on top of your game, but at the same time just understand that it's okay to have a life outside of medicine. [151]

Someone that has balance, as far as you can put in the time to do well in the class, but you do not let it consume you all. You are able to separate school, as school is just a part of your life rather than it being all consuming. And so, I consider a good medical student as someone who

> does the hard work when needed but also knows how to relax and also be supportive of others. [112]

Rules Outlining Student Relationships with the Faculty in both Medical School and Hospital. For the most part, students define their relationship with faculty as good experiences. In general, faculty members are willing to teach and support them, are humble and do not exercise authoritarian power over them. Nevertheless, dealing with some faculty members have been a difficult experience for the students. Students characterize these faculty members as mean and belittling people who provide subjective evaluations of them that can negatively affect their grade and therefore ranking as medical students. The most common strategy of resistance against the latter group of faculty among students is anonymously reporting the negative behavior of the faculty on student evaluations. Students are afraid of "creating waves" and get their feet wet in such circumstances.

A. For the most part, students define working with faculty as good experiences due the following reasons:

    a. In general, most faculty members at the hospital are willing to teach and supportive of students

> The physicians that I have been working with are very patient, do genuinely seem to be listening to me, making the best offer to teach me. I have found to be really appreciative of them. So, I'd say there is a lot of them, the people who'd rather sit down with me listen to how I feel and then tell me how to improve, rather than just walk by and pass me. [103]

> For the most part everybody has been really good about that like, I never felt like, oh you are an early medical student, I am a resident, or I am an attending like, I am gonna make you suffer ... no, everybody's like, really good in that part. Everybody seems to be aware of that kind of stereotype. Like, current residents are like, I do not wanna be like "that guy' who makes you suffer just because I suffered. Because that's a terrible strategy, like nobody wins. It's not healthy, so I think that is sort of changing. [023]

b. Many faculty members are humble; there is a minimum exercise of power over students. Below are exemplar data pieces pulled from the observation field notes collected via direct observation of the Family Medicine team.

Resident asks the attending about a patient. Attending is sitting behind a computer on the same row with his residents. There is an inner room for the attendings with computers and a mini conference table provided but he is not using that room today. He is laughing and joking with his residents. Attending gets up, calls about a patient himself instead of asking the residents who are normally supposed to do it. [Obs] [p. 28]

In the hallway before going on the morning rounds, attending is talking to the entire team [residents, interns, third-year medical students, and me] about personal things: "it said it'll be raining the whole week but it was a flawless sunshine this morning!" She is laughing with her residents on a joke someone makes. Asks one of the residents about his 3-year-old son's sleeping habits, talks about her own 3-month-old baby and issues she is facing with breast feeding. [Obs] [p.46]

B. On the other hand, working with some faculty can be a very difficult experience for students. Below are a few examples of difficult working relationships between students and faculty members.

a. Faculty who are mean and belittling to students.

I have heard of people who've been yelled at, cursed at, and thrown out of the OR [004]

Any issues? More than we have time to talk about. I have had everything from faculty that was harsh, and it was difficult for me to be excited and enthusiastic around them, I felt like they were just correcting me at every stage, never getting positive reinforcement for the good things I did. At no point in medical school I have just been totally wrong, I guess. Like, even if I did not get everything great, I believe there was something I did that was worth reinforcing. But that faculty, he was just very focused on the negative and never told you a good thing. [034]

This one time on my surgery rotation - and this person is just known for that - it's an attending who does not learn your name, does not care who

you are, won't say hi in the hallways. In the OR, won't acknowledge you, won't refer to you, essentially you should just know what you are doing or he will yell at you, if anything. That's just how he is. He just yells at the residents, and everyone is like, what's going on… And he is just known for that. So, I did not learn anything on that rotation. The resident was too scared to teach me, or even pay attention. I am guessing he is getting bad reviews but he is one of the best surgeons there is so ... I know that he has made people cry before and they reported him and they said he will be talked to. But I cannot really explain it ... like, the resident just said "ok", and she just moved on. [063]

So, what I have heard is, it's mainly the attendings who I think just do not want to have medical students with them; so, when they are with them, just everything they do is wrong. Some people are just getting trenched in their ways, medical students sometimes do some things differently, they cannot be bothered, and some people just do not like to teach. So, if someone does not know something, they get very annoyed with that. Like, "why don't you know everything?!" [063]

I think med school has kind of a high-tolerance culture. Like, things that are not generally accepted in society outside medical school are actually accepted here. So, some of the hierarchy and the way people choose to impose that, to me it's like, this is pure fantasy! You can't do this, literally, in the parking lot. Like, the way some surgeons behave, the way they behave towards resident or whatever ... so like, what you do right now you can't take this outside and say like, because it'd be as if you lied. So, in a sense, it feels as though in this space, the rules are maybe different… At least to me it seems like most of what happens inside could not possibly happen elsewhere. I think it's a culture thing, in this culture the rules and thresholds are a bit different than the world outside, I'd say. And again, it's not just me. [121]

b. Students are graded and ranked based on subjective evaluations by clinical faculty, which can negatively affect their grade and perhaps future chances in getting admission to the residency programs of their choice.

As a student, your academic achievement is how you are defined. I would not say it's the same as a doctor. I kind of feel like the education is not very indicative of what your work as a doctor is gonna be like. I mean, as a student, you are graded, right? You are graded, it's a scale, and you're ranked. So, it's all about your scores. [So that's like the most important thing to attend to?] Yep. That's the system. [081]

I had an attending who kind of works hours to actually belittle people, and that was the hardest month in my medical school career and it almost drove me away from the field I am going to. He took every opportunity to chew me out and spit me out, I was already fearful of his evaluation of me. I probably should not have because it was going to be crummy anyways, as it was more dependent on him than it was on me… So, we are getting evaluations from our attending and it's probably like half of our grade. For a lot of the clerkships it's like 90% of the grade. It's like I will perform the exact same, but one attending will give me 2 while another will give me 5 out of 5. They [the administration] do try to control for it, but people are people. When you are not using actual outcomes-based measurements, then you can't totally deal with subjectivity. [034]

c. Student survival strategies include: trying not to make waves, compliance with rules and regulations, and anonymous reporting with no tangible results.

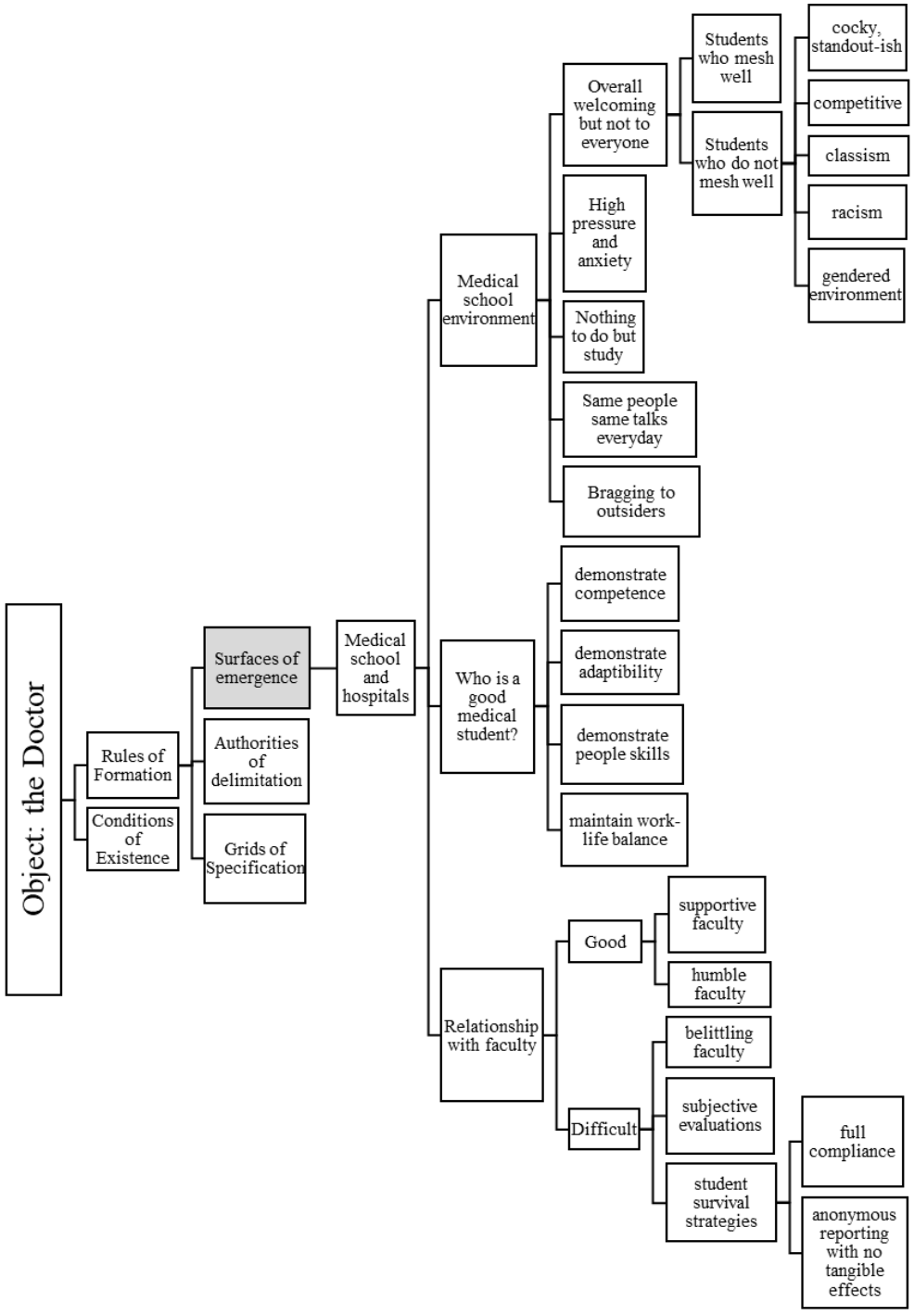
If someone treats you differently, I feel that it kind of makes you, like, it almost freezes you, in a way ... [in the past] I have been like, I am gonna stick up to myself, and I'm gonna be like making raids and getting people who were doing unethical things and were in positions above me, you know… but now in medical school, if somebody's mistreating me, like, I do not know, I sort of ... I do not know, I have done it more anonymously, I guess you can say. But I have not like confronted anyone face to face ... in med school, no, I do not wanna do that. I am a little bit afraid of making waves, you know… I had a mentor who told me that you cannot do that in med school; just keep your head down and, you know, you just gotta lick their boots if they want you to. I would not confront them directly ... because unless there is something that is really really wrong and you are sure about that, you are gonna lose that battle every time. It's like a police officer. So, if you go to a police officer and you say, I do not like how you did that, you know, it's gonna be like, it's not gonna end well for you unless he is doing something really wrong, like absolutely wrong. And then you just report him. It's better that way, and he does not have a chance to retaliate against you at that moment necessarily; so, I would go the anonymous reporting way when I really think that there is a serious abuse of power going on. [081]

My strategy has generally been like, just do your job, and move on. But if it goes beyond the limits then I usually go higher up to the person who can do something about it [so have you ever done that, here?] No, not here in med school. [Why not?] Ahh… [Uncomfortable] I think in med school it's basically like, you do not want your feet to get wet, so, so long that it's not

out of the ordinary and not enough to hit the threshold, like, things that I consider to be inappropriate so much. [121]

Figure 4.4

Rules Related to Surfaces of Emergence for the Formation of the Doctor as an Object of Modern Medical Discourse



> In those situations [of being mistreated] we usually kind of talk to ourselves… Yeah, but I can't think of anyone who actually stood up and resisted something in public. So apart from evaluations that are done anonymously, people do not often stand up and resist, at least I have never seen an incident like that personally. [184]

Authorities of Delimitation. These include all entities that validate and define the position and function of the doctor, such as: professional bodies like Liaison Committee on Medical Education (LCME), senior physicians, hospital administration, insurance companies (they often have the final say to allow a physician to do a procedure – and whether they are willing to pay for it), and federal laws such as Medicare and Medicaid. Authorities of delimitation also include those who pay serious attention to the doctor and define doctor as someone who should possess a number of specific characteristics (e.g., patients, and society in general). Obviously, the doctor is recognized as a unique professional authority in the clinical settings. They are also recognized as highly respectable individuals in common society. In fact, the highly prestigious and authoritative figure of the doctor is much more attended to in common social settings compared to the clinical settings. Common folks in the modern U.S. society admire the doctor's position regardless of their own level of education and social class. Many parents have a preference for their children to become doctors when they grow up. Doctors are also looked upon as extremely smart individuals who often serve as role models for young people in their families and immediate communities. The role of the doctor in modern healthcare system is often defined by many positive - and sometimes negative - characteristics not only by their patients but also by society as a whole.

Based on this description, the most important authorities of delimitation for the doctor–from general to more professional–include common society, communities,

families, parents, younger individuals, patients, medical students validating the attendings, attending physicians validating residents, and hospital administration. Whereas theoretically it is possible for each of the above authorities to characterize the doctor in positive or negative ways, here is what generally happens: common society, communities, families, parents, and younger individuals often characterize and define the doctor in a positive way. On the other hand, patients, medical students, attendings and hospital administration characterize the doctors in both positive and negative ways depending on specificities of the matter (e.g., which doctor, which authority, which patient, what kind of experience, etc.) Below, we will look at a few examples of how data in this study support the above-mentioned points.

Let us first look at a few exemplar data pieces denoting the social prestige of being a doctor as perceived by medical students.

> I think the social prestige is definitely a big deal. I mean, you can help people in other roles as well, you know, you can be a nurse, you can be a respiratory therapist, a social worker ... and those are all fantastic and they help people - but social prestige does not come with it. And I'd be lying if I said that I had not thought about that. [134]

> I remember when I was a kid, during the civil unrest in Nigeria, both sides had casualties and needed doctors … and that's why everybody respected the doctors. There was this kind of a societal need that made them very important people. [184]

> Regardless of their own levels of education, social class and cultural background, parents across the board get excited for their kids to get admitted to a medical school and be put on the path to become physicians. We are a middle-class family, and we do not have a physician so my parents are excited for me becoming the first doctor in the family. [023]

> Growing up, my parents always wanted me and my brother to become doctors, he did not end up getting into med school ... he is 5 years older than me… I found that I did like sciences and I was good in my academics in school, so I kind of stuck to it going to college taking medical science classes knowing that I am going to med school… If I were to fail in med

> school and go back home, my parents will be very disappointed because I know they have very high hopes for me like, "oh, he's gonna do what we wanted for both our kids to do, so there is the pressure on me in that sense. [012]
>
> I know that traditional South Asian families want their kids to be only doctors, engineers and lawyers [laugh] ... Definitely like, the societal culture, like, in some cultures medical doctors and lawyers, and engineers, those are the things that they want you to become when you grow up. [141]
>
> If your parents are, like saying that you should become a doctor… or maybe you have other friends whose parents are doctors… it's really kind of easy to be influenced at an early age. [MS3]

Physicians are often perceived as very smart individuals with above the average level of intelligence and abilities in general society. Lay people create myths about doctors as somewhat extraordinary people.

> Before coming to med school, I definitely imagined that there will be a lot of studying, I had heard some crazy stories like studying 12 hours a day, and not getting to see anyone and not getting any sleep, etc. [012]
>
> I remember being a pre-med before becoming a medical student. So, they all seemed so put together, they seemed so much more advanced than me ... I had that perspective, that I always thought that doctors know just so much that it's incredible! I was like, how am I ever supposed to be that smart? So, the more I learn that perspective is kind of changing. So, they do know a lot but it's not actually as what I thought before, like, I thought they were geniuses, on a whole another level, and so impossible. So [being in med school now] you learn that it's actually not that incredible. [043]
>
> I think a lot of pre-meds are under the assumption that you have to study 24/7 and you have to eat like an hour a day… I think there is also a misconception from the general society that doctors are supposed to know everything. They should know as much as they can, but hey, we are human beings too, we make mistakes just like you do, unfortunately. [151]

Doctors in the family or even in community often serve as a role models for the younger individuals. Here, authorities of delimitation are the younger individuals, and again, society in general.

> In my experience, kids that age [12-year-olds] who want to become a doctor have had some prior experience with doctors and kind of like how respected they are. So, as a kid, I mean it can be really inspiring, you know, seeing that people look up to you [as the doctor]. They see the doctor as someone who is really smart, knowledgeable and successful. And when you are that young, you do not kind of know what goes into it ... like all the effort that goes into it, all the long hours that they work as a doctor and all. As a kid you will just see a doctor and think like, okay, this is somebody that I want to be like when I grow up. Almost like a hero that you want to be like. [MS3]

The next authority of delimitation for the doctor as an object of medical discourse is the patient. Patients may characterize the doctor in both positive and negative ways–based on their own unique experiences. In the excerpt below, a patient is indirectly defining the position of a doctor in certain ways such as: the doctor should not be rushed, they should look you in the eye and let you talk, they should give you a minute to relax before/after a procedure, etc.

> I just hated physicians, I wanted to become a physician to do it right. One of the experiences was my first pap-smear ... I was in college before they changed the regulations. The physician was clearly very stressed, very over-worked, very rushed, when she came in. And, I hated her ... she barley looked me in the eye, did not let me talk, and it [the procedure] was extremely painful. She did not give me a minute to like, relax, did not talk to me… I obviously did not ever go again there though… So, ah, I mean the whole thing was a disaster. It was awful. [043]

Medical students can also be the authorities of delimitation for the doctor as an object of medical discourse. The student below is characterizing his pediatrician as someone who was unable to teach, understand, and empower his patient:

> My own experiences with my pediatrician growing up, I did not feel taught by him, I did not feel understood by him ... and so, I want to be the pediatrician in somebody's future that can really empower people. [103]

Here is another student characterizing doctors in a positive way, but characterizing them nevertheless:

> I have seen primary care physicians who have been seeing patients for a long time, and it's just very different ... they know things about each other, like, "how is your wife and kids?", "oh you went on a vacation recently so how was that?" There is like, a lot of back and forth, and they are like friends. [012]

Below is a medical student evaluating the doctors' attitude toward time management and efficiency in seeing patients:

> What bothers me the most is how little time is there, I feel like it's so expensive, and the reason my parents never want me to go to the doctor is that it's so expensive. The person who has done 18 years of training to be here serves you for 5 minutes. And I have been to my gynecology rotations, so the residents would do everything that the OBGYN does, and then they come in for like 1 minute and then leave again. So, if that was me as a patient, that would bother me cause I am here for you, I am paying cause of you, for your opinion ... so, just like, 5 minutes, just sit down. And so, I think as a patient what's the most frustrating is the clear message of "I am busy, and I need to go see the next patient" that you get from the doctor ... And so, if I think that someone did not do their best, I am like, why did they even come? Why did I even spend like $500 for this hour? So, I think even when clinics are behind and it's late, it'd be nice if the doctor spends like 10-15 minutes talking to the patient. Even if it's not about their clinical condition, if it's about their sister's farm or something like that… I know that nurses and others are doing what they have to do, but I still think that patients come for the doctor, so what bothers me is that they are just in and out. [063]

Here is another medical student characterizing the doctor as someone who should not use his/her professional authority to influence common people in matters that are irrelevant to a medical profession:

> So, I know some doctors who are like, when they make a reservation in a restaurant, they are like, "hi, this is dr. so and so", or when buying tickets for concerts ... So, I am not really criticizing them, like, I am not saying how dare you do that, but my deal with that is like, well, how is your degree related to something that's not… if you are like calling the restaurant and think that those two letters after your name is gonna influence something that matters? [151]

This quote is an exemplar of how students may validate the attending physicians:

> We have an attending at Eskenazi whom everyone loves. He is extremely, sort of humanistic. I mean, he just cares about people. I heard stories from other people about how he has changed the culture by being honest, kind, friendly, gentle, not hiding or drifting away from correcting what needs correction, by showing people this is how you do the procedure better ... but he does it in a way that people know he is only trying to make them better, and he cares about them. And he has transformed people around his workspace, by being who he is. [034]

Medical students may also evaluate residents and other doctors:

> Most residents are not trying to be overbearing or paternalistic towards students. They are just trying to do their job, part of which is teaching students what's right and what's wrong, and teaching them how to be safe ... And residents especially, they are very very busy. They are only a year separated from us now, and I feel like that could sometimes be stressful and they do not wanna seem like overbearing to us or paternalistic. Or like setting expectations to us. Some do, definitely… But at the end of the day, it's their job. They are being paid to be there and teach you but also that means that they are responsible and reliable to a degree. Accountable for whatever goes on with their patient, so that's accountable to the law, to the hospital, and kind of the all the staff that they are working under. [103]

The next important authority of delimitation–especially for residents and junior doctors–are the attending physicians. The attendings can characterize the doctor either in a positive and supportive way or criticize them in negative and dejecting way. Examples of attending physicians validating their resident's opinions:

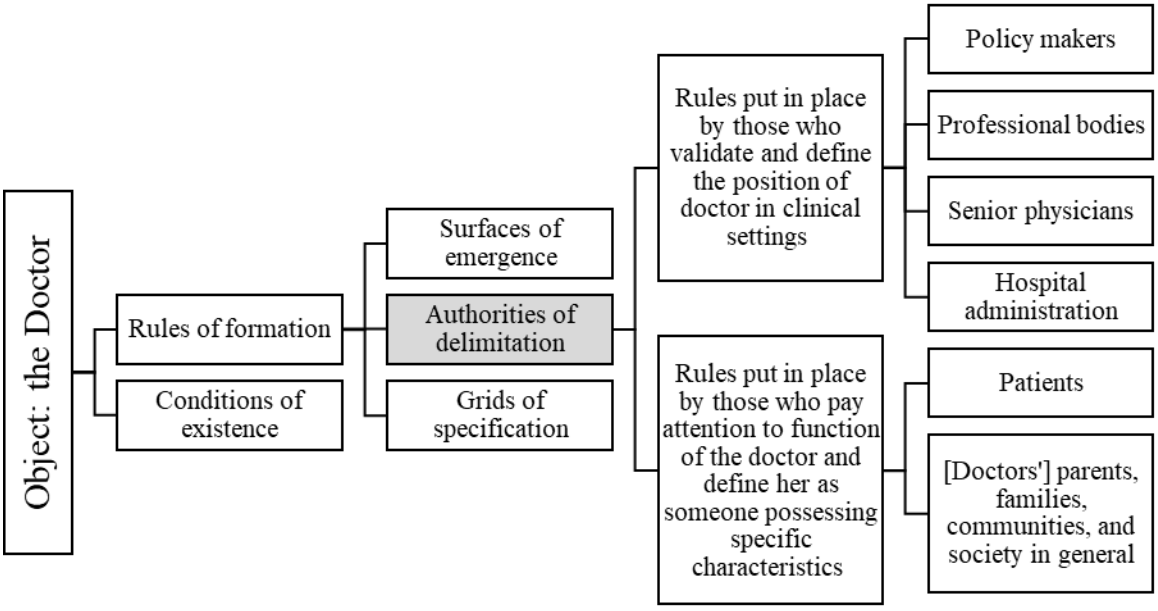
> Resident describes patient's case for five minutes outside the patient's room in the hallway. The entire team listens to him attentively–including the attending. At the end of his case presentation he suggests a course of treatment: "Does that sound good?" he asks, somewhat hesitantly. Attending: "You tell me, you're the boss!" giving him confidence. [Obs] [p.18]

> Attending discusses the case and consults with everybody. Resident takes the lead on the case. Attending seems to appreciate her taking over. Resident also leads the team on the visit. Attending does not interfere but curiously observes and checks oxygen and vitals machines as resident is talking to the patient about the medications she had taken yesterday [Obs] [p.21]

In sum, the point of this section is to demonstrate the absolute chaos created by dispersion of opinions regarding who the doctor is, what the doctor should do and should not do, how the doctor should act toward certain things, etc. The public is quite confused when it comes to answering these questions. There are no standard answers since modern medicine is not theorized by the literature in any standard way–especially when it comes to defining the human traits of the doctor and the way to go about medical professionalism. There are thousands–if not millions–of rules being set in place by various authorities of delimitation in our society, with everybody expecting the doctors to be responsive to them. Figure 4.5 summarizes the authorities of delimitation for the doctor as a discursive object.

Figure 4.5

Rules Related to Authorities of Delimitation for the Formation of the Doctor as an Object of Medical Discourse



Grids of Specification. These are written and unwritten rules based on which different *kinds* of doctors are classified, related, contrasted, and grouped. Written rules include normative documents (e.g., the American Medical Association [AMA] guidelines for medical ethics and other similar documents) as well as formal discussions on medical professionalism held in school and clinical settings. The unwritten rules regarding different kinds of doctors (e.g., good doctors, caring doctors, busy doctors, humble doctors, etc.) include statements defining different kinds of doctors that are spoken by medical students, doctors, hospital administration, business administration, patients, and society in general. Either formal or informal, written or unwritten, all of the above statements contribute in forming modern medical discourse on a daily basis. In this section I will establish three broad categories of rules based on which doctors are being classified as part of the modern medical discourse: 1) Rules classifying, relating, and contrasting doctors based on their personal traits; 2) Rules classifying, relating and contrasting doctors based on whether they attend to the person of the patient in addition to caring for her body; 3) Rules classifying, relating, and contrasting doctors based on how they deal with issues caused by nondiscursive structures.

<u>Rules Classifying, Relating, and Contrasting Doctors Based On Their Personal Traits.</u>

A. Doctors who listen, communicate things efficiently, and educate the patient.

> [A good physician is] someone who takes the time with patients, talks to them and listens to their questions, and educates them. A lot of times patients I have seen in the clinic or on rounds ... you can tell that they have these questions and they do not really understand remedies and if you could take like 5 minutes to explain it to them really well, the relationship they are having with you, the trust that they have in you, it will be really enhanced. So, I would like to spend time, knowing them and educating them ... I just want to be the kind of physician that my patients say: "yeah, she is a great doctor because she listens to me" ... It is a way to show your patient that I respect them and I respect their time. [023]

I want to do pediatric palliative care, and I'd like to practice patient-centered care in which, like, you need to fully listen to the patient. Like, I do not want them to feel that I do not really have time to get to know my patients and establish relationships. [093]

Communication is important, especially with kids. If they do not know what's going on, they won't even care and they won't take your medicine. If you tell them that: hey, we are doing this so you can do that again, would you be ok with this? Then they'd be like, yeah. Then ok, good ... But if you speak in the hallway and you come in and like, alright, this is what we are gonna do, the kidos do not know what's going on. [063]

B. Doctors who are humble versus doctors who are not.

So, like, you can tell who is not humble. They are like, I'm a big shot, like a surgeon or whatever. So, I get it that they are good and passionate or whatever but they are also that stereotypical personalities. So, I wanna be a doctor that shows patients that care and listens to them. I am not defined by my job, by my profession, like, I am just a person outside of my job just like anyone else is, the same as the person who works at McDonald's. But I'd like to use my profession as a physician as one of the main ways that I share myself with the world and try to use the gifts that God has given me to improve other people's odds through my job. [023]

So, as though there is something in med school that goes right into your head ... like, I have seen some really cocky residents. I know you sleep less; yes, you're tired; yes, you deserve the position you have; but you do not have to shove it into people's faces as though you're a freaking god or something. [161]

Oh yeah. Specially surgery. WOW! A lot of surgeons do not think they are human, they think they are gods and I find that just odd… [043]

Below are examples of attending physicians being humble in the clinical setting:

Attending talks and laughs with third-year medical student in the hallway. [p.20]

Attending holds the door for the entire team every time we enter or exit a stairwell on the way to the morning rounds. [p.5]
The team leaves the patient's room after the morning visit has ended. After a few steps, the attending stops and goes back towards the patient's room as though he has forgotten something. He goes into the room and asks: "Do you want me to shut off the light for you? Do you want the tray next

to you?" the patient nods: "yes please". He fixes both and leaves the room with a smile. [p.16]

Patient is an 80-year-old man, hard of hearing. Attending is squatting on the floor to get at the level of the patient's head and talks to him: "Any pain? What are you feeling?" [p.38]

C. Doctors who are personable versus doctors who are not.

There is a lot of people who get high scores on the exams but they do not care about people, they can't talk to people, and it's like, well, no matter what you know if you're not gonna treat your patient well they are not gonna like you, that's the point. And then you can't really be helping. [043]

I think to the average person it's really important if the doctor is personable - who knows what they are doing but it does not need to be the world's best cancer researcher or something, you know. People do not know what you are talking about so you being super smart is not very helpful to them, but you being able to speak to them and having a conversation is I think more important. [063]

I like pediatrics ... so like, the kids are scared, parents are terrified, they don't wanna be there. If you can get the kids to like you and trust you, the easier it is to get things done in terms of their treatment. And to me that's what is exciting about being a doctor, I don't care about writing notes, that's not fun… that's why I am hanging out with patients. I think if you don't wanna do that then, being a doctor is kind of really ... you'll end up like a mean attending who is not fun being around. [063]

D. Doctors who are competent but also have a team-mindset versus doctors who are competent but do not have a team-mindset.

So, to me a successful physician is someone who does well for their patients but also to other doctors. If they have issues or questions they will go to that person and that person is an authority figure, or they have a knowledge that can really help out. Other people are gonna need it… It's never gonna be a one-person show, like, patients are gonna come to you and you're gonna have the answer because you have been reading a book ... You also have to have a good relationship with your colleagues and kinda know when to pass it on. So, they [good physicians] have a team-mindset. The patient is also part of the team. You can't be like, oh, I know you have concerns, I am gonna look it up on my own to get you the answers, so like, discuss with them what they want and work it out as a team. [012]

E. Doctors who are fair and impartial in treating their patients versus those who are not.

It's hard, but theoretically, I would like to say treating everyone with the same respect. You are not saying like, oh you get a certain amount of time, versus another person who will get a different amount of time. I think everyone deserves the same amount of respect, same amount of attention, I can't really think of how I am going to implement this [as a doctor] or … But just like, whatever I do, I want to treat them with respect, I would want to go to them with a great attitude, a smile on my face ... So, like ... instead of saying "Hi, I am a doctor and you are the patient and that's it", I wanna say, "Hi, I am a person too". [151]

Interpersonally, treating them with human dignity regardless of who they are. Like being an alcoholic does not dissuade you from giving them the proper treatment because you think they are not worth it. I do not think that's professional. Funding is a different issue. Like is it the most cost-effective thing to do, like how you deal with the resources that you have available, it's a discussion worth having but I am not gonna have it right now. But not letting your personal treatment of a patient be affected by some of the ways that you do not think like it's worth your time. [034]

F. Doctors who speak ill of their patients, use prejudice to judge them, or be dismissive of what they believe to be true versus those doctors who do not.

There are a lot of physicians who make fun of their patients or complaint about how they had their … before going into the room and then afterwards - of course, not in front of them. I do not think that's professional. You kind of lose your whole perspective of why you are here and what you are doing. [043]

So, one time, back home [in Nigeria] the doctor was doing H&P [history and physical exam]; they asked me if I was sexually active, and I said no. And he did not believe me because of my age. I was like: you asked a question, and I said no. So that's like, you know, you have this opinion in your head, and it does not mean that everybody will need to fit into that… [184]

In college, I just had a concern and wanted to get checked out. It took a while to get the appointment and when I finally go, I felt like the doctor did not take me seriously, did not even evaluate me to the degree that I kind of wanted ... and just kind of dismissed it like it was nothing. [072]

Rules Classifying, Relating and Contrasting Doctors Based on Whether They Attend to The Patient As a Whole Person.

A. Doctors who acknowledge the patients as whole persons versus those who do not.

I want to have long term relationships and following them [kids] as they grow up, kind of checking in and being very cognizant of the fact that it's a full person, instead of treating just the disease. [103]

It [patient centeredness] means considering what the patient's needs are and not just focusing on your specific goals as physician. Like a lot of specialties do. They focus on rheumatology, only focus on that alone. So, if they [patient] have something more pressing in their life going on at this moment I feel like that should be important to you and you should recognize that ... And deal with the crazy surgeons, ah ... I don't really understand but I think they have a lack of perspective. Like, you need to step back and see the bigger picture of a person, the patient. They only care about surgery, and it may not even help your patient the way they wanted. [043]

Well, you should be a really good doctor, you should not miss things, get the procedures quickly and accurately. But then, the other half is making the patients feel like they are well taken care of; that they are not a cog in the medical machine, you know, they are not "pancreatitis in room 9". They have 3 kids, and things like that ... even if you are just doing a procedure, like in a very short amount of time, just let them know that at least their physician cares about what's happening to them. I think that's just super important, but really sometimes lacking ... There is a huge difference in how the patients respond to that and how satisfying their work seems to be, you know. [072]

I mean, [doctors] they should be efficient in terms of using their time, and respect my time too, but not so efficient where they would completely objectify me as something like a checklist of symptoms. Like, when I become CHF in room 11. [141]

B. Doctors who are aware of the social issues as they relate to their patients versus those who are not.

Someone who can think beyond the studying, someone who thinks about social issues, like what you could be doing as a medical student and as a doctor one day, and to think about the privilege that you are given by

society just by doing this ... So, to me, that's what I'm looking for in a friend, and in myself, but I know there are plenty of "good" med students who are great on paper but do not care about these other issues. [171]

I think it's very important to address social issues with patients even if they are not the cause of the present issue at this precise moment ... If a homeless person comes in with a belly pain or something, I do not wanna send them away without seeing a social worker and talking to them about options where to go if they are experiencing homelessness. Or, a patient who is coming for a belly pain again, but we see in their chart that they were the victim of assault 2-3 years ago, like, I would not wanna just drive past them. Because I understand that a lot of times these patients only present to the emergency department, their only interaction with the medical field happens there and that's where you need to catch them. Kind of make sure that they do not fall through the cracks, and so that's one thing I have tried to tell myself that I am really good at as a physician and I am not gonna let people fall through the cracks to the best of my ability. [134]

The vast majority of my experiences with patients have been at Eskenazi. It's the county hospital for the most underserved population. I worked with people who were less fortunate and seen people whom it took them an hour and half just to get to the hospital. They are like, "I got on this bus, and then got this one, and tracked that one…" you know, they may not have the money for their medications. If you do not take the time to ask and you just move on from there then you'll never find out that they are actually not taking it and their health is continuing to decline. Because they cannot afford the medication, or having to choose between medication and food, you know ... It's been an eye-opening experience to how a lot of the world lives. The type of decisions people have to make, and how you can help. I cannot directly make them to go to resources, but building a knowledge catalogue of what resources are available in your community and help best to get person X to resource Y for treating Z, it's a lot more interesting than "oh, so you've got a sinus infection, here are the antibiotics, go on to work." [004]

C. Doctors who build a human-to-human relationship with their patient in order to makes it easier for patients to open up, versus doctors who do not.

One thing that I [as a doctor] would pride myself on would be professionalism. I like to think that I am good at talking about any topic that a patient might want to discuss with me. So, I need to be able to establish that trust between me and the patient so they can feel comfortable talking to me about anything related to their health, as opposed to like, hiding something because they did not feel comfortable ...

if anything, just giving them that level of trust that I do not have to ask like 20 questions to learn about the information that they want to tell me. It'd rather need to be upfront, like, hey, I have been having a problem with my relationship, you know, something like that. A personal topic that kind of is related to the rest of the information and their health condition. [112]

So, like, exploring the patient's perspective, someone who cares, and asks personal questions, creates an environment where they can share what's going on. It is good because they will be more comfortable to share more with you, so they are not gonna give you just short pieces of what's going on - they are gonna give you the actual story of what's happening because they trust you. And they feel cared for, which is a huge thing in medicine. [072]

D. Doctors who put themselves at the service of the patient versus those who do not.

I am a big proponent of like, if that patient needs a sandwich and a pair of socks, I'll go get them a sandwich and a pair of socks, I will not bother the nurse or anybody to go get that for me. I know where the juice is, I know where the water dispenser is, like, I can do that. [Mindful of how others perceive you?] I think yeah, I am always mindful of how people perceive me and I think that's something that is very important, because the ER is such a collaborative space ... your role as a team leader and medicine as a whole depends on how others perceive you ... Would I be perceived as the doctor who is only good for giving someone a juice? You know the way to solve that is to be a strong physician, and to have that perception of being a strong leader is going to value the collaboration of all the team members, but also be able to do these other things [134]

I enjoy the service industry aspect of medicine, to think of the physicians as personal health consultants almost ... I'd say that's not a totally accurate analogy, but I'd enjoy being at the service of the patient. I guess, like, that kind of relationship [112]

Resident is fixing the tray table for patient: "you want brown sugar? Yeah? Here is sugar ... oh, you are picky" patient is smiling at him. Attending takes the empty sugar packets from the patient's hand and puts them in the trash. She also puts a fork in her plate while the resident takes a listen to her lungs. Patient is a 50-year-old African American woman; she seems to be doing much better than yesterday. [Obs] [p.46]

Rules On Classifying, Relating, and Contrasting Doctors Based on How They Deal with Issues Caused by Nondiscursive Structures.

A. Doctors who create a balance between their personal values and time efficiency as proposed by hospital administration versus those who do not.

> And there is even some of it that's beyond doctors alone. There is definitely issues with the system, where like, doctors have less time with patients and they are spending a lot of time on other things like charting etc. They are kind of being rushed and forced to see as many patients as possible, to kind of increase the *efficiency* [emphasis added] because that's how hospitals make money. And I think that ends up leading to error. Obviously if every doctor spent like, as much time as they wanted with a patient, error rates will drop but then, you know, [enough] patients won't be seen. So, I guess like there is some societal changes that we need. We need to make sure that ... the administration as a whole is willing to work with doctors to make sure that they are not just like, trying to get as much money as possible, but also are trying to do what's best for the patients. [MS2]

> And then, they [the doctors] should have values. I know this one is a little bit more abstract as to what does it mean to have values ... So, some medical places that I used to work with were at times kind of too efficient. In one place, for example, so it's like, I go get a history of the illness, I get the chief complaint and then get out of there, then I summarize and kind of distill that information and give it to the physician–so that the physician has an idea of what's going on and what to do next. And I get that it all makes for an efficient system, but ... I think there needs to be a tension between being too efficient and also taking the time and being able to espouse those values of yours with an efficient practice. [141]

> Growing up, my siblings and I were all very healthy, so I just remember the pediatrician coming and be like, is everyone good? Okay. Good. So, we would be waiting there for like an hour to be seen and then we'd be finally face to face with our doctor… I guess, my frustration as a child was kind of having to be there and wait so long, and I could see my mom being frustrated at times cause she felt like she was going at it alone, did not have support from our doctor. I now have a doctor here, and she is great. I love her. So, I definitely see the difference between a good doctor and a busy doctor. [And a busy doctor is not a good doctor?] No. [Is there anything that the doctor can change?] I think you can change things, like, you can say, okay, so if you book me for 3 patients every 15 minutes, that's a no. That is not good. [103]

B. Doctors who are aware of socioeconomic resources available to the patients and make an effort to make sure patients get connected to the right resource, versus doctors who do not.

> In whichever field I'd be, I'd be more socioeconomically informed. So, like, I know in the emergency department for example they send people like that to a social worker who could introduce them to appropriate resources and all that, but I guess what I would like to do personally is to first make sure that the referrals are worth the time and the resources, and it's actually informative and beneficial to my patient. So, do not just send them through a black hole ... Like, once there was this victim of domestic violence, and the doctor is like, "okay, send them to the social worker" and I am like, "how do you know that the social worker is actually able to do anything with this?" Because if that person drops the ball, it's not only gonna look bad on the social worker but it's also gonna look bad on me cause I was the last person who checked this patient and that person did not come back to me because of the quality of help the social worker was able to provide ... sometimes they are like, "oh, you are smoking, so you need to quit that", and just like that ... cause they are trying to check the boxes for every patient and I do not think that's the kind of care I want my patients to be referred to. [141]

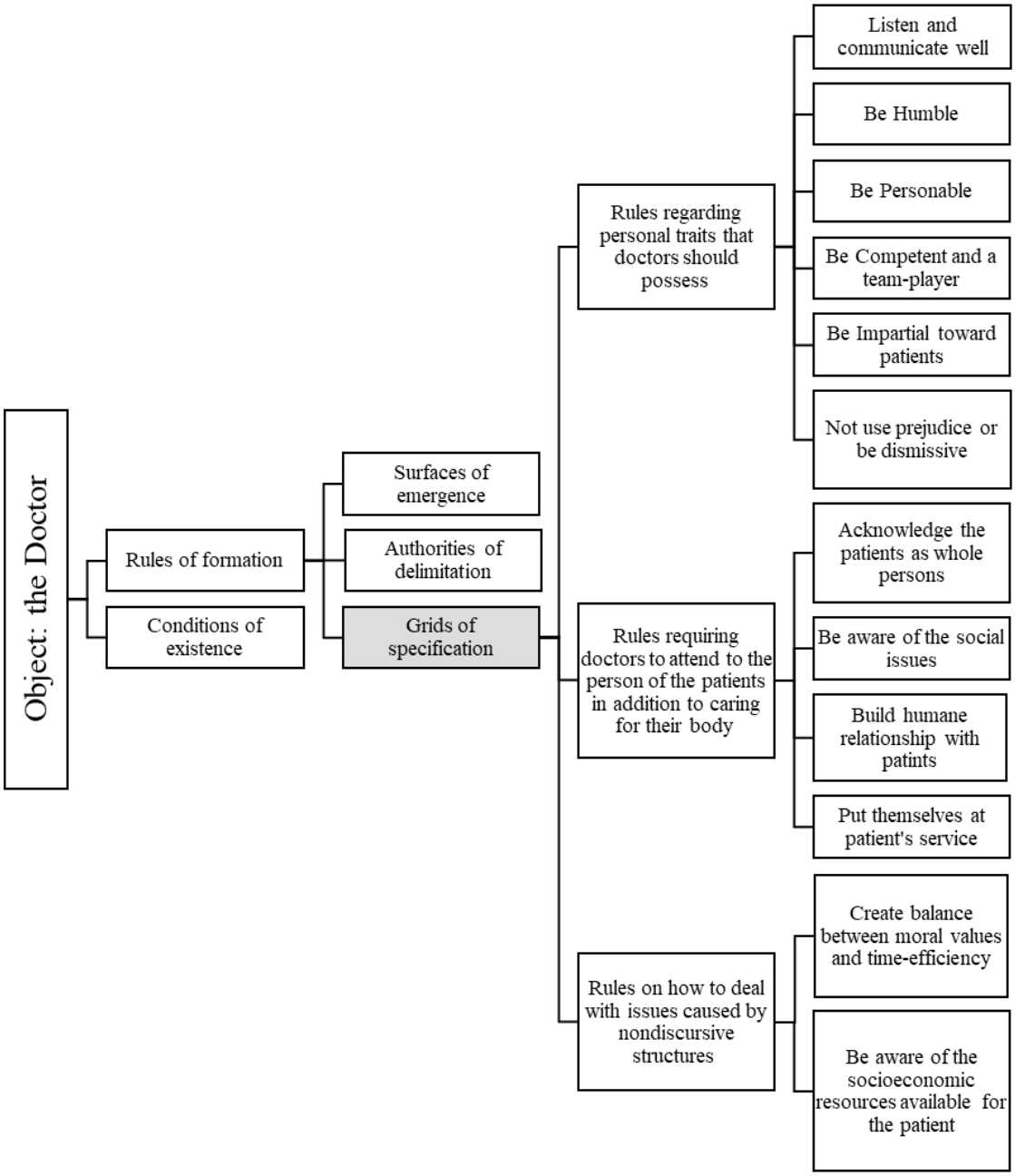
Figure 4.6 summarizes the grids of specification for the doctor as a discursive object.

Conditions of Existence for the Doctor as an Object of Medical Discourse.

Again, archaeology is not only tasked to establish the rules of formation for every single object, but also to outline the relations between those rules. In other words, we need to establish the conditions of existence for the doctor as a discursive object. While there is no hierarchical relationship between the three rules of formation for the doctor which I have established above, there are certainly other more subtle relationships between different parts of these different rules. For example, the hidden curriculum (Hafferty & Franks, 1994) consisting of all non-written, non-formal rules and regulations in medical schools can markedly influence the professional identity formation process in medical students.

Figure 4.6

Rules Related to Grids of Specification for the Formation of the Doctor as an Object of Medical Discourse



For instance, how students are treated by senior faculty at the hospital will partly shape the way they understand the authority function of medical profession. Thus,

surfaces of emergence for the doctors can influence both the rules that the doctors will set in place as authorities of delimitations in the future (e.g., medical students' understanding of who the doctor is and what responsibilities he/she has), as well as the rules that they will set in place as grids of specification for the doctors (e.g., the way medical students evaluate, classify, and categorize the functioning of the doctor in society). In sum, the rules in the surfaces of emergence (for the doctor) can play an influencing role in shaping the rules for both authorities of delimitation and grids of specification by the doctors.

The present section describing the doctor as an object of discourse partially explains how discourses in medical school may impact the professional identity formation process in medical students. It is true that medical students and doctors are not the only authorities of delimitation to define the function of the doctor in society, but they are the most impactful ones as they are really the ones who embody their own understanding of their role as the doctor in their clinical practice. Thus, they are the most powerful authorities of delimitation for defining the function of the doctor, compared to other authorities such as patients, communities, etc. That is because students are future doctors, they are the only authorities of delimitation that will get to put the rules they make about the doctor in actual practice.

The Human Body. The next object of medical discourse we will discuss is the human body. The talk about human bodily structure and function occupies a large space among the statements in modern medical discourse. Just like disease and its treatment, statements about the human body can be easily spotted in medical and clinical research reports, medical textbooks, both basic science and clinical lectures and podcasts for medical students, all didactic teaching materials, student assessments and medical board

examinations, discussions in both didactic and practical clinical teaching and learning that happens in the hospital setting as well as daily interactions between doctors in the clinical settings.

Surfaces of Emergence. Again, these are the social loci/norms that designate something as an object of discourse and justify the talk about it within that discursive formation. In other words, they characterize something in a certain way in order to turn it into an object of a specific discourse. Surfaces of emergence for human body (as an object of medical discourse) include individuals, families and communities, where signs of an abnormal bodily behavior are first noticed. As soon as the body is believed to be acting abnormally in any way, it becomes the object of medicine. Social norms that assign the status of *abnormal* to specific ways in which body acts include certain degrees of rationalization, conceptual codes, and theories that are used by surfaces of emergence. Let's look at an example here. If you wake up one morning with a lower back pain that then gradually decreases during the day and disappears by night time, according to your immediate social norms it might be seen as normal. However, if you happen to have the same problem for extended periods of time during the day and if it tends to stay with you for a whole week, according to common social norms, the way your body is acting will be considered abnormal and thus it automatically becomes an object of medical discourse. The simple rule that suggests "when someone's back constantly hurts for an entire week they need to go to the doctor" designates your body as an object of medical discourse. Rules such as these functions as the cultural norms in a particular society. They involve certain degrees of rationalization, as well as conceptual and theoretical codes on

the part of the surfaces of emergence: individuals, families, communities, and society at large.

Again, it goes without saying that social norms can be different depending on the society and the time period we live in. However, they all have a designated threshold beyond which a certain behavior of the body will be accorded the status of abnormal and thus the body is automatically enrolled by the surfaces of emergence to become an object of medical discourse. Whereas surfaces of emergence characterize certain acts and behaviors of the body as abnormal/sick/diseased, the burden of cure or at least explaining the condition is usually transferred from the surface of emergence (individual, family, community, and society in general) to medicine, which is commonly perceived as a well-established and trusted institution in modern US society. Besides, medicine has always been about the body. Perhaps the body is the most natural object for the medical discourse due to the nature of the profession itself.

Authorities of Delimitation. Again, these are authorities that validate the existence of something as an object of a specific discourse. They give it attention and provide specific definitions for it. For human body (as an object of medical discourse), authorities of delimitation include: doctors, other health professionals such as nurse practitioners and physician assistants, lab and imaging technicians who confirm and validate the presence of abnormality in the body, biomedical research, and media (television, newspapers, popular blogs that educate the public about basic abnormal bodily structure and function, etc.). The attention paid and definitions provided by the above entities make the abnormalities of the human body important to the society and urge people to take it seriously. Authorities of delimitation for the human body also

includes practitioners of alternative medicine, such as acupuncture, yoga, and natural healing techniques. It is all these authorities combined that define and characterize the human body as an object of medical discourse. It is worth reiterating here that each authority of delimitation functions based on its own rules that are developed by the group of people who are involved with that specific authority and the body of knowledge and practices that justify its authority. Some of these authorities are only recognized by public opinion (e.g., an internet blog that talks about abnormal body functions) whereas others may also be recognized by the law and government (e.g., physicians and medical scientists).

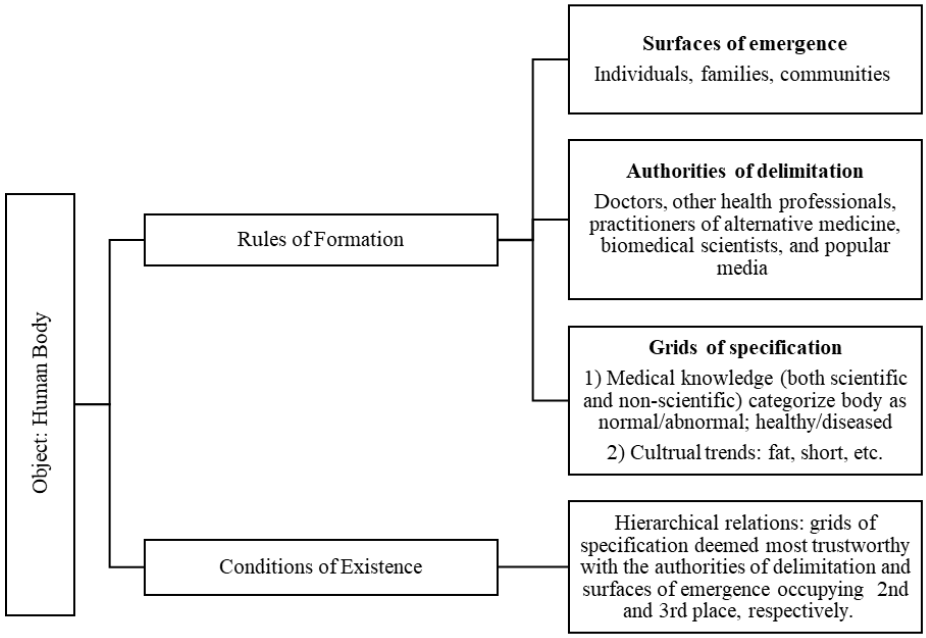
Grids of Specification. These are systems according to which different kinds of an object are classified, related, and contrasted. For human body, grids of specification include medical science (and knowledge), which recognizes and classifies different types of normal and abnormal behaviors in the body, relates them to other similar conditions in terms of a common etiology or treatment, contrasts between similar conditions, and so on. Again, the rules based on which medical scientific knowledge classifies, relates and contrasts the normal and abnormal behaviors of the body can be different than, let's say, the rules of medical knowledge used by an alternative medical practitioner for the same purpose.

Rules that characterize the human body in order to classify it in different types also come from the culture of the immediate society. Common people follow cultural trends for classifying human bodies in to categories such as: male, female, tall, short, big, skinny, white, black, so on and so forth. Whereas medical knowledge follows some of these classifications, such as that of the male and female, it does not always use the

cultural categories for classifying human bodies. In general, medical knowledge classifies the human body into two broad categories when it comes to studying their features as objects of medical discourse: the normal/ healthy bodies versus abnormal/pathological/diseased bodies. You can add details to any of the two major categories above, such as, different structures of the healthy body (anatomy), different functions of the healthy body (physiology), different structures and functions of an abnormal body or body part (pathology), and so on. Anatomy, physiology and pathology are but a few examples of how medical knowledge delimits (classifies, relates, and contrasts) the structure and function of the human body as an object of the modern medical discourse. Figure 4.7 summarizes the analysis of human body as a discursive object.

Figure 4.7

Summary of Archaeological Analysis for Human Body as an Object of Modern Medical Discourse



Conditions of Existence for Human Body as an object of medical discourse.

There is a hierarchical relationship between the three rules of formation above. Grids of specification that is set by peer-reviewed scientific knowledge is considered to be the highest authority when it comes to setting up rules about defining the human body in medical discourse. Medical knowledge is often deemed as the most accurate way of identifying, analyzing, and explaining human bodily structure and functions, which is trusted by all authorities of delimitation (healthcare professionals, researchers and the media) as well as surfaces of emergence (individuals, families and communities). In other words, the rules set by grids of specification bear the most weight among the three rules of formation for the human body as an object of medical discourse. The next most trusted set of rules are those that are set by authorities of delimitation (e.g., doctors and other healthcare professionals). The last set of rules in terms of their accuracy and trustworthiness are the norms that are used by the surfaces of emergence in order to identify and explain the human bodily structures and functions (e.g., degrees of rationalization, conceptual and theoretical codes used by family of the sick person).

The Sick Person. Talking about the sick *person* - that is, addressing the patient as a whole person and not just as an objectified body that needs fixing - also happens in modern medical discourse. This type of talk is not common but it is there when it comes to specific types of discussions in medical discourse. For example, the bulk of statements in discussions related to medical ethics and patient-centered care address the patient as a person. However, statements about the *sick person* is almost never found in medical and clinical research reports, medical textbooks, and basic science teaching material. They are sometimes found in clinical teaching materials, student assessments, and medical board

examinations. Such statements are very rare in both theoretical and practical bedside-teaching and learning as well as daily interactions between doctors. In doctor-to-doctor interactions in the clinical settings, talking about the patient as a person is quite rare. At best, there might be some talk about patients' socio-economic conditions as they relate to their medical situation. This is not the same as talking about a patient's feelings, for example, as a person. It needs to be noted that the phrase "sick person" is used in this study in order to make a distinction between the common term "patient" and the person of the patient. It often happens that medical professionals talk for hours about the signs and symptoms of a disease, its treatment options, and various physiological or pathological characteristics of the body as related to a patient. In such circumstances, they are technically talking about the *patient*, but not about the *sick person*. To make this distinction possible, I am using the unusual phrase of the "sick person" instead of the patient[7].

Surfaces of Emergence. These are the social loci and norms that designate the person of the patient as an object of medical discourse and justify the talk about that *person* within the discursive formation of modern medicine. Surfaces of emergence for the sick person include patients, patients' families and communities, as well as the hospitals, doctors and other healthcare providers especially nurses at the hospital. These are surfaces where concerns about the person of the sick are developed, discussed and addressed as part of the medical talk. The norms used in these surfaces include certain degrees of rationalization, conceptual codes and theories that are used to assign the status

[7] I realize that not everyone who goes to the doctor is sick, as, for example, pregnant women or kids who come for their normal pediatrician checkup may not be sick. However, in this study the term "sick person" refers to the person of the patient who is suffering from some problem and comes to seek medical help.

of an object to the person of the patient. Some such norms that emerged from the data collected in this study are as follows.

A. Patients are likely to be attended to as a person at the hospitals by healthcare providers.

Below are exemplar pieces of data from the direct observation of clinicians at the hospital that indicate patients were received as whole persons there, and not as mere *bodies* needing to be fixed or *diseases* needing to be treated. The way nurses are talking about their patients suggests that they see more than a body that is lying on a bed as a regular object of medicine. They see a *person* there, who needs to be comforted and cared for, who belongs to a culture where they come from (in case of the Punjabi lady), which needs to be respected if they are to have a productive relationship with the patient. Even when patients are semiconscious or unconscious, the healthcare team tends to keep in mind that the patient lying on the bed is still a person and needs to be treated like that.

> Nurse speaks to the patient in English even though she knows the patient can't understand it. "She can tell I care!" says the nurse to a resident that looks at her with enthusiasm. Nurse asks the resident who can speak the patient's native language, Punjabi: "tell her I am gonna take good care of her today". Resident translates the message to the patient but the patient does not even look at her. Patient follows the nurse with her gaze around the room, but does not respond to the doctors' prompts. She is semiconscious. [Obs] [p.5]

> Nurse is talking about the patient during morning rounds: "he is got such a sweet face, doesn't he? His hairs are so soft" Attending looks at the patient kindly and agrees. Patient is a 60-year-old African American male, and is semiconscious. Attending says to the patient: We'd like to talk to you but we understand it is tiring to be here", petting him on the head. We leave without expecting a reply. [Obs] [p.11]

B. Concerns about the person of the patient are rarely raised in doctor-to-doctor conversations but they almost always appear in doctor-to-patient interactions.

Concerns about the person of the patient remains on the outskirts of what is perceived to be the "hard" science of medicine - that is, the application of medical scientific knowledge on the patient. Once it comes to the conversation among the doctors themselves, it is pretty much all about the signs and symptoms, lab tests, and imaging reports. The discourse becomes limitedly scientific, value-free, and (trying to be) objective. (I put "trying to be" because medical practice is really never objective). Doctor-to-doctor conversations about a patient sound altogether detached from the human being that the entire talk is about. Do clinicians believe that it is somehow *more professional* to remain at a value-free position with regards to the person of the patient? It is a question worth exploring but is out of the scope of the present study. Concerns reappear when it comes to picking the right choice of treatment for the patient and talking to them about it during a doctor-patient interview. The exemplar quotes below demonstrate how the person of the patient is acknowledged during discussion of the choice of treatment.

> Patients are in control of their body, they are autonomous in that they have the right to refuse medical treatment, even if medical science says that this is what you should do ... But I completely understand, and I do not think it should change. I think patients should still be in control of their own health. [012]

> Patient does not want the female catheter. Resident: "that's totally alright. It's your choice", petting her on the hand. Resident explains a different choice and its pros and cons to the patient. Patient is convinced to choose the next option. The resident pets her on the back of her hand again, kindly. [Obs] [p.21]

C. Are doctors really concerned about this patient or are they just pretending to be so? Both scenarios are equally possible.

A few questions that are worth pausing over are as follows: Is it that the concerns for the sick person is genuinely in there but physicians are actively trying to hide it when they are among themselves? Is it a medical *cultural* thing? Or, is it that they do not really care about the persons they are supposed to care for, they only put on a mask and play the role of a caring physician when interacting with the patient? But why do they need to put the mask at all - societal norms and pressure, or again, just a cultural thing? Does this have anything to do with the way they are being trained at the medical school on how to care for their patients? Providing an answer to each of these questions is beyond the scope of the present study. However, I will make an attempt here to briefly address the very last question: Does this have anything to do with the way they are being trained at the medical school on how to care for their patients?

One way students learn how to put on the mask of a "concerned face" when they are interacting with patients is through simulation trainings. Having to give an acting performance in full doctor-patient encounter sessions, they learn from each other that it counts as "good" practice if you can look and sound genuinely concerned when you are interacting with patients. They practice pretending to be concerned when interacting with patients, even when the patient is a SimMan® 3G–the patient simulator. Below are exemplar pieces of data pulled from direct observation field notes of the surgery simulation trainings for third-year medical students.

Setting: IU Health Simulation Center, Fairbanks Hall. Simulation room is setup like an actual hospital room. A bed with a mannequin lying on it is standing in one corner. The

mannequin is hooked up to multiple machines. In the room next door, Hector is setting behind a desk with his head-phones on and looking into the simulation room through the glass window. The two rooms share a huge glass window that allows seeing only from one side. Hector can see the simulation room but staff in there cannot see him. Hector provides a voice for the mannequin so it can interact with students. On a desktop screen there is a window projecting from the conference room where 6 third-year medical students are seated at a round table. They are waiting for their turns to practice a simulation patient visit. They will be watching their peers' performance in simulation room through a screen provided form them in the conference room. Rachel (pseudonym), a surgery nurse educator, is leading the session. She is acting as the RN in the room.

> Student 1 enters the room. She starts with physical examination of the patient (mannequin that is being voiced by Hector from the other room). Hector is singing "I believe I can fly…" Student tries to sound like a doctor but seems to be nervous. After the first couple of minutes she succeeds to put on a concerned face. Hector shrieks abruptly: "my side hurts!" Student responds with a kind voice: "I am sorry, I know it hurts" Hector continues mumbling and singing. Student can't prevent herself from laughing but pulls herself together and puts on the concerned and caring face back. She asks Hector things about his condition and sighs in response–her facial expression of concern looks perfectly natural ... Time is up and student returns to the conference room, high-fives with others. One student tell her: "Good job!"
>
> Student 2 enters the room. Rachel describes the patient and asks "what can you do for me doc?" "I will go ahead and see him", says student. She seems to be calm and normal. Begins physical exam. Hector is completely silent. Student faces the RN and says "I am concerned about his BP", with a very concerned face… Student tries to take his pulse but can't find it, laughs with embarrassment. RN helps her find the pulse… Student returns to conference room. Other students: "that was fantastic!"
>
> Student 3 enters the room and goes straight to the mannequin: "Mr. Hector, how're you doing for me, sir?" Student seems shy but is smiling awkwardly at the mannequin. He begins doing physical exam… Student returns to the conference room; looks a bit embarrassed. After almost an

> entire minute another student says “it was good”. Student 3 shrugs his shoulders and smiles.
>
> Student 4 enters the room: “Hey Mr. Hector, how are you doing?” She sounds confident. Begins physical exam by telling the mannequin: “it might be a little cold, so just that you know” referring to the stethoscope. Student continues: “So they told me that you do not wanna be here?” Hector: “Nobody wants to be in here”. Student does not follow up with the latte statement. She seems concerned and looks at mannequin’s face attentively but Hector starts wheezing abruptly in a funny voice. Student laughs but quickly pulls herself together again… Student returns to conference room. Others clap for her. One student: “you really nailed it!”
>
> Student 5 enters the room. She seems nervous and is clearly blushing. Tries to sound confident asking mannequin for his permission for performing physical exam on him. Hector: “You can’t listen or look at me.” Student looks at mannequin disconcertedly. Hector starts singing “Macarena” and makes a barking-like sound every few seconds. She begins doing the physical exam despite the patient telling her not to do it. Hector does not object. Student is trying to hold it together but still unable to put on the right face. She does not look confident at all, is still blushing and smiling for no reason ... Student returns to conference room. Others smiling at her as though trying to provide encouragement.

Many students believe that the ability to put on faces when needed has to be “part of your toolkit” as a physician. In the examples below, medical students are advocating for the physicians’ ability to *pretend* in certain situations, their ability to put on a face and *play the role* even when you are “screaming on the inside”.

> I think external confidence is incredibly important, patients need that, they need to believe in you as a medical professional. Even when you are screaming on the inside, it’s only having them believe in you and that’s important for the physician-patient relationship. So, being able to be confident. So, you’ll have to learn to put that confident face when you need it. It has to be part of your toolkit. [134]
>
> And there is also this, especially for doctors, like, you have to think like, … I do not know, it’s like, we can act, I mean, if the physician is the leader at that situation, so like, act like you know what’s going on, or it’s ok to say if you do not know what something is, but you have to act like ... you have to be the one that’s like, okay. You have to be the one who’s holding it all together. [171]

> It's like, when you have a role, and sometimes you have to stay in that role. What I mean by that is, you call me into your office, and you walk me to the patients' room, for example, and patient is being absolutely ballistic. You are a human being and they should not be doing that to you, but you are also a doctor and as doctor you now have to stay in that role. And your role is to stay calm, and all of a sudden you are like, oh they just crossed me out, and you know that you have been sitting in that room completely calm and play the role. [184]

Let us also look at the exemplar excerpts below that are pulled from direct observation data at the hospital:

> Patient with stage 4 cancer does not seem very happy. Resident says: "it was a pleasure taking care of you!" in a tone that does not sound very genuine. Patient says "thank you" after a brief pause, rolling her eyes at him. "Take care of yourself, okay?" says the resident. "I will", says the patient, sounding somewhat defensive. Resident: "you're doing better than before you came here". Patient: "I did not have any of these problems before I came in here." No one follows up with this last statement. Silence for a minute. Resident begins to talk about technicalities of the patient getting discharged that afternoon. [Obs] [p.20]

> Resident tries speaking in Punjabi, the patient's native language. Patient is not responding to commands and is apparently semiconscious. Resident is trying to make her smile by making a joke in her native language but the patient does not respond. Resident looks genuinely concerned, worried faces, sighs ... Resident is holding the patient's hand… Attending asks the nurse to get her something to change sooner in order to minimize the infection. The team leaves the room. Resident remains in the room for another minute, looking at the patient with a concerned face. [Obs] [p.5]

In the first scenario, the resident talking to the discharging cancer patient sounds like he is pretending to be *concerned* toward his patient. However, the resident in the second scenario sounds like she is genuinely concerned about the patient because she is working with a patient who is semiconscious–so, she does not need to pretend if she did not feel genuinely concerned about the patient. The patient or patient family or relatives were not there in the room to hear her or see how she acted toward the patient, which makes the genuineness of the concern quite obvious. The problem is, it is not always obvious to tell

whether someone is showing a genuine or a fake concern. There are more subtle situations where it is next to impossible to tell whether the doctors actually are concerned about the sick person that is in front of them or are they just pretending to be so.

Authorities of Delimitation. Concerns about the sick person are validated and taken seriously by the patients themselves, their families and communities, society in general, sometimes media such as TV and newspapers, and also by scholars who publish research about medical humanities (e.g., medical ethics, medial anthropology, medical sociology, etc.). These entities often generate critical views about modern medicine for not caring *enough* about the person of the patients. Concern about the sick person can also come from the doctors and the hospital administration. There is no standard rule about this though. Different doctors deal with this issue differently, depending on their own cultural background and personal codes of morality. Sometimes compassion for the sick person is related to humanistic values, sometimes to faith, and other times to the nature of medical profession itself. Let us look at some exemplary data coming from medical students that are divided in to two categories: 1) statements coming from the doctor's position; 2) statements coming from the patient's position (in which students talk about their own experiences as patients).

A. Concerns about the sick person can come from the doctor's position

> For me, patient-centered care is thinking about the whole patient. Not seeing them just as a body in the bed and a disease that needs to be treated. But seeing them as a human being, that has a mother, a father, children, uncles, aunts, a community they come from and their own problems. They are coming to you. Yes, you do not have a magic ball to solve everything, but I think it's your job to make sure that patient as a person is at the center and not patient as a disease ... Being an MT prior to med school, I saw some really sad things ... Like, we were going in to patients' homes where they did not have hot water or heat even in the winter, and I think through that I developed kind of a sense of that a patient is more than what

> you see in the hospital, you know. They are always coming from *somewhere*. [134]
>
> I think, remembering that it's another human being coming to you, talking about very personal things, and not ever making it seem like trivial, because it's the 3rd call that you are working to… for that person, maybe it's their first call in the last 10 years. It's very important to them ... It may be difficult to find a meeting point - for physician it's the 60th patient that they are seeing this week whereas for the patient this might be the first time in 20 years that they are in the hospital so it's such a big deal for them while totally commonplace for the physician. [184]
>
> Residents are discussing the patient on the phone, talking about whether the patient can afford a 90-days insurance: "Can they afford that? Yeah, how much is it? That's not too bad, are they okay with it?" [Obs] [p.1]

Doctors who care about sick persons may develop strategies of their own to resist the restrictions imposed on them by the system–that is, the nondiscursive structures–in an attempt to stay true to their personal values regarding ethics and morality. Some doctors care about the patient's perception of how much time the doctor spends with them. This is an example of how some doctors attempt to find ways to compromise with the system that does not bend enough to allow doctors to spend more of their actual time with patients:

> In the emergency medicine, you're very limited on your time for interactions. I have been researching techniques for building better rapport within that timeframe with patient. Most physicians get to have only 5-10 minutes with their patient and you not only need to get a ton of information in that time to find out why they are here and how best to treat them, but also make sure they trust you and you are acknowledging that you are dealing with another human being. [004]
>
> There are ways that you can do that. For example, when you go in the room, if you set down, they are gonna think you stayed there longer compared to if you were just standing up the whole time. Or if you stand on the opposite side of the bed, in the hospital room they think you stayed longer even though you are spending the same amount of time, cause if you are standing by the door, they think you're gonna run off ... So, like little things like that are ways to teach you to be a better doctor. [023]

Example of resisting the system based on personal code of morality:

> Being able to practice in a way that is consistent with my faith. Not to force it on anyone, but it's not infrequent that people are struggling emotionally. If it's a place where they tell me that we are not comfortable with you praying with them but the patients want me to pray with them that would be an impasse for me. That's a place I am not comfortable working. If a place said that I have to perform a certain procedure but I think that procedure harms somebody and they force me to do that I would not practice in that context. I have my own conscience. [034]

B. Concerns about the sick person that come from the patient's position

The comments below demonstrate patients' expectations from the doctor to see them as persons, ask them personal questions and build a human to human relationship with them rather than acting "like a machine or something". These comments clearly show the patients' desire for their personality details to be noticed and acknowledged by the doctor at every encounter. These comments voice the silent struggle on the part of the patients for being recognized as *human beings* by their doctors.

> This is just something that's important to me, but they always say the wrong year of school I am in, they always ask the wrong things, like ... and so if you have read the chart then maybe you should know who I am as a person. And that's my primary physician, yeah. And also, the dentist for example, you do go to them like twice a year, you know. They are always wrong. So, like, "you just graduated from college, right?" And I am like, "no, that's 2 years ago". [063]

> So, there was this one time that I got a diagnosis and I really resisted the diagnosis, you know ... So, I was just sitting there and the doctor just kept going… I think it was a good opportunity for a physician to kind of have a more human to human interaction ... So, in my head I was like, you are talking to someone who knows about this condition. So, I did not feel like at any point my being a med student came up in our conversation. And they knew I was a med student and they knew my year and all. But they did not address that, and it was more like a, ok, ok, ok… and keep going about their own thing ... It was just like, "hey here is your diagnosis". And I am like, "uh… it's not that… really?" And also, I knew that the medication for that condition was very expensive, and I could not afford that at that time, but the doctor did not seem to care, he was just like, "this is the diagnosis and this is the medication for it". And I am like, "OKAY!"

> … I did not like what that physician did to me, not because their diagnosis was wrong or anything, but because I wanted him to talk about what that diagnosis meant to me. [184]
>
> He [my doctor] did not ask me any personal questions, like how I felt or ... And I do not like it to be that way, you know ... It did not seem like he was rushed; he did sit there and all. But he just did not ask me any personal questions. He did not ask me like, "you are going for the procedure, are you nervous?" He did not seem like he really cared where I was coming from, he just kind of wanted to get to do the thing and move on, you know. [072]

Grids of Specification. These are rules based on which different types of sick persons (referring to their personal characteristics) are classified, related, contrasted, and grouped into categories. Making a personal judgment is required in order to classify patients in this manner. Doctors have to do this on a regular basis as they navigate through their busy schedules trying to prioritize which patient needs the most urgent help. Examples of common categories (which come from the data collected in this study) include: angry patients, nice patients, respectful patients, deserving patients, more important patients, less important patients, and so on. Societal norms in general and personal preferences in particular - on the part of the doctor - feed into the decision-making process in order to classify patients into different categories. This is besides the common perceptions that doctors do not judge their patient, and one who goes to the doctor should rest assured that they are not going to be judged by their doctor.

Below, a medical student is using his personal judgment to categorize patients as happy, unhappy, disrespectful, demanding, and angry. He thinks these categories have more to do with the patient as a person. Just to reiterate, this study is an archaeological analysis and the point here is not to accept or reject the truth of these claims (e.g., whether the patients were actually angry and disrespectful or not), or criticize the

student's behavior for talking about patients in this manner. The goal here is rather to report, as accurately as possible, the types of statements that are happening in real time as part of the medical discourse concerning the person of the patients.

> So, I was like in charge of the patients' history and ... for the most part patients were happy. But there was a few that were not happy. I thought there were some who were even disrespectful to physician. I think, it had more to do with who the patient was as a person, because, they were just demanding everything, and I was trying to help them as I could ... I do not know, all I saw was an angry patient. Like, every time I would enter their room, they'd be like, "why did it take you so long to bring that?" And then like, "oh, this is the 5th time this month I have been to ER, why can't you guys fix me?" And I was like, oyeeee, I'm out… [151]

Below is a couple of student responses to a discussion prompt presented in a focus group (see prompt # 3, FG Protocol, Appendix D). The prompt went as follows: "You are a resident and have 10 minutes before participating in a surgery you have been looking forward to. There are 3 patients who need your urgent attention: A) an 80-year-old woman who has been throwing diapers at junior doctors recently. She is the wife of an important physician at your hospital. B) A 25-year-old patient who takes good care of himself. His mother sued the hospital last year. C) A 55-year-old homeless patient who has been admitted 3 times over the last month with no improvement because he keeps discharging himself. You have enough time to visit only 1 of these patients and leave the other two to your interns. Which patient would you choose and why?" Students responded as follows:

> I would not choose the homeless guy because he is noncompliant. Even though I worked with homeless people, I mean, you can't help somebody who does not want to help himself. And between the other two, chance of getting sued or upsetting the attending physician ... Ummh ... Being completely honest ... I'd probably sit down with the 80-year-old woman and chat with her, and try to make a good impression on her. [MS3]

> I'd lean towards C; but also, I've shadowed in emergency rooms, when you are triaging a disaster for example ... I know I have seen people sort of downgrading the priority of a patient being seen based on the understanding that there is not really much that they can do for them. And so, I can imagine somebody to whom C would not be a high priority for someone who is qualified, and they would sort of put them off to be seen by interns [MS1]

The above students are classifying a patient as: homeless, noncompliant, person who does not want to help himself, and person who is less worthy of a senior doctor's time and attention. Again, they are using their own best personal judgment to come up with these categories, and I am not here to say whether their judgments are right or wrong. The point I would rather wish to emphasize is that doctors do need to classify, relate, contrast, and group their patients into categories according to their best personal judgment–based on the patients' personal characteristics. Of course, classification of patients by the doctor who is using their professional judgment based on the medical condition of the patients (e.g., urgent patient, medically complicated patient, elderly versus young patient and how that affects their survival from a specific disease, etc.) is not part of the present discussion.

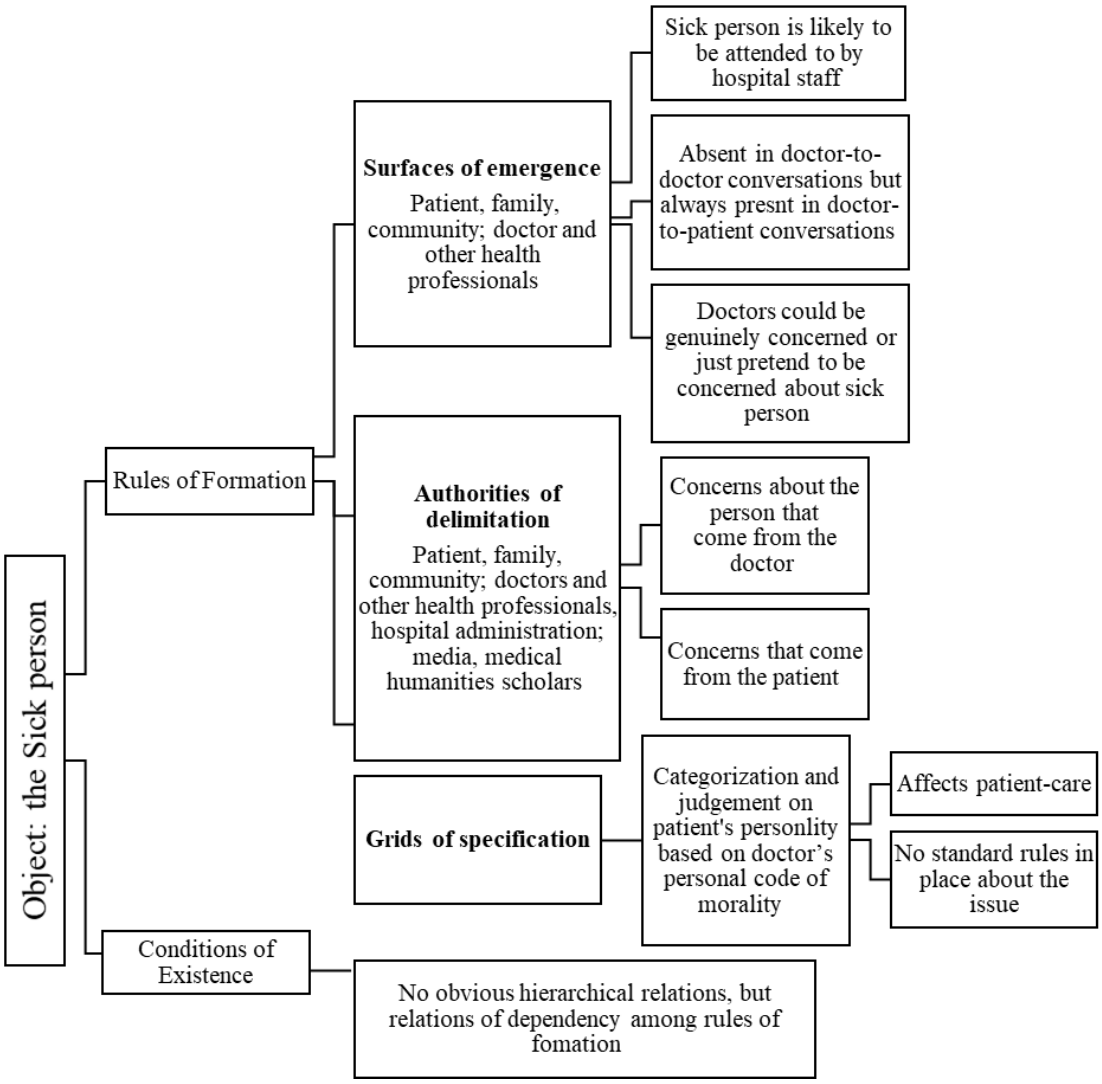
Conditions of Existence for Sick Person as an object of medical discourse.

Again, conditions of existence for an object includes defining the rules of formation for each object which we did above, as well as characterizing the relations of those rules with one another. While there seems to be no obvious hierarchical relationship between the rules associated with the surfaces of emergence, authorities of delimitation, grids of specification for the sick person, there are certainly other more subtle relations that connect these rules with one another. The relations between parts of the above three rules are such that makes them dependent on one another. In a way, some of these rules

are determined and defined by other pieces within the three sets of rules of formation for the sick person as an object of medical discourse. Figure 4.8 summarizes the archaeological analysis of the sick person as an object of medical discourse.

Figure 4.8

Summary of Archaeological Analysis for the Sick Person as an Object of Modern Medical Discourse



For example, doctors being formally taught to pretend being concerned about a patient as part of their medical training, the local medical culture allowing only minimal

talk about patients as whole human beings when doctors are among themselves, and, lack of a formal requirement in place for doctors to attend to the person of their patients, are linked at the level of their very nature that denies the significance of acknowledging a patient as a person and a full human being. The latter two rules also reinforce one another. The often-silent struggle for being noticed and recognized as a human being and not merely a patient by the doctor–on the patients' part–further attests to the effects of this *culture of denial* on the way patients perceive the quality of medical care they receive in modern clinical settings.

Doctors having not only the choice but also the authority of categorizing patients based on their personal characteristics is another rule that further reinforces the culture of denial toward recognizing patients as human beings. Even though at times inevitable, categorizing patients based on their personal characteristics can have detrimental effects on the delivery of medical care by the doctors–as was demonstrated by a few examples of the data above. If the doctor thinks you are less deserving of their care, then you are likely to be affected by this decision in several ways, including but not limited to being denied the care that you would otherwise receive - based on who you are as a person. What makes the situation even more alarming is the fact that doctors classify patients only based on their personal code of morality. Thus, depending on your luck, you may encounter a doctor who has true Christian values and will not discriminate against you as a person, or, a doctor who simply follows his/her own personal upbringing and the values hailed by their family or immediate social circle. If you encounter the latter, there is no guarantee you will not be "*othered*" by that doctor in a way that will seriously affect the time, amount, and quality of medical care that you receive.

It is remarkable that nobody teaches the doctors how to adopt a personal code of morality that will be harmless for their patients during medical school training. Having an inclusive code of morality, a narrow one, or not having any codes of morality at all is a personal choice that medical students enjoy. They are never required to share that code with anyone. Therefore, there really are no standards for having it, and no penalties for not having it. The question is: does having or not having certain codes of morality on the part of the doctor tend to affect the delivery of medical care? Based on the data collected in this study, I would affirm: yes.

Enunciative Modalities

In the previous section we discussed the objects of modern medical discourse as they emerged from the data collected in this study. In other words, we determined *what* people involved in medical discourse talk about when they talk about "medicine". We found medical discourse mostly consists of the talk about some kind of disease and its treatment, the human body, the doctor, and the sick person. Identifying these objects, outlining the rules for their formation, and establishing the conditions of existence for each of them constituted the archaeological description of the first of four elements in the discursive formation of modern medicine. In this section, I will attempt to analyze the second element of discursive formation of modern medicine, which is the modality of statements. In other words, now that we know *what* people talk about in medicine, the next step is to explore *how* they talk about those things. For example, given the first object of discourse: the disease and its treatment, first, I would like to establish what types of statements are most common about the disease (e.g., qualitative description of disease). Next, I will try to address the following three questions: 1) who has the right to

authoritatively speak about the disease and its treatment in modern medical discourse? 2) What is the institutional site from which this speaker is drawing his/her authority? 3) What is the specific position of this speaker vis-à-vis the diseases and their treatments, in general. The entire process will be repeated for each discursive object–four times in total–in this section.

Unlike the discourse of medicine in the sixteenth or even eighteenth century, modern medical discourse is based upon a unified corpus of knowledge suggesting pretty much the same traditions that need to be followed everywhere. This includes similar ways of looking at the disease in general, similar ways of perceiving signs and symptoms of diseases and analyzing them, similar ways of documenting patient history and examination details, using same medical vocabulary (even when speaking in different languages) in relation to same human body structure and functions (unified anatomical and physiological understanding of the body across the board) and their pathological conditions. Therefore, one has to admit that modern medicine is no longer based on a group of diverse traditions, observations, and heterogeneous practices which would differ too much depending on which doctor, which hospital, and which state we are talking about. Even though all findings of this study are local and relative to the Indiana University School of Medicine as observed in 2019, building on the similarities in fundamental medical practice, they can be relevant to and/or insightful for other localities within the United States.

Modalities of Statement about Disease and its Treatment. Statements that are about diseases and their treatment options make up a large bulk of the talk in modern medical discourse. Types of archaeological statements referring to this object include

qualitative description, reasoning and analogy, and statistical statements. Below are a few examples of each type pulled out of the clinical observation field notes:

Example of qualitative descriptions about disease and treatment:

> Patients stated that the pain began the day before and consisted of a sharp pain that lasted around 30 seconds, followed by a dull pain that would last around 2 minutes. The pain was located over his left chest area somewhat near his shoulder. He has never had chest pain in the past. He has been told "years ago" that he has a right bundle branch block and premature heart beats. He will be placed on a diabetic, heart healthy diet. He will need to be NPO after midnight for his nuclear stress test tomorrow. [Obs]

Example of reasoning and analogy statements about disease and treatment:

> Attending talks about patient's meds for 30 minutes with resident: type, choice of drugs, does, etc. … Resident talks back and challenges the attending's choice of drug. Attending: "put her on 400 mg of …" Resident: "but she is already taking too much" Attending, after a minute's pause from the other room: "alternatively, you can put her on Asmanex (medication)". Resident: "I already put her on 400 mg of Atrovent". [Obs] [p.13]

> Resident describes the patient to attending in the hallway outside patient's door. Attending asks questions, residents struggle a bit. One resident speaks up and challenges the attending: "but there are studies that prove IV fluid does not do much in this case" additional 20 minutes' discussion outside the door. They are talking about: viruses, CMV, mono, etc., trying to figure out the correct diagnosis. Attending: "I went to the literature twice because I was not sure of myself". Resident provides few suggestions and asks question. Attending seems to appreciate it. [Obs] [p.15]

Example of statistical computation statements about disease and treatment:

> Number of adults with diagnosed heart disease has reached 30.3 million that is 12.1% of the US population. Percent of office-based physician visits with coronary artery disease, ischemic heart disease, or history of myocardial infarction indicated on the medical record makes up 6.7% of the US population. [Obs]

Rules for the Formation of Statements about Disease and Treatment.

1. Who has the right to authoritatively speak about disease and its treatment in modern medical discourse?

Those who have this right includes doctors, residents and medical students–each with varying amounts of authority; other health professionals such as physician assistants and physical therapists – depending on the nature of the problem; also, medical textbooks and research papers from which the teaching materials (e.g., lectures, notes, and podcasts in medical education) are drawn.

2. What is the institutional site from which this speaker draws his/her authority and what are the rules of this site regarding statements about disease and treatment?

The institutional authority on which statements by doctors, residents and medical students are based (when they are talking authoritatively about the disease and treatment options) includes that of the medical school and hospital. Medical textbooks and journal papers, on the other hand, draw from the institutional authority of peer-reviewed academic practice as well as the institutional authority of their respective publisher or journal.

3. What is the specific position of this speaker vis-à-vis the diseases and their treatments?

In case of doctors: they often have a direct relationship with the disease and its treatment options based on first-hand experience with their patients. They are *observing* subjects of the disease through their contact with their patients. They are also *listening* and *questioning* subjects in relation to the disease through their relationship with their

patients. The qualitative description of the disease, reasoning based on analogy and deduction, and statistical information they provide as discursive statements in the clinic are either based on conclusions reached by others (e.g., medical researchers) or by themselves (based on the physical exam, lab tests and imaging tests they perform on the patient) and are often backed by well-established evidence. Doctors do not make baseless speculations about the nature of disease and their treatment in clinical settings. Put in another way, it's their job to reach to the right conclusions based on supporting evidence in order to treat the patients. They need to do their job for personal, social and administrative reasons in order to remain *a doctor* and be endorsed as a competent professional by others in the field. They need to perform their job as accurately as possible to continue to receive all personal and social privileges that come with being a doctor (e.g., ranging between values such as financial stability, and feeling good about being able to help the patient).

As for residents and medical students, their position is a little bit different. They are similar to doctors in terms of having a direct relationship with the disease and being the observing, listening, and questioning subjects. However, unlike doctors, the qualitative descriptions of the disease and treatment options, especially, clinical reasoning based on analogy and deduction that they provide are not always correct. This is partly due to the fact that residents' and students' perceptions are not always based on the first-hand evidence, or simply the right type of evidence. Thus, conclusions they reach at can sometimes be pure speculations. This is tolerated in part because students - and even residents - do not share the same kind of responsibility as the attending physicians. What happens to the patient does not ultimately affect their professional status and future career

as a medical professional. Also, hospital administration does not rely on the accuracy of understanding and performance by medical students. Attending physicians and clinical faculty hold students responsible mainly for showing up, participating in patient care, and learning from others. It is not *their* job to make the right decisions in terms of diagnosis and treatment of the disease. Therefore, for students, it is not a matter of keeping their career, professional status, or financial privileges when they provide qualitative descriptions, statistical calculations, and/or reasoning based on analogy and deduction in relation to the diseases and their treatments in the clinical settings. A few examples from the data to better illustrate this point.

> Five minutes talking outside the door - not a deep level of discussion. Resident who described the case to the team did not do a good job of presenting at all. He describes the patient but skips some info, does not seem to be sure about anything he is reporting: "I do not know, I mean" Attending: "I wonder if tachy is because of his lobectomy?" The resident who is assigned to the patient shrugs his shoulders. The second resident adds something which is not important at this point. The team goes in. The first resident takes the lead. Patient is a 50-year-old man with small cell carcinoma. [Obs] [p.50]

Here are a few exemplar statements from medical student interviews about their own position and responsibility in the clinic:

> Residents are being paid to be there and ... They are responsible and reliable to a degree; [they are] accountable for whatever goes on with their patient ... A medical student really is not responsible. I mean we may get chastised if we do something grossly wrong, like negligence, but we are not gonna be yelled at. [103]

> And as a 3rd year [student], we have kind of the most freedom with the least responsibility. Technically, we do not do much so you can spend a lot of time with the patients. [063]

In case of basic science medical educators who are not clinicians: Even though they provide qualitative description of some diseases and their treatments as they relate to

teaching their basic science subject, their position is completely different than that of a doctor in relation to this significant object of the medical discourse. First off, their relationship with disease and its treatment is not a direct one because basic science educators, often holding PhDs - and not MDs - do not come to personal contact with patients and therefore have little to no experience of *observing* the disease they are talking about. They are not the *listening* or *questioning* subjects either when it comes to the disease and treatment options. They are mainly *reporting* subjects whose speculations are based on the evidence provided and verified by others (e.g., medical textbooks and clinicians). Nevertheless, their positioning with regards to the statements they make about the disease is rather interesting. That is because their professional status as medical educators, their social prestige, career and financial security all depend upon the accuracy of the statements they make about at least two significant objects of the modern medical discourse (i.e., the diseases, and the human body). Even though untrained in the field, they cannot simply make baseless speculations in their statements about disease. Their statements tend to be as accurate as possible and backed by evidence (even if that evidence comes from all secondary sources). Hence, basic science educators need to stay engaged with disease and its treatment as an important object of medical discourse within the medical school for their own personal/professional benefit.

Finally, in case of the medical researchers who also make all sorts of statements (e.g., qualitative descriptions, reason by analogy and deduction, and statistical calculations) about diseases and their treatments: often, if not always, they have a direct relationship with the diseases they are talking about as medical researchers. They are *observing* subjects but also, and mainly, the *questioning* subjects regarding specific

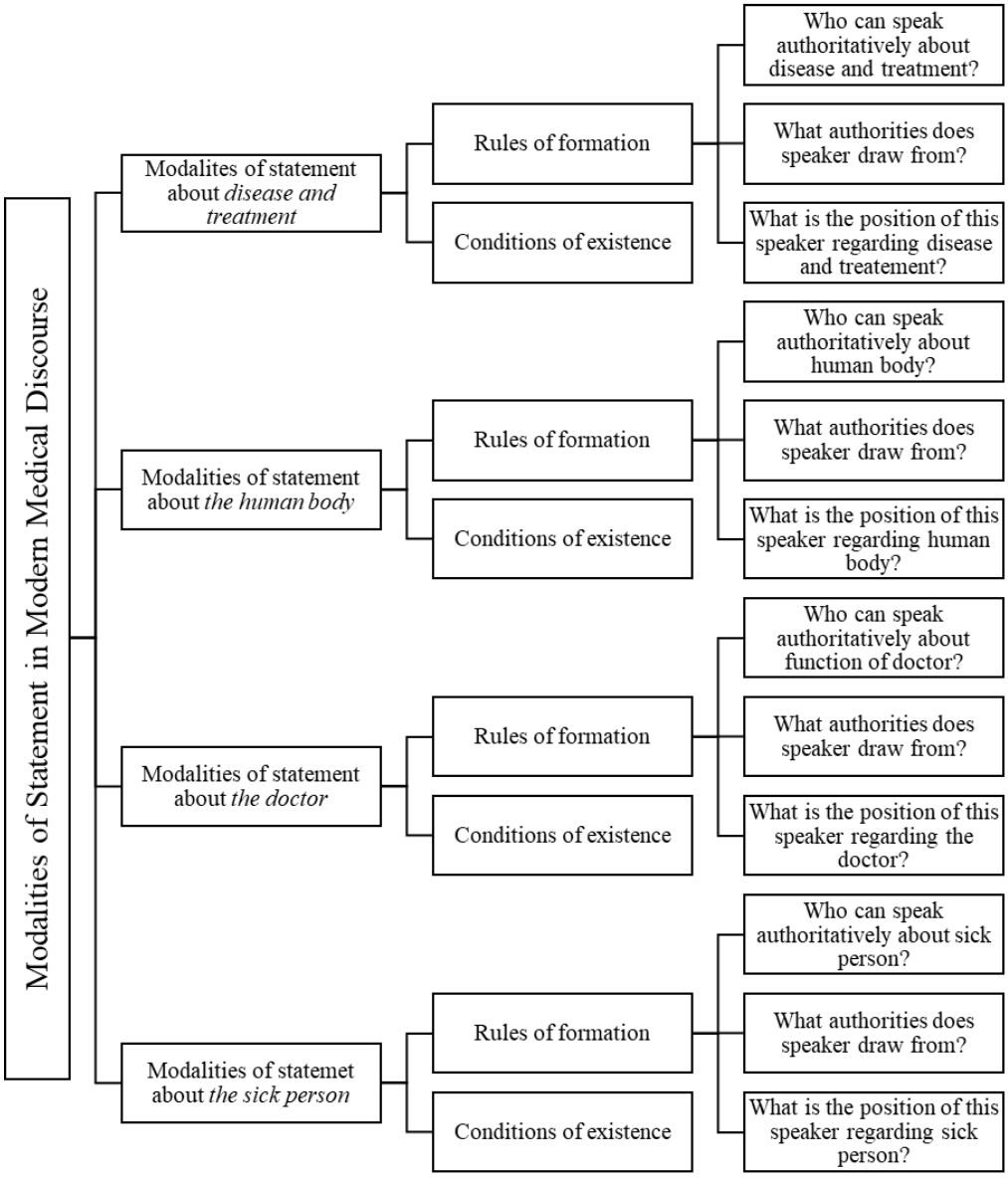
problems about the nature of diseases and their treatments needing to be researched. The statements they make, whether they are qualitative descriptions, statistical information or reasoning by analogy and deduction, are based on well-established and peer-reviewed evidence–and occasionally they may also include some theoretical assumptions and speculations. The position medical researchers assume when making those statements are very much based on their personal and professional interests–given the rules of academic institutions in the US. Medical researchers publish to get promoted and make themselves established in their field. This often leads to a significantly enhanced career and financial benefits for them in the long run. Some publish for the reason of doing a service to the profession itself. These are often people who are, in addition to being medical researchers, are often clinicians as well.

Statements about diseases and their treatments (statistical calculations, in particular) also come from researchers in other fields such as public health, public policy etc. Research like that draws on the authority of academia and their certain publishers. However, their position regarding the disease and its treatment is completely different than others who are directly involved in clinical care (e.g., doctors, residents, students). An epidemiologist, for example, produces statistical results and conclusions about different diseases based on firsthand research. Nevertheless, they do not have a direct relationship with the disease, they are not *observing* or *listening* subjects, but can be a *questioning* subject in relation to the diseases and their treatment. Conclusions they reach are based on evidence and not mere speculations. One may wonder, then, why do they publish about disease when they do not have a direct relationship with it? The answer might that it is their job as epidemiologists to conduct research and publish in order to

receive all personal and social privileges as professional academics. They mainly talk about disease as an object of the public health discourse rather than clinical medicine. Figure 4.9 illustrates the archaeological model of analysis for modalities of statement as elements of modern medical discourse.

Figure 4.9

Archaeological Model for Analyzing Modalities of Statement Used in Modern Medical Discourse



Conditions of Existence for Different Modalities of Statements about Disease and Treatment. There is a hierarchical difference in weight of the statements about disease and treatment depending on who enunciates them, what type of institutional authority the speaker draws from, and what their positioning related to disease and treatment (as an object of medical discourse) is. For example, a statement about clinical reasoning based on analogy and deduction made by an attending physician has more weight when compared to the same statement made by a resident or a medical student. As a rule, analysis based on analogy and deductive reasoning (clinical reasoning) is most endorsed if it is spoken by an attending physician. Residents and students also perform deductive reasoning in various clinical situations but their say - while deemed acceptable - has less weight than that of the attending physician.

Interestingly, the patients are also allowed to make statements like that using their deductive reasoning, but their say has almost no value when it comes to deciding the diagnosis of the problem through clinical reasoning. Clearly, deductive reasoning is not the only modality of statements that is weighted hierarchically in medical discourse. Other modalities such as qualitative descriptions and statistical information about disease are also weighted differently in clinical medicine depending on who speaks them, what institutional authority that speaker draws from, and what their position is regarding the human body as an object of medical discourse. For instance, a 3rd year medical student reporting statistical information drawn from a peer-reviewed journal article carries less weight in the eyes of the patient and patient families compared to the exact same information coming from the same source, but spoken by an attending physician.

Modalities of Statement about Human Body. Types of archaeological statements referring to the human body as an object of medical discourse include qualitative description of the body; biographical accounts of how the body behaves over a specific period of its own history (patient history); statements about the location, interpretation, and cross-checking of signs in the body; reasoning that leads to predicting how the body will act under certain circumstances through an analogy and deduction (e.g., prognosis); statistical calculations about the body (e.g., mortality and survival rates, demonstration of correlation between certain causes and their effects on human body, etc.); and paternalistic statements by doctors in reference to the sick body. Let us observe some examples of the above modalities of enunciation below:

> Example of qualitative description statements about the body:
>
> In anatomy lab, we had a 90-year-old female cadaver who died of colon cancer. She had no fat, but muscles were not too good either, they were paper-thin. We also had a 29-year-old body-builder and you could see every muscle on his body. [004]

Example of biographical history statements about the body:

> Patient: "my skin started itching over the forehead first. In a day or two I developed the rushes and then they started burning so bad. I also began feeling dizzy and feverish ... they told me it is a type of skin infection" [Obs].

Example of statements locating signs and symptoms in the body:

> Resident is reporting patient's lab values to his attending: "cholesterol and triglycerides were high in the blood, urine was clear. The AST (test for liver enzymes) results were messed up ... I have put in the order for a maxillofacial CT, will follow it up via phone right now… [Obs] [p.1]
>
> Resident calls another department about a patient's biopsy and asks whether the patient needs to get one: "the mass is in the right iliac fossa and we are thinking of perhaps a lymphoma" ... he calls three other people about the same patient, following up with cardiologist, radiologist, etc.,

> "Can you send me the results of his coronary angiography and echo by 2 PM today?" [Obs] [p.2]

Example of statements predicting how the body would react under certain conditions:

> Attending is teaching the residents in the conference room during the education session: "Heart transplant recipients receive more aggressive immunosuppressant treatment during the early post-transplant period, incidence of non-Hodgkin lymphoma is five times higher after heart transplant than after kidney transplant. In short, the more aggressive immunosuppressant drugs you receive, the more likely you are to develop the cancer after the transplant." [Obs]

Example of statements about statistical information as they relate to the body:

> Resident: I looked this up last night and found a study that says among patients who received neoadjuvant therapy, the mortality rate for right pneumonectomy was 21.4%, that is, 3 in every 14 patients getting the surgery. [Obs]

> Attending discussing the breast cancer patient with his residents: So, I read this somewhere that, the number of women with early stage disease in one breast who undergo removal of the unaffected breast has increased from 5% of total mastectomies in 1998 to 30% in 2011. [Obs]

Example of paternalistic statements about the body:

> I tried to stop taking the medication that made me feel terribly nauseated but she (the doctor) said you're not allowed to. I did not know what to do so I just stopped going to her anymore. She was like, whatever the insurance paid for I had to have it. I was willing to pay for another $20 if there was something else to help, I did not mind, but she was like just following the rules and not what I wanted. She was just trying to tell me what's best for me and was not really understanding when I kept telling her that I was actually worse, I was worse than I ever was, so I just felt like she did not care. In our transitions-1 class they were telling us about the paternalistic model versus patient-centered model. She was definitely following a paternalistic model by just telling me what to do and what's best for my body regardless of what I would have wanted as a person, based on my other needs. [051]

Rules for the Formation of Statements about the Human Body.

1. Who has the right to speak authoritatively about the human body in modern medical discourse?

Those who have this right include the doctors, residents, and students; allied health professionals; the patient; medical texts and journals; and both clinical and basic science faculty in medical schools.

2. What is the institutional site from which this speaker draws his/her authority?

The medical care teams including doctors, residents and medical students draw from the authority of the hospital when operating in the clinical settings; the patient, on the other hand, uses the ownership authority over the body that she speaks about; medical texts and journals base their statements on the authority of academic medicine; and lastly, the faculty talking and teaching about human body base their assertions on the authority of medical school, as well as medical texts, and the hospital (in case of clinical faculty).

3. What is the specific position of this speaker vis-à-vis the human body as an object of medical discourse?

In case of doctors, residents and medical students, they all have a direct relationship with human body as an object of medical discourse. All doctors get trained in the anatomy of bodily structures often by means of dissecting human cadavers in medical school. Medical students typically develop their authoritative relationship with human body for the first time in anatomy lab. This can be a highly complicated and emotionally disconcerting experience for some, a mere learning experience for some others, and something in between those two extremes for the remaining majority of students. One of the coping strategies students tend to develop in the anatomy lab is desensitizing

themselves toward cadavers' bodies in order to be able to work with them. In an attempt to not get overwhelmed by emotions, they try to distance themselves from the fact that the cadaver lying in front of them was a walking and talking human being that used to live among them not a very long time ago.

> We often called our cadaver our first patient. I get that, we appreciate it that they dedicated their body to us and everyone deserves respect and dignity ... however ... for me, I took it more as a learning experience. Like, when we were working on the face, it is a sensitive area, it's at the end of the course, after bisecting the head when it does not really look like a human anymore… so that was the part for me where I was like, whoa! We just did that! If I did not desensitize myself, there comes almost a little bit of a paralysis of decision making, like, people who are in the surgery often experience that feeling ...You know that this person is not alive, but you still respect them. [004]

> If you are going to become a physician, and you need to desensitize yourself to a cadaver, then I think medicine will be very difficult for you. I think you can, if it helps you, but then how are you going to make it through a real person that's alive than dead, you know, you have to be able to confront the fact that this was a real human being who was kind enough to dedicate their body to the education of stupid first-years who do not know how to use the scalpels, we are not doing a good job. [063]

One of the problems often arising as a consequence of using a desensitization as an actively chosen strategy is an almost subconscious objectification of the human body on the part of students who try too hard to desensitize themselves. Whether students do it consciously or subconsciously, once they objectify the human body it makes it further difficult for them to treat their cadaver's body with respect. This type of objectification might also have long-term effects on some students in terms of the way they perceive, observe, and touch the human body as a physician in the future. A more detailed discussion of this topic will be provided later in this chapter as we discuss the strategies related to the human body. Let's look at the following example that describes medical

students who treat their cadavers' bodies like an object–or even worse than a regular object such as a pencil.

> [In anatomy lab] mostly people were respective but there were also definitely people who would like, just let it drop, and not take the time to set it down gently, and were kind of rough with it [their cadaver's body]. I do not know. Not caring about it ... I mean, I think it's important to always be gentle, even if it was a pencil, I am not gonna throw it across the room. Just like, it's a matter of courtesy… I do not know. It's still someone donating their life to you… so if that was my body and a stupid med student is throwing my legs around, I would not be happy about it. I think the donors envision a medical student who would take care of them, or you would not give your body away if you knew that someone was gonna cut you up in three and throw around, mess around with you, you know. [043]

In general, student comments became more sensitive to objectification of the cadavers' body when they were asked whether they would be willing to donate their own bodies to anatomical education. Below is an excerpt from the interview conversation with a medical student who sounded pretty comfortable with the way bodies are currently being handled in anatomy lab. However, once I asked him if he would like to donate his own body to science then, his response was as follows:

> So, I remember saying no [to donating my body] when we were discussing this in the class, but it was a very quick talk and more of a gut feeling. I do not think I had really processed that enough before saying no ... cause, I'll be like, almost a hypocrite, oh my God, like, I said, oh I myself had that mindful attention in treating them [the cadavers] as a person and… and I also said that there was a culture of self-correcting among students that helped reminding each other to stay ethically accountable toward our cadaver ... but, I do not know. I feel like I am not comfortable with that level of objectivity [if it is my body as the cadaver]. Like, I would want more mindfulness, I did not feel, like… so I know that students have to objectify in order to function, but I also feel like that would be like too much objectification for me to do it [donate my own body] and ... [But it's only when it comes to your own body when you feel different?] YES, YES! That's exactly what I wanted to say. Like, that's the reason I am like squirming, literally [Laugh]. [141]

In relation to the living bodies (of the patients), the positioning of doctors, residents and medical students is not much different either. They still have a direct relationship with the body through physical examination, which includes looking at, listening to, and touching of certain parts, or all, or any parts of the patient's body. Medical practice is one that requires intimacy with the patient's body in order for the practice to be effective. Doctors are privy to the things about their patients' bodies that no one else, not even the closes people to the patient, often are.

> Attending is leading the session; he reads a patient's case to the residents, word for word: "Mr. Smith is delivering normally-shaped stool, 4-5 times a day" Residents laughing: "oh, bless" [Obs] [p.30]

> Like, some patients will share with us things that they have never really shared with anyone else, and we are being trusted to carry that to the extent that our relationship with that patient holds up, in a more personal way. [MS2]

> I think overall the doctor has a more personal relationship, whether it's due to the nature of the profession or not, but it's a personal job. [MS3]

Doctors are also able to observe the internal parts of the body via medical imaging such as CT and MRI that they order for their patients. Thus, the statements they enunciate about the human body are for the most part conclusions reached based on first-hand evidence. At times, these statements may also include theoretical speculations, especially when it comes to microscopic structures of the human body. In sum, doctors, residents and medical students are the *observing*, *listening*, *questioning*, and *perceiving* subjects in relation to the human body as an object of medical discourse.

The medical team's relation with a living human body is what I would like to call strictly professional in the sense that they deal with the body as part of their routine job. Dealing with human bodies is not a matter of life and death to them whereas how they

conduct themselves when handling human bodies maybe a matter of life and death to the patient. Below are some student comments in response to a movie trailer shown at the focus groups. To Err is Human (Eisenberg, 2018) is a documentary that focuses on preventable mistakes in the US healthcare system. Here a few examples of how students responded:

> So, I know sometimes they take out the wrong kidney from a patient for example, and that happens more than several hundred times every year. Does that mean they did not even communicate and make sure which side they needed to work on? [MS3]

> I think it's something that we need to get better at, and the hospitals, they are working on that. Like, I know before surgeries for example, they always double check to make sure it's the right patient, are we operating on the right place, or the right side, and they count the pieces of gauze to make sure they do not leave any inside the patient afterwards… so these are avoidable things, you know, that hospitals work on. I do not think we are perfect. I think we are still working on how to completely eliminate all of those errors. [MS2]

Students also linked the doctors' sometimes neglectful attitudes towards the human body (especially in cases of surgery) to the broader context of the hospital. The rules and regulations in the hospital, which is a nondiscursive institution, were directly related to the ways doctors and other healthcare professionals behave toward bodies. Here are a couple examples from the focus group data:

> I think part of it might be due to lack of a work-life balance, which does not exist a whole lot among physicians. So, if you are so fatigued all the time, then you are like, not aware of your tiny mistakes all the time, but those tiny things could have a grave impact on the patient. And that's basically everyone who works in the healthcare industry. There might be very few people who work in the healthcare industry but are not tired all the time. [MS3]

> So, one remedy for this would be having more doctors, more resident positions available. If there are more doctors there will be more checks in the system and also, they won't be too tired and burnt out all the time. [MS3]

Lastly, making paternalistic statements about the human body is common among doctors in general, and the attending physicians in particular. Something that often accompanies these statements is what Foucault calls the *medical gaze*, "the eye that knows and decides, the eye that governs" (BC, p89). The gaze is what tries to locate and define boundaries of a ghost (the disease) that has possessed a person's body. Let's look at an excerpt pulled from a patient's treatment plan to illustrate this example:

> Patient was recently diagnosed with borderline diabetes and has been trying to control it with diet and exercise. Upon presentation in the ED his blood glucose level was found to be 280. We will place the patient on sliding scale insulin and will continue to monitor his blood sugar levels throughout his stay in the hospital. We will also obtain a hemoglobin A1C to get a sense of what his sugars have been over the past 3 months. We will encourage the patient to follow-up with his PCP about his diabetes since it appears that diet and exercise may have failed, thus requiring a medication to control his diabetes.

One can see hints of a tone here that assumes that what is being referred to as "patient" here is a body that has been possessed by diabetes. An archaeological analysis does not commit to criticize the validity of any discursive practice. Therefore, I am not suggesting that what is happening in the above excerpt is wrong or defective in some way. Rather, I am simply reporting the existence of medical gaze on the part of the doctor, which consists of paternalistic statements regarding the patients' bodies as part of the modern medical discourse.

In the case of patients which is the next group of people who can speak authoritatively about the body: Whereas patients have a very direct relationship with the body they talk about (which is their own body), the statements they make about the body are often speculations and at best backed by evidence from the popular media and the

World Wide Web (unless the patient is a medical professional himself). Let's look at an example here:

> Patient comes with like, 5 pain radiating down her hip. And he is a hip surgeon so she is thinking like, oh it's a hip problem. So, he quickly does like an X-ray and notices that it is a back problem. So, he is like, I am not a spinal surgeon so, I can't help this problem. She gets super upset, and like, I am very disappointed, I have come for this, and how could it not be my hip? I think she had a little bit of dementia herself; she was coming from the nursing home. So, he really explains and does a tracking, he goes through multiple times, and it's kind of a difficult situation. He was kind of doing the best he could but there was no way to explain to ... he was kind of hitting the wall there, you know. [072]

Clearly, that is because, unlike doctors, patients are not trained in observing the human body in general and from within. Their relationship with their own body–in a sense–is that of an *observer* from the outside. They are also the *listening*, *questioning*, and *perceiving* subjects regarding their own body as an object of medical discourse. Moreover, the only party that might have a life and death interest in the entire business of seeking medical care is the patient, whereas for others, it is mainly a matter of job requirement to deal with the patient's body.

In the case of medical textbooks and journals, their relationship with the human body is often a direct one, especially when they use firsthand research data and observations. In general, archaeological statements made in a medical textbooks and journals are conclusions backed by well-established, peer-reviewed evidence[8]. The

[8] Some medical textbooks and journals might contain data that were obtained through less than ethical means. For example, specific medical knowledge that is likely to have been the result of unethical experimentations conducted on prisoners of WWII and victims of concentrations camps. However, the means through which the data is obtained is beside the point in the present discussion. The point that I am trying to establish here is that the data in medical textbooks and journals are usually the result of a direct relationship between researcher and the human body, the accuracy of which is supported by hard evidence and peer-review. While it is highly important to discuss whether that relationship was established through ethical or unethical means, such a discussion is beyond the scope of the present discussion and not relevant to the level of the archaeological analysis. Archaeology neither looks for the origin of the statements, nor does it attempt to verify the legitimacy of the statements' source.

authors of these documents mainly assume the position of the *observing* and *questioning* subjects. Again, the interests served by publishing about human body through research are broad, ranging from a degree requirement to an enhanced research career, professional development and financial outcomes. Serving these interests may also indirectly help a broad range of patients that are relying on constant enhancement of medical profession.

Lastly, in the case of faculty who teach students about the human body: They might have a direct relationship with bodily structures they are teaching about (e.g., in case of the anatomists, pathologists, and clinicians). However, some faculty do not have a direct relationship with human body and the statements they make are mainly based on theoretical speculations that they draw from a mouse model, for instance. Therefore, members of the latter group may not be the observing subjects, but they are the *questioning*, and *perceiving* subjects who draw from authority of the academia to enunciate statements about human body as an object of the modern medical discourse. Faculty's position regarding the human body are, again, defined by their job requirements, professional development and financial aspirations as employees. Their efforts in training future doctors *indirectly* affect and benefit patients in the future.

Conditions of Existence for Different Modalities of Statements about the Human Body. Just like the relations between modalities of statements about disease and treatment, there is a hierarchical difference in weight of the statements about human body as well depending on who speaks them, what type of institutional authority the speakers draw from, and what their positioning related to the human body (as an object of medical discourse) is. For example, a statement about clinical reasoning based on analogy and

deduction made by an attending physician has more weight compared to the same statement spoken by a resident or a medical student. As a rule, analysis based on analogy and deductive reasoning (clinical reasoning) is most endorsed if it is spoken by an attending physician. Residents and students also perform deductive reasoning in various clinical situations but their say - while deemed acceptable - has less weight than that of the attending physician.

Patients also make statements about their own body. What doctors are highly interested in is patient's information about the symptoms and sings of diseases, which is valuable information for reaching correct medical diagnosis. However, patients' own clinical reasoning and attempts in articulating statements about human bodily structure and function have little to no value when it comes to deciding the diagnosis of the problem through clinical reasoning. Again, deductive reasoning is not the only modality of statements that is weighted hierarchically in medical discourse. Other modalities (e.g., qualitative descriptions, patient history, interpretation of signs, and most of all, the paternalistic gaze are all statements that will be weighted differently in clinical medicine depending on who speaks them, what institutional authority that speaker draws from, and what their position is regarding the human body as an object of medical discourse. For instance, a medical student's report of statistical information drawn from a peer-reviewed journal article carries less weight in the eyes of the patient and patient families compared to the exact same information coming from the same source, but spoken by an attending physician.

Modalities of Statement about the Doctor. Modalities of statement that refer to the doctor as an object of medical discourse include: qualitative description of doctor,

biographical accounts of the doctors, and statistical statements about the doctors' performance in the clinical settings. It is worth reiterating that the *doctor* here is not a person. It is a function, a position that anyone can step into. Also, it is not merely an individual function or position that is referred to in this section. Rather, the doctor that we discuss as an object of medical discourse is a node in the network of similar functions and always in relation to others, within the modern medical discourse. Let us now look at a few examples for each modality of statements about the doctor–as specified above.

Example of qualitative descriptions about the doctor:

These include descriptions of doctor in terms of their personal and professional characteristics, such as good doctor, bad doctor, caring doctor, patient-centered doctor, young doctors, paternalistic doctors, etc. (see grids of specification for the doctor as an object, in the previous section, for more).

Example of biographical statements about the doctor:

These could be positive or negative characterization of some physician that students have known in the past. They tend to describe interesting characteristics they have seen in those physicians to their peers all the time. This type of statements about doctors are pretty common among medical students, mostly during their training years in medical school. These statements are less common but are still present only in doctor-to-doctor private conversations, as seen in the quote below.

> I had an attending who kind of works hours to actually belittle people. That was the hardest month in my medical school career and it almost drove me away from the field I am going to. He took every opportunity to chew me out and spit me out, I was already fearful of his evaluation of me, I probably should not have because it was going to be crummy because it was more dependent on him than it was on me. [034]

One thing I saw that was really great was that one time a physician was showing us something on a baby, and the baby needed to change the diaper and he changed the diaper. He did not make a nurse do it, he just did it himself. Afterwards, they were like, thank you! So, he's like willing to help out the other staff… I think it's that kind of behaviors that makes teams want to work well together. And the physician did that, you could kind of feel it in the air that they were in it together. [072]

He is the chief of medicine at Eskenazi, he is a pulmonary critical care doctor. From all the interactions I've seen, I have not seen him yet in the actual practice, but from all the talks he has given and the classes he's taught us, I really enjoy his demeanor and his approach to just life in general and to medicine. You can kind of tell he still has the passion for what he does, which is the good thing. He tells us the things that still fascinate him even though he has been doing it for years now… So just that, he is encouraging, he is uplifting to others, he has a positive outlook, and he is still excited about what he does. And is able to recognize ways that he still enjoys this job, I think that whole approach is something good. [112]

I saw a physician who knew the janitors by name, on first name basis, that's a really special work culture. So that janitor felt like they were doing something to contribute to the healthcare team. [034]

Example of statistical statements about the doctor:

About 58 percent are employed at a hospital or with a medical group, while about 31 percent are employed at a private practice. About 51 percent of physicians would not recommend medicine as a career, where about 55 percent state that morale is very or somewhat negative due to stressors. About 54 percent of physicians in the country have stated that they have experienced burnout as of 2014. There has been an increased number of stressors such as the lack of a single payer system that has contributed to extensive insurance paper work and a decrease in independence for many physicians as hospitals purchase more private practices. Many, about 80 percent, also state that their workload is at their capacity or even overextended. Only about 11 percent of physicians spend 25 minutes or more with their patients (Characteristics of U.S. physicians in 2018, Elflein, 2018).

Rules for the Formation of Statements about the Doctor.

1. Who has the right to authoritatively speak about the (function of the) doctor in modern medical discourse?

Those who have this right include the medical school and hospital administrations, doctors, residents, medical students, and the patients.

2. What is the institutional site from which this speaker draws his/her authority and what are the rules of that site regarding statements about the doctor?

The administration members talking about the doctor draw their authority from the institution of the medical school and/or hospital. Doctors themselves, residents and students making statements about who the doctor is and what they should be like, base their statements upon the authority of the medical profession as an established institution in society, of which they are a part. For example, a doctor - or even a medical student - talking about what a doctor should be like is much more credible in the eyes of the society in general compared to a businessman or a middle school teacher talking about the same thing. That is because the doctor and the student are coming from a medical professional background that gives them the privilege of speaking more authoritatively about the function of *doctor* in medical discourse. Lastly, patients base their statements on the authority of the hospital, private clinic or any healthcare facility administration that values patient feedback and treats it as legitimate statements with possible consequences for healthcare providers.

3. What is the specific position of this speaker vis-à-vis the doctor as an object of medical discourse?

In the case of the administration members, they have a direct relationship with the doctors who work in their administrations, so they get to observe them, hear them, question them, and develop their own perception of how doctors perform their job. The administration members make statements about the doctor as part of their job as the observing managers. The statements they make about the doctor are often conclusions reached at based on the firsthand observation and data collection. However, the administration members also make a lot of statements about doctors that are merely theoretical speculations and/or wishful thinking. A couple examples:

> The medical profession has long subscribed to a body of ethical statements developed primarily for the benefit of the patient. As a member of this profession, a physician must recognize responsibility to patients first and foremost, as well as to society, to other health professionals, and to self (AMA Code of Medical Ethics, 2016).

> To function as a premiere medical school and continuously improve, IU School of Medicine requires exceptional and committed individuals. A working and learning culture that is based upon the school's articulated core values and guiding principles is critical to attracting, retaining and nurturing members of the IU School of Medicine community. For this reason, and to warrant the trust of patients, families and society at large, all members of the IU School of Medicine community are committed to fostering and embodying professionalism (Indiana University School of Medicine Website; Mission, Vision, and Core Values, 2020)

In the case of doctors, residents and students, for the most part, they have a direct relationship with the professional role of the doctor. They are observing, listening, questioning and perceiving subjects. The statements they make are sometimes theoretical and other times based on the firsthand experiences. Being assigned to get into the role of the doctor themselves, doctors, residents and medical students are seeing their own professional interest in defining who the doctor is and what it means to be (or become) one. For example, when students were asked about what professionalism meant to them

in this study, majority of the statements they made were about defining what the doctor should/should not do on a personal level (e.g., dress code, having time-management skills, responding to emails, etc.) to be considered a good professional. It rarely touched on the subject of how a doctor may serve the patient/sick person better as an outcome of possessing a good level of professionalism. Exemplar quotes below show how students focus on the person of the doctor–and not the patient–when talking about professionalism:

> And I kind of realized from friends of my own, that… I need to show up 10 minutes early before their shift starts; so, recognizing that somebody holding a position higher than you told you to do something, you do it essentially immediately or at your earliest convenience. And you can't just sit around with your phone all day, or studying at your own, like, the things that you think that you should be studying. So, my idea of being a professional person is essentially just being open and ready to learn at all times. [103]

> A part of the definition for professionalism is like, you know, you have to be like in formal attire, and like wearing your white coat, so you're representing the medical profession and not just yourself, so you have to be very clean cut all the time. Be very polished. [012]

> As a doctor, just being confident. At least to give the aura of being competent and knowledgeable about whatever their expertise is… And kind of carrying themselves obviously with an air of being normal. You can't show up to work as a doctor with your hair out of the place and wearing T-shirt and basketball shorts. Obviously, that's not professional. [103]

In the case of the patients: When patients talk authoritatively about their personal experiences with a doctor, they are often talking about a direct relationship they have had with a doctor in person. When providing their feedback, the patients assume the position of an observing, listening, questioning, and perceiving subject in relation to the doctor they had seen. The statements they make are mostly based on their firsthand experience and factual evidence, but they also make statements sometimes that are merely theoretical

speculations (e.g., the expectations of what an ideal doctor should do based on their own subjective understanding of the doctor's job). Below is a couple example of the latter situation:

> Patient comes with like, 5 pain radiating down her hip. And he is a hip surgeon so she is thinking like, oh it's a hip problem. So, he quickly does like an X-ray and notices that it is a back problem. So, he is like, I am not a spinal surgeon so I can't help this problem. She gets super upset, and like, I am very disappointed, I have come for this, and how could it not be my hip? I think she had a little bit of dementia herself; she was coming from the nursing home. So, he really explains and does a tracking, he goes through multiple times, and it's kind of a difficult situation. He was kind of doing the best he could but there was no way to explain to ... he was kind of hitting the wall there, you know. [072]

> Part of that subjective thing is, like, doing something that the other person is not ok with. Whatever that maybe, and it's different for different people. So, if I am not okay with you standing close to me, then that's unprofessional. I am gonna write it up, if you give me a survey, I'd say he was unprofessional, he stood too close to me. And then he [the doctor] goes to the next room and they would say, I like how he stood close to me, it made me feel important. [181]

Unlike doctors and administrators, the patients make these statements without any pressure to secure their own employment, career, or financial security. Rather, they often share their perception of their doctor to either report an injustice, file a complaint, or to report appreciation and gratitude regarding the doctor's behavior towards them. Let us look at a few examples of patients providing verbal and written feedback about the doctors that are taking care of them:

> Hallway pin board above the nurses' counter is full of Thank You cards signed by patients and patients' families. Countertop for nurses is also displaying several cards from the patients and their families thanking the entire staff for their dedication and hard work. [Obs] [p.36]

> There are about 6 people on the medical team during morning round. We all are about to leave the room after visiting a patient. Patient: "I like that you are in here, thank you for being there for me. See you all later!" She says that smiling at everyone happily and appreciatively [Obs] [p.42]

> Small cell carcinoma patient, elderly male. He looks very happy today. "I could not have had a better team to take care of me", he addresses the attending and looks at the entire team appreciatively. Patient's wife: "He is writing "Thank You" notes to all his doctors and keeps them under that tray". Patient: "I will make sure to add Dr. Longie's name on the card!" says showing one of the cards that he just pulled from under his tray. [Obs] [p.18]

Conditions of Existence for Different Modalities of Statements about the Doctor. There is a hierarchical difference in weight of the statements about who the doctor is and wheat he/she should be like, depending on who speaks them, what type of institutional authority this speaker draws from, and what their positioning related to the function of the doctor (as an object of medical discourse) is. For example, a statement about how the doctor should behave in the clinical setting that is coming from an attending physician has more weight when compared to the same statement made by a medical student. And then again, the same statement defining what a doctor should be like is more credible when coming from a medical student compared to the exact same statement coming from a grocery store owner.

In clinical settings, patients and patient families also make statements about the function of the doctor. These statements include both positive (e.g., appreciative gestures and comments) and negative (e.g., criticism of the doctor's behavior as a written feedback submitted to the administration). Patient's feedback about the doctor's performance counts as important data in the process of doctor's evaluation by most hospital administrations. In this case, worrying about a patient's evaluation is practically better justified for a doctor than worrying about some medical student's evaluation of his performance in the clinic. Therefore, patient's statements about the doctor carry more

weight that students' or even residents' statements about the doctor in the clinical settings.

Qualitative description of the doctor's function and performance is apparently not the only modality of statements that is weighted differently depending on who speaks it and what kind of authority they are drawing from in modern medical discourse. Other modalities including biographical accounts of the doctor's life and behaviors, as well as statistical information about doctors' performance in a certain area are also weighted differently in clinical medicine depending on who speaks them, what institutional authority that speaker draws from, and what their position is regarding the doctor as an object of medical discourse. For example, if a 3rd year medical student reports a certain statistics about the performance of the doctors in a certain field and at a certain locality, the statements are going to carry much less weight and consequence for the attending physician compared to the event where the exact same statistics are being reviewed and reiterated by the hospital administration. The same with biographical accounts, depending on who recounts them and by what type of authority, it will be weighed differently in the clinical settings.

Modalities of Statement about the Sick Person. Types of archaeological statements referring to the *person* of the patient in medical discourse include, again, qualitative descriptions, biographical accounts of the sick person (e.g., talking about the patient's family and social history), reasoning by analogy and deduction (e.g., making judgments about who the patient is, why were they treated in a certain way under certain circumstances, and how would they act under certain circumstances), statistical calculations (e.g., referencing the statistics of people belonging to a certain race or gender

acting in a specific way as patients), and paternalistic statements (e.g., talking about what is best for the patient and what they should do to help with their own treatment). Let us look at examples for each statement type below.

Exemplar qualitative description statements:

> The patient was an African American woman in her early 20s. She had one child and was living with her brother and her boyfriend. I think like, four people lived there, and they reported low-income status. [141]
> So, this one woman comes in and she is in a diabetic coma, she was too poor to buy insulin, so she was rationing out her doses for the insulin to last longer, and so her blood sugar kept going higher. She was also on Medicaid, so she was brought in by her daughter who was maybe about 35… so, she was literally saving her medication to keep it for longer, and that was just so sad… [141]

Exemplar biographical accounts of the sick person:

> When I was at Methodist for a surgery rotation, we got an educated family. Their son had kidney failure as a child and now he was 35, still living with them as he goes to dialysis 3 times a week, just living with the condition, you know. So, he had a very acute abdomen and the question was whether we needed to operate. While our surgical team was the leader, he still had cardiologist, nephrologist, and the dialysis team coming by and palliative care was involved. So, there were tons of doctors but this educated family could not figure out who exactly is doing what. The mom was confused and so it finally took a family meeting. It's like we were all on the same page, we knew what was going on, it was just a matter of communicating that to the family… but when you get all those doctors, sometimes they do not agree. So ... the family was lost. And I can imagine, like, the mom was there the whole time 2 weeks and dad would pop in from work; but a lot of other families do not have that kind of time or resources to dedicate and ... So, it can be very confusing. [004]

Example of reasoning by analogy and deduction statements:

> It usually happens with my parents, like, they get frustrated with their healthcare experiences. They have a language barrier [parents are immigrants from Uzbekistan] … My mom has arthritis and her legs hurt like all the time, but she feels like wherever she goes they do not listen to her. Her doctor was a really demeaning person and she was just being rude to her… she was talking to her in a rude way. So, like, my mom kind of stopped going to the doctor anymore even when she had pain. And I felt like that should not happen… and so we had to change her doctor then…

> Like, you are not supposed to be mean to your patient because you're getting paid for what you're doing. I feel like it happens most of the time to them, even to my dad, like, he does speak English but I feel like they treat him differently, and you can see that. [161]

Excerpts below are pulled from the focus groups with medical students. These responses were provided as they were discussing prompt #3 (see FG Protocol in Appendix D)

> I'd go with C because that looks like it's the most medically complex. As a resident I'll be more experienced than the interns to deal with that type of patient. A, [laughing], I'd leave that to my interns because she might be mean but I think it may also be a good experience for them to understand some of the nuances of daily practice, I mean the patients are not always necessarily nice to you… B is almost an ideal patient, like, he is educated, there should not be any problem communicating with him. [MS1]

> I think I might choose B, because it says his mother sued the hospital last year, which means they probably thought that they were not treated well in this hospital. So, going to him and giving him this little bit of extra time, I think would actually be helpful in changing their perception in the long run. [MS3]

> I would not choose the homeless guy because he is noncompliant, even though I worked with homeless people ... I mean you can't help somebody who does not want to help himself. And between the other two, chance of getting sued or upsetting the attending physician. Ummh ... Being completely honest ... I'd set down with the 80-year-old woman and chat with her, and try to make a good impression on her. [MS3]

In the excerpts above, future doctors are making judgments about the sick people as they are trying to predict what each patient will do if they are treated and if they are not treated urgently. For example, it is being assumed that patient A is going to be mean again the next time medical staff contacts her, because B is educated, "there should not be any problems communicating with him", and C "does not want to help himself" because he is homeless and noncompliant.

Exemplar statistical statements about the sick person:

> Resident is explaining the case to the team in the hallway outside the patient's room: "So, I looked it up yesterday and it turns out that glaucoma

> is about 5 times more common in African Americans, and they are also about 6 times more likely to get blind because of it." She suggests any plan of treatment for this patient should keep this information in mind. [Obs]

Exemplar paternalistic statements regarding the sick person:

> I never really heard a whole from my mom, sometimes she would come home and complain about how hard of a time she has had. So, in her case being a pediatrician, she often times gets to suggest what is best for the kid, whereas parents have the autonomy over what happens with the kid ... so I knew from that aspect that sometimes patient-physician interactions can be frustrating, it can be annoying. There are times that patients do not go with science and what the medical profession recommends ... and you still have to be like, you have to still give the patient that autonomy. [012]

> If they do not want that shot, then, that's a bit tricky to me ... I think I would be a little bit more pushy with that just because of the acquired immunity. And really trying to push them into taking the vaccination. So, I'd try to clarify what sort of misinformation they have heard. [103]

> Just making sure that you are effective at your job and hand the patient all the necessary information and ultimately let them decide, but I know a lot of times you kind of have to persuade them to your way of thinking because you know what is best for their health in those situations. But also, not forgetting that it's ultimately their decision - but you still have to work to try to pull them in the right direction. [112]

Rules for the Formation of Statements about the Sick Person.

1. Who has the right to authoritatively speak about the sick person (the person of the patient) in modern medical discourse?

Those who have this right include the doctors, residents and sometimes students too, patient families, and patients themselves.

2. What is the institutional site from which this speaker draws his/her authority and what are the rules of this site regarding statements about the sick person?

In case of the doctors, residents and students, they all draw from the authority of the hospital, medical school, and the institution of medicine in general when they talk

authoritatively about a sick person. In the excerpt below, the student is speaking on behalf of the hospital and drawing from that authority actually suggests to patients that they do not have to be there if they think hospital is trying to get their money.

> I think it has to do with the patients and the people outside the profession, so we have to be this way… and that's how people interpret that… even patients now, are like, oh the hospital is only trying to get my money and whatever… I mean, if that's true then you do not have to be here, you know. [MS4]

In the above excerpt, the doctor is blaming patients and she draws from the authority of the hospital and the institution of medicine in order to do so. She needs that authority because what she is suggesting is not a personal opinion, rather, she is trying to speak in behalf of the hospital and the medical staff.

> I used to work at an urgent care so there was no real triage system. So, basically, they see people like, those who are actually your friends or families in the place of a patient who is supposed to be in chart. And one time they cut like 115 people in this g-technology device called a PPD, and he was like, oh, it's just a PPD, so… yeah. [MS1]

Here, the medical student explains how medical staff at the urgent care were drawing from the authority of the medical facility to deny care to some patients not based on professional medical judgments but based on who they were personally (whether they were friends or family to the staff or not).

In case of the patients and patients' family, they can speak authoritatively about the sick person drawing from the authority of their special position as direct beneficiaries of medical practice, which comes with certain rights and responsibilities. This authority is given by the institution of hospital and private clinics to people who fall under special categories of "patient" and "patient's family" under the hospital regulations and the laws defining these categories in the healthcare system. Patients and patient families are

assigned specific rights which they can exercise when it comes to their relationship with healthcare professionals as well as the hospital administration (e.g., the right to discuss their personal history and other personal information about their family, social and economic circumstances, etc. as they relate to their present health condition, and the right to provide feedback and evaluate their experience with the healthcare team as well as the hospital administration). Below are three major rules regarding patient's rights and that of their families that emerged from the data in this study. Examples of statements associated with each rule are also provided.

A. Patients have the right to decline what the doctors may think is best for them, and the doctors need to acknowledge this right unless they are able to convince the patient to act otherwise.

> [What I would want from my doctor] from a patient's perspective, I'd say is general respect. So, I want them [the doctors] to respect me and respect my choices, assuming that I am in a condition to make my own choices. I also want them to challenge my choices, like, I might not know enough about the consequences of a choice I am making and may end up not taking a medication that could have saved my life. So, like, if I have a terminal cancer and there is a drug that has a 40% chance of curing me but without it I would die for sure ... So, I might actually say that, you know what, I have been living a great life, I do not wanna pass through suffer cause of the side effects of chemo and everything. So, I want a physician that's professional enough who is like, you know what, that's your decision. As long as you are aware that you will die without it. [151]

> Patient: "I am ready to go home ... I do not want no food or nothing. I just wanna go home." Resident does a good job of convincing her to stay: "you're here for a reason, tests need to come before we can decide what to do." Patient: "I've been here since yesterday, nobody did anything" Resident explains oxygen, blockage in her heart, why she has pain, what could happen if she leaves, etc. The patient seems to soften gradually. She does not insist on leaving anymore. Resident continues: "Sorry, our beds are not too comfortable ... we're gonna get you some food now, okay?" Patient nods quietly. [Obs] [p.25]

B. Patients have the right to provide feedback regarding their care. This can come in multiple forms including, verbal sarcasm, gestures, written feedback, and more.

> Patient has stage 4 cancer, does not seem very happy. Resident says: "it was a pleasure taking care of you!" not very genuinely. Patient says: thank you, after a brief pause, rolling her eyes. "Take care of yourself, okay?" says the resident. "I will", says the patient. Resident: "you're doing better than before you came here". Patient: "I did not have any of these problems before I came in here." No one from the medical team follows up regarding this last statement. Silence for a minute. Resident begins to talk about formalities of the patient getting discharged that day. [Obs] [p.20]

> Patient: "so, when are they going to let me know about scheduling the procedure? Resident: I do not know, we called in the morning and they said they will call back. Patient giggles sarcastically as she is shaking her head. [Obs] [p.56]

Simple gestures on part of the patients such as rolling their eyes or a sarcastic giggle can be regarded as statements of their feedback about the personal medical care they are receiving.

> Elderly female patient who told the attending yesterday: "you're funny!" she has nausea today. Patient: "I have not seen the damn nurses for a while, where are they?" [Obs] [p.41]

> Patient is talking about his doctor: "Stupid freak cancelled the appointment on me… hahaha" [laughing]… Attending cuts him a couple times as he keeps talking about all sorts of stuff. "Dr. Anderson is an excellent doctor… every doc changes my medicine though; give me one right thing and stick the hell to it." Attending explains why they changed his medicine very briefly in 1 sentence. Patient continues: "more experimentation then, huh?" He sounds frustrated. Attending explains a bit more. Patient's gall bladder has been removed, has two hernias to fix, and he keeps talking about irrelevant things as the team prepares to leave the room. [Obs] [p.71]

Patients may scold the healthcare personnel at times without really being held accountable for that behavior.

> Small cell carcinoma patient, elderly male. He looks very happy today. “I could not have had a better team to take care of me”, he addresses the attending and looks at the entire team appreciatively. Patient’s wife: “He is writing “Thank You” notes to all his doctors and keeps them under that tray”. Patient: “I will make sure to add Dr. Longie’s name on the card!” says showing one of the cards that he just pulled from under his tray. [Obs] [p.18]

Patients may provide verbal or written feedback to the doctors as often as they like and in any version that they prefer. Feedback could be given in the form of verbal or written comments or gestures as simple as smiling appreciatively at the healthcare team.

C. Patient’s family has certain rights such as having access to patient information, providing feedback, and holding the healthcare team accountable. Doctors need to acknowledge these rights and be responsive to them.

> Cancer patient with mass in the neck, whose wife was in tears yesterday. She is so nice. Resident takes the lead, explains everything about the upcoming procedure to the patient and his wife. “Any questions?” petting her on the shoulder mildly. Wife begins talking, seems happy to be asked. She is so sad, you can tell from her eyes, but laughs with us. Attending is pulling up patient reports and images of the scans for her on the screen. “Can I get a picture of that with my phone?” she asks. “Our family are in CA and OH, will send it to them ...attending: of course, here I will hold them up so you can take pictures. “You guys are sweethearts! Oh, you really are!” she says. Attending: what other questions do you have? Explains more to her. [Obs] [p.39]

> Patient is old lady came back from surgery. Attending smiles and pets her on the feet. Family asks: what’s a diverticulum? Right when the team is leaving the room. Attending stops, goes back and explains. Family member says thanks and clearly appreciates the gesture. Attending: thank you for asking! [Obs] [p.62]

> Back to our overdosed patient in the Progressive Care Unit. She went into a shock this morning due to taking more than regular dose of pain medications. She’s alert and almost sitting on her bed now. Attending talks to the family as he is sitting right next to the patient. Resident explains patient’s progress to the family. Patient: they told me I over-worked you guys!” attending: you gave us just enough excitement. Patient: thank you

> guys, for doing everything for me… Attending along with his entire team head to the next room to meet with 10 family members. They are discussing the incident. Attending takes the lead on responding to their questions about how it all happened and what measures are being taken to take care of the situation. The entire team is sitting there silently, wearing a responsible look on their faces. [Obs] [p.40]

3. What is the specific position of this speaker vis-à-vis the sick person as an object of medical discourse?

The doctors, residents and students, all have a direct relationship with the sick person. They listen to their personal information and respond to their requests as part of their job. However, do they care personally about those sick persons? In the following excerpts, students suggest that doctors do all of the above just because their job requires them to do it, not that they personally care to do it.

> I mean, the point is like, so many doctors are there just doing their job. So, if they are asking for your detailed information it's because they need it for the history not that they actually care, okay?! [MS2]

> I think some doctors, it's sadly true that they get it done but they do not actually care about people. [MS2]

> The team is walking toward another patient's room that is on the other end of the hallway. Attending is discussing a difficult and high-risk patient with her residents. No one looks really stressed, however. They are laughing and smiling as they are discussing the issue. Looks to me like a normal job. [Obs] [p.56]

Nevertheless, a large portion of data in this study suggested another different outlook to this issue as well. In the following excerpts that are pulled from the direct observation of the clinical settings, one can clearly see that for some doctors, what they do is more than what their job technically requires them to do. One cannot fail to see the shadow of a human being who feels for those who are suffering; a human being and not just some machine who has been assigned to get the job done; a human being that actually cares.

> Resident puts the nebulizer in patient's mouth. Patient coughs a lot, can't even speak a full sentence. Attending finds tissue and gives it to her. Still keeps looking until she finds another box, "here, this one is softer". [Obs] [p.47]

> I said "good morning" as I walked past the resident sitting behind his desk on the 8th floor. He was reading patients' data on his computer screen. No response. After almost a whole minute, he said in a low voice: "good morning" as though he just heard me. A minute later he is talking to the other resident: "oh… [Deep sigh]. I wonder if Mr. Richardson [an elderly patient who has stage 3 cancer] will see the daylight today". The other resident replies with a sigh: "it's terrible…" [Obs] [p. 65]

> 45-year-old female patient. She is not responding to questions. Resident tries speaking to her in her native language, Punjabi. Patient does not respond but looks at her and blinks. Resident sighs ... tries again to make her smile but it does not work. Resident looks concerned and, sad. Starts walking up and down the room in frustration. [Obs] [p.70]

Some doctors/residents go beyond treating the body of the patient as an object of medical discourse and care about their person as well. This is not required by a specific law, however. The instructions on medical professionalism in the medical literature is pretty vague on itself, let alone the discussion of how to care for the person of the patient. In other words, if the doctor only does his/her job and attends to the body of the patient without caring about their person (feelings, perceptions, etc. as related to their condition) there is no law that would accuse the doctor for it. Medically, the job is considered to be done and that seems to be fulfilling enough for many doctors.

> I do not think it's a necessity that you be friends with your patients though, I think you can do a good job without really being friendly. [MS3]

> So I, like, one hundred percent agree with the caring thing, but I know some pretty awesome physicians that are not - or do not seem to be - caring people. [MS1]

> I know, I have seen like, this very good doctor who is so capable, but does he care? Like, you can't tell whether someone really cares, so… I do not know. [MS1]

In case of medical students, however, it is a little different. They are really not required to attend to the sick person as a trainee beyond a bare minimum. In general, students are least responsible bodies for what happens with the patient at the hospital. As long as students are there and trying their best to learn the skills, they are not going to get in trouble with their superiors if anything goes wrong with a patient. Medical students who want to invest more time than they are required to with patients seem to be doing so for a couple of reasons:

A. Medical students enjoy hanging out with patients, thinking that is what medicine is really about.

> The first two years of medical school were kind of isolating from what I wanted to do with my life, granted that I was still only around my cohort of students. And now I feel more isolated from my friends but more entrenched in the field. So, I would say that my support, like, the reason why I keep going through this is kind of small interactions with patients and make them feel listened to. I value feeling like I am making a difference for them. [103]

> [What's the value of spending more time with patients? It's not going to enhance your grade so why do it?]: To me that's what medicine is more about, to make them [patients] comfortable when they are at a worst time in their life. [063]

> I am excited to get in the clinic when the time comes and become automatic, like, you know, how to think through every part, so I could start to work more on what I think is the more satisfying part–which is being physician that cares and like ask about their perspectives and be friendly and have relationships ... So how I hope to do that is by having good mentorship relationships like, I meet with a physician every couple of weeks and just talk about things. And when I am on rotation, I will be really paying attention to what the physician does, but also like, "what a cool pair of shoes!", or "how about that super bowl, hah?" things like that, you know. So hopefully getting better at this mastery because I want to be a good doctor, but also at the same time, being the doctor who is interested in exploring patients' perspective. [072]

B. They think there is always more to learn so why should not you run the extra mile if you have the time with least responsibility?

> I guess a good medical student is someone who does not just try to get the work done but also get to spend time with the patients since you have time to do that. Like, residents work shifts, even the attendings switch but you're like kind of the person who gets to spend the most time with the patient. A good med student can bridge good learning with using every opportunity to kind of see the patients and gain experience. [063]

> So, like, my parents [who are both physicians] chart until like 9 PM sometimes. And it makes them hate what they do ... Which is why I think being a med student is better because you do not have to do anything like that and instead you can just go and hang out with the patient ... So, the best time I guess for us in NOW. [063]

In the case of patients and their families, again, they are the direct beneficiaries of the medical care. For patients, how their person as a whole is treated in medicine could be a matter of life and death. They provide information about it, talk about it as much as possible, and want everybody's attention for this specific object of medical discourse. For patients' families too, they are the direct beneficiaries of what happens to the sick person who is either a family member or a loved one. So, unlike the healthcare team, it is not their job to be around the patient and care for them. Rather, what drives them to make any statements regarding the sick person is their personal bond with that person that they care about–who happens to be the patient at this time.

> If I were the patient, I think, whenever we are in the same room, I'd want to be the main focus. I would not want them [doctors] to be distracted, or tied to their screen, or whatever, like they are often typing and also talking to the person sitting over there. I know I probably would not like that ... I think they have to be concise, but if I were the patient, then I'd want more time. A lot of times people are being cut off, like they are saying something within the first 10 seconds or something then they are cut off, I do not like that at all. Also, I'd like them to ask more things outside of your symptoms, like obviously the medical stuff is important, but more like, what's going on in your life, trying to figure a general sense of things ... cause a lot of times an issue may seem like it's medical but

> maybe it has to do with their job environment or something like that ... I think if feels good, it's just nice to be comfortable with someone, especially when they are dealing with stuff that's so personal. So, I'd kind of want them to know me a little better versus seeming like a machine or something. [121]
>
> So, if I am the patient, then I would like my doctor to first of all be mindful as they are treating me as a patient. So, do not treat me like another reimbursement check–just treat me like a… in a way that honors my humanity. Secondly, I expect the physician to obviously know more than me. Although they know more about my condition, they would not force me to bias myself toward one thing. They would honor my choices. So, like, honoring the complexity of my humanity and not treating me like a mere disease; and honoring my choices as things that I need or want from my medical treatment. [141]
>
> I'd say, what I'd want from my doctor is being informative, respecting my choices, respecting me as a person, respecting me and my family, I'd say respecting me not just as a cadaver or a patient, but as a person. I do not see a lot of doctors doing that but at least is some TV shows and stuff, the general attitude of some doctors towards their patient is like, maybe not treating them as inferior but "hey you know what, I am the boss!" kind of a deal. So, like, it does not work like that. [151]

Conditions of Existence for Different Modalities of Statements about the Sick Person. Similar to other three categories of statement modalities, there is a hierarchical difference in weight of the statements about the sick person depending on who speaks them, what type of institutional authority this speaker draws from, and what their positioning related to the sick person (as an object of medical discourse) is. For instance, a statement about the sick person that is spoken by an attending physician who is in charge of a certain patient weighs much more than the same statement if it were to come from a patient's friend or family member. To illustrate this point let us say take the example of a negatively-biased statement regarding patient's racial characteristic. The reason this statement carries more weight if it comes from the physician is that physician is the one who has the authority to make the kind of decisions that a patient's life might

depend upon. For instance, if the physician has a racial bias against this patient, she can make a statement accusing the patient of faking his condition and therefore dismiss his symptoms. Such a doctor is likely to also pay less attention to the patient, which can be detrimental to the patient's health. On the other hand, if the same racial bias and accusation for faking the symptoms comes from a distant family member who came to see the patient at the hospital, it will not be as consequential as the one coming from the physician, simply because this family member is not at a position to make decisions that can affect patient's life and death at this point. And vice-versa: if a doctor is positively biased toward the person of the patient, she might pay more attention and take better care of that patient; whereas, if the same sentiments come from a family friend, it can't have that kind of an impact on the delivery of care to this patient. Therefore, the rule of thumb is that statements about person of a patient that come from a physician carry much more weight in medical discourse than the same statements spoken by people outside the medical profession.

By the same token, statements about the sick person coming from the residents, medical students and the patients themselves carry less and less weight, due to the level of impact they might have on real-life processes in the clinical setting. Reasoning by analogy and deduction is not the only modality of statements that is weighed differently depending on who speaks it and what kind of authority they are drawing from in modern medical discourse. Other modalities including, qualitative description of the personal characteristics of the sick person, biographical accounts of the patient's life, statistical information about certain groups of people as patients, and finally, paternalistic statements about the sick person and what might be best for them are also weighed

differently in clinical medicine depending on who speaks them, what institutional authority the speaker draws from, and what their position is regarding the sick person an object of medical discourse.

Concepts

In the previous two sections, I discussed the objects and modalities of statement in modern medical discourse as well as rules for the formation of each of those elements. In this section, I will elaborate on the third discursive element, which is the concepts. Concepts are ideas/notions on the basis of which statements in a discursive field are framed. In other words, when saying something about an object of discourse, people draw from certain notions in order to be able to frame their opinions. It is worth mentioning here that dispersion of ideas and therefore concepts were fully welcomed in this study given the nature of the work being an archaeological analysis. No attempts were made to blend the dispersed ideas based on an underlying coherent theme as that would have been against the chief principles of archaeology explained in the previous chapters. In this section, I will describe the field of statements as divided into three parts that, in turn, mark the rules for the formation of discursive concepts (details on this will follow under Rules for the Formation of Concepts below).

As a general remark, the basic locations where concepts were sought after in this study were the fields of: relations between rules for formation of the objects (e.g., relations between *surfaces of emergence* and *grids of specification* for different objects), rules for the formation of modalities of statements (e.g., relations between *who has the right to speak with authority* and *what is the speaker's position in relation to the object of discourse*), and, relations between rules for the formation of objects and rules for the

formation of modalities of statement (e.g., relations between *surfaces of emergence* for a certain object and *position of the enunciator* of statement in relation to that same object). According to Foucault, it is such a group of relations that establishes a system of conceptual formation (Foucault, 1972).

Rules for the Formation of Concepts. In archaeology, the field of statements needs to be divided into three divisions in order for it to be described in terms of its conceptual framework. The first division deals with ordering and succession whereas the second division represents forms of coexistence among statements. The latter field, in turn, is divided into three fields of presence, concomitance, and memory. The third division outlines procedures of intervention for working through statements in the medical discourse.

Forms of Succession. Here, I will attempt to establish a number of rules that are at work to define the systems of *ordering* (including logical, methodological and other ways of ordering, as the system of ordering in real-world discourses is not always strictly logical) and types of *dependence* among statements. The point is to identify a series of statements that are linked by a continuity in the problem they address (AK). Next, I outline the forms of succession and dependence as well as illustrate what Foucault calls the *rhetorical schemata* (Foucault, 1972, p. 57). Rhetorical schemata are the network of rules according to which different groups of statements are brought together in a discourse. Possible forms of ordering and succession include describing the "order of inferences, successive implications, and demonstrative reasoning; or the order of descriptions, the schemata of generalization or progressive specification to which they are subject; the spatial distributions that they cover; or the order of the descriptive accounts,

and the way in which the events of the time are distributed in the linear succession of the statements" (Foucault, 1972, p. 56). And, various types of dependence of statements include "dependences of hypothesis/verification, assertion/critique, general law/particular application; the various rhetorical schemata according to which groups of statements may be combined (how descriptions, deductions, definitions, whose succession characterizes the architecture of a text, are linked together)" (Foucault, 1972, p. 57). For instance, we will see how various types of statements (e.g., qualitative descriptions, deductions, statistical and biographical information) about a certain object (e.g., sick person) are all linked together according to a system of dependence. The aim here is to illustrate and describe this system of dependence itself.

Concepts related to Disease and its Treatment.

A. How various rules for the formation of the *disease and its treatment* (i.e., surfaces of emergence, authorities of delimitation, and grids of specification) are linked to each other, depending on each other or following a specific order.

Peer-reviewed scientific medical knowledge is the highest authority for making credible statements about disease and treatment in modern medical discourse. Scientific knowledge of medicine sets up the grids of specification for disease and treatment as an object of medical discourse. Therefore, rules set by grids of specification bear the most weight amongst the other two sets of rules set by authorities of delimitation and surfaces of emergence, respectively.

B. How various types of statements about disease and treatment are all linked together according to a system of dependence.

The three types of statements using which people commonly talk about disease and treatment include qualitative description, reasoning and analogy, and statistical statements. There is a system of dependence set by the scientific knowledge of medicine that ties them together. Statistical statements are used to produce or verify scientific medical knowledge about disease and treatment (e.g., identification or verification of survival rate in basal cell carcinoma amongst 60 to 70-year-old patients). Clinical reasoning and qualitative descriptions about disease and treatment too are based on the scientific medical knowledge; hence, the system of dependence among three of them are setup by the medical knowledge.

C. How various rules for the formation of modalities of statements about the *disease and its treatment* (i.e., who is speaking, from what authority, and what is their position regarding the disease and its treatment) are linked together according to a system of dependence/specific law of order.

Rules for the formation of statements have a hierarchical relationship among them. Regardless of the type, the most credible and trustworthy statements are those that are spoken by attending physicians who draw from the authority of the hospital and the institution of medicine itself when making statements about disease and treatment. Such statements also tend to be most accurate ones because it is the doctor's job to make the most accurate statements about disease and treatment that are based on the most trusted scientific medical knowledge. The doctors tend to do their best in coming up with most reliable statements since their professional position as doctor is at stakes.

D. How various rules for the formation of disease and treatment as an object and for the formation of modalities of statements about the *disease and treatment* are linked together according to the system of dependence/specific law of order.

As described above, credibility and trustworthiness of all statements about disease and treatment - either in medical school or clinical settings - are measured by the level of accuracy with which the statement is drawing from scientific medical knowledge. The more accurately and faithfully one reports the science-based facts of medical knowledge in one's statement, the more credible one's statements will be. The point is to use the scientific facts in one's statement as objectively as possible and without any personal attempts on interpreting them. So, if a statement is spoken at a surface of emergence (patient's family or community) but it is evidently based on peer-reviewed medical knowledge, it will be counted as credible. If the same statement about disease and treatment coming from the same source is spoken by a resident at the hospital though, it will be granted a higher status than the one spoken by patient's family. This is because the latter statement's speaker draws from the authority of the hospital and the institution of medicine in general.

<u>Concepts Related to the Human Body.</u>

A. How various rules for the formation of the *human body* (i.e., surfaces of emergence, authorities of delimitation, and grids of specification) are linked to each other, depending on each other or following a specific order.

Again, peer-reviewed scientific medical knowledge is the highest authority for making credible statements about the structure and function of the human body in

modern medical discourse. Scientific knowledge of medicine sets up the grids of specification for the body as an object of medical discourse. Therefore, rules set by the grids of specification bear the most weight amongst the other two sets of rules set by authorities of delimitation (healthcare professionals, researcher, and media) and surfaces of emergence (individuals, families and communities), respectively.

B. How various types of statements about the human body are all linked together according to a system of dependence.

Various types of statements using which people commonly talk about the body include: qualitative description, biographical accounts, statements about location, interpretation and cross-checking of signs in the body, reasoning and deduction, statistical statements and paternalistic statements. There is a system of dependence set by the scientific knowledge of medicine that ties all these modalities of statement together. Again, statistical statements are used to produce or verify scientific medical knowledge about the body whereas clinical reasoning, qualitative descriptions and statements about location, interpretation and cross-checking of signs too mostly draw from scientific medical knowledge. All of the above statement types, even paternalistic statements about the body, if spoken by the doctors and healthcare professionals, will be based on scientific medical knowledge. However, if some of these statement types are spoken by lay people such as patients or patient's families, they will not be based on medical knowledge and that is exactly why they have little to no credibility in modern medical discourse. For example, if a patient provides qualitative descriptions about his own bodily structures that is non-compliant with scientific human anatomy, physiology and pathology, those descriptions will have no value in medical discourse. Thus, scientific

medical knowledge not only sets up a system of dependence among various types of statements, it also creates a measure of credibility for all statements about human body.

C. How various rules for the formation of modalities of statements about the *human body* (i.e., who is speaking, from what authority, and what is their position regarding the body) are linked together according to a system of dependence/specific law of order.

Rules for the formation of statements have a hierarchical relationship among them. Regardless of the type, the most credible and trustworthy statements are those that are spoken by attending physicians who draw from the authority of the hospital, medical school, and the institution of medicine in general when making statements about the structure and function of the human body. Such statements also tend to be most accurate ones because it is the doctor's job to make the most accurate statements about the body that are based on scientific medical knowledge. The doctors tend to do their best in coming up with most reliable statements since their professional position and social status as doctor relies upon accuracy of the statements they make both about disease and treatment and the human body as two major discursive objects that heavily draw from scientific knowledge of medicine.

D. How various rules for the formation of body as an object and for the formation of modalities of statements about the *body* (e.g., grids of specification and who is speaking) are linked together according to the system of dependence/specific law of order.

As described above, credibility and trustworthiness of all statements about the human bodily function and structures - either in medical school or clinical settings - are

measured by the level of accuracy with which the statement is drawing from scientific medical knowledge. The more accurately and faithfully one reports the science-based facts of medical knowledge in one's statement, the more credible one's statements will be. The point is to use the scientific facts in one's statement as objectively as possible and without any personal attempts on interpreting them. So, if a statement is spoken in a surface of emergence (patient's family or community) but it is evidently based on peer-reviewed medical knowledge, it will be counted as credible. If the same statement about the body coming from the same source is spoken by an attending physician at the hospital though, it will be granted a higher status than the one spoken by patient's family. This is because the latter statement's speaker draws from the authority of the hospital and the institution of medicine, while the former speaker cannot.

Concepts Related to the Doctor.

A. How various rules for the formation of *the doctor* (i.e., surfaces of emergence, authorities of delimitation, and grids of specification) are linked to each other, depending on each other, or following a specific order.

There is no obvious hierarchical system of ordering among the three rules for the formation of the doctor as a discursive object, but there is a critical system of dependence that relates the three sets of rules to one another. To keep it short, the rules set by both the authorities of delimitation and grids of specification about the doctor depend on the rules that are in place in the surface of emergence for the doctor. The rules and regulations of the surface of emergence for doctors, which is medical school, partly shape the professional identity of medical students as they go through their medical training. The way medical students understand who they are as authorities of delimitation and the way

they differentiate between different types of doctors (grids of specification) in the future all depend on what they are exposed to during their medical training at the medical school.

B. How various types of statements about the doctor are all linked together according to a system of dependence.

The three types of statements using which people commonly talk about the function of the doctor include qualitative description of the doctor, biographical accounts, and statistical statements about doctor's performance in clinical settings. There is a hierarchical relationship among these three modalities of statement that ties them together. Statistical statements about doctor's performance are usually provided by peer-reviewed research that has the highest credibility in the medical community. Biographical accounts, however, are mostly produced by doctor's themselves, medical students, and sometimes patients. These accounts are often produced in a story-format and they do not possess the same amount of credibility as the statistical data provided by a research study. Lastly, qualitative description of the doctor's personal characteristics and clinical performance are mainly provided by patient's feedback as they evaluate the quality of care they have received in a healthcare facility. Most healthcare facilities take patient feedback seriously as sometimes they become consequential for the doctors in terms of receiving some sort of punishment or reward for it if they receive a bad or a good review, respectively. Therefore, even though not scientific and not spoken by the medical professionals, qualitative descriptions of the doctor's performance are deemed as necessary and important data needing to be collected in all modern healthcare facilities.

That is because patients are important authorities of delimitation when it comes to defining what a doctor should be like in modern medical discourse.

C. How various rules for the formation of modalities of statements about *the doctor* (i.e., who is speaking, from what authority, and what is their position regarding the function of the doctor) are linked together according to a system of dependence/specific law of order.

In terms of credibility and trustworthiness of the statements defining what a doctor should be like, statements spoken by individuals who are connected with the institution of medicine and can draw from its authority are deemed as most trustworthy and reliable in modern medical discourse. These individuals include all medical professionals including students, residents, and attending physicians. The way they define the function of the doctor in the clinic is considered the most credible by the surface of emergence as well as all authorities of delimitation. Therefore, there is a hierarchical relationship between statements defining the position and function of the doctor depending on who speaks them, what kind of authority they draw from, and what their position is regarding the doctor in general. As explained above, descriptive statements about the doctor's performance coming from the patients are also deemed quite important and mostly credible by hospital administration. That is because patients hold a unique position regarding the doctor since they are direct beneficiaries of medical care that can have life or death consequences for them. Drawing from the authority of this unique position, which the entire medical institution depends upon, patients are amongst the most significant authorities of delimitation when it comes to giving feedback about the performance of the doctor in the clinic.

D. How various rules for the formation of the doctor as an object and for the formation of modalities of statements about *the doctor* (e.g., grids of specification and who is speaking) are linked together according to the system of dependence/specific law of order.

As described above, credibility and trustworthiness of all statements about the doctor are measured by the level of connection between the speaker and the institution of medicine. For example, the most credible definitions of the doctor's position and responsibilities are considered to be those that are provided by practicing physicians, or at least medical students who have been in the field and therefore must know all the nuances of holding a medical job. However, when it comes to practical impact and creating consequences for the doctors, patient's statements in the form of feedback are deemed as the most important form of data that needs to be collected at all medical facilities as a way to evaluate the doctor's performance.

In sum, medical professionals in the surface of emergence (medical school) and hospital–who are also considered the main authorities of delimitation for the doctor - may or may not enunciate statements about defining the position of the doctor as practical data to evaluate the doctor's performance. Therefore, while deemed credible, this type of data is not always present so grids of specification for the doctor cannot rely on them. The grids of specification are rather more practically setup by the statements about the doctor's performance provided by patients as evaluation data. What a good doctor should be like and what things they should and should not do are mainly defined by patient's statements in the clinical settings, so, this makes the patient an important authority of delimitation for defining the doctor's position. Even though they do not have the kind of

authority that medical professionals have, their unique position regarding the function of the doctor (being the direct beneficiary of medical care and having to trust them with their lives) makes them eligible for being one of the most significant authorities of delimitation for the doctor.

Concepts Related to the Sick Person.

A. How various rules for the formation of the *sick person* as an object (i.e., surfaces of emergence, authorities of delimitation, and grids of specification) are linked to each other, depending on each other, or following a specific order.

Again, while there is no obvious hierarchical system of ordering among the rules for the formation of sick person as a discursive object, there is a system of dependence that relates the three sets of rules to one another. The rules of the surface of emergence (medical school) about referencing the person of the patient reinforce each other about disregarding the eligibility of the sick person to join the list of popular and most obvious objects of medical discourse. Thus, the rules of the surface of emergence often shape the rules that appear among the authorities of delimitation and grids of specification for the sick person, that is, how doctors, patients, and other authorities talking about the person of the sick understand the nature and significance of this discursive objects and how they put this understanding in their daily practice. Here too, the rules and regulations of the surface of emergence for doctors partly shape the professional identity of medical students as they go through their medical training. The way medical students understand who the patient is (are they bodies to fix or whole persons to attend to) and the way they differentiate between different types of patients based on their personal characteristics

(grids of specification) in the future partly depend on what they are exposed to during their medical training at the medical school.

B. How various types of statements about the sick person are all linked together according to a system of dependence.

The five types of statements using which people commonly talk about the sick person in the clinic include: qualitative description of the sick person, biographical accounts, reasoning and deduction, statistical statements, and paternalistic statements about the sick person. There is a hierarchical relationship among these five modalities of statement that ties them together. Statistical statements about a certain group of people as patients are usually provided by peer-reviewed research that holds the highest credibility among medical community. On the other hand, biographical accounts of patients including their personal, family, and social history are mostly provided by patients themselves and are valuable as long as they help in making the correct diagnosis by the doctors. These accounts are often produced in a story-format and they do not possess the same amount of credibility as the statistical data provided by a research study, of course. The remaining three modalities are often informally provided by the doctors and other healthcare professionals in clinical settings. Qualitative descriptions of the patient's personal characteristics, reasoning and deductions about who the patient is as a person, and paternalistic statements regarding the sick person and what is best for them are mainly produced by doctors and other healthcare professionals. Thus, there seems to be no obvious system of dependence among different modalities of statements about the sick person, but there definitely is a hierarchical system of credibility that can be spotted among them.

C. How various rules for the formation of modalities of statements about the *sick person* (i.e., who is speaking, from what authority, and what is their position regarding the sick person) are linked together according to a system of dependence/specific law of order.

There is a hierarchical relationship between statements about the sick person depending on who speaks them, what kind of authority they draw from, and what their position is regarding the sick person in the clinic. The kind of impact a statement may have on the delivery of healthcare to the patient basically determines which statements about the sick person sit on the top of the hierarchical system. Statements spoken by individuals who are connected with the institution of medicine and can draw from its authority are deemed as most powerful and impactful in terms of affecting the quality of healthcare delivery to the patient. It is likely that negative or positive biases from the medical staff regarding who the patient is as a person can affect the delivery of healthcare to that patient in a negative or positive way, respectively. While the way medical professionals perceive, categorize and define the person of the patient may or may not be accurate, the statements they enunciate about the sick person can have detrimental effects on the condition of the patient, regardless of how true or justified they are. The same statements if spoken by a non-medical staff including patient's family and community members will not have the same effect on the delivery of the healthcare to that patient and that is why they are less powerful statements. That is because the latter group of people cannot base their statements on the authority of medical profession, and, also, they do not have the same unique position (of being able to make life and death decisions about that patient) regarding the sick person as the doctor has.

D. How various rules for the formation of the sick person as an object and for the formation of modalities of statements about the sick person (e.g., grids of specification and who is speaking) are linked together according to the system of dependence/specific law of order.

As described above, the significance of statements about the sick person is measured by the size of the impact they can have over the quality of care which a certain patient receives. For example, the most consequential statements about the person of the patient are considered to be those that are enunciated by physicians who are in charge of that patient's care. In other words, these physicians can be considered the most powerful authorities of delimitation because they are eligible to draw from the authority of medical profession. Again, it is the effects of the rules and regulations in the surface of emergence (medical school) that partly shapes the professional identity of the doctor- the latter, in turn, plays the upper hand in the way doctor treats and addresses the person of the patients, and the way he categorizes them in various groups (grids of specification). In Foucault's words, "there is a system of dependence between what one learnt, what one saw, what one deduced, what one accepted as probable, and what one postulated" (Foucault, 1972, p. 57). And the way a doctor postulates thing related to the person of the patient, can have the most powerful effect on the way he treats and cares for them.

Forms of Coexistence. These are rules based on which certain groups of statements are accepted or rejected in a discourse. Forms of coexistence are in turn divided into three fields: field of presence, field of concomitance, and field of memory.

Field of Presence. Field of presence consists of statements that were originally taken up from elsewhere but have now become part of the modern medical discourse. These are

statements that are accepted as *true* and involve exact descriptions, well-founded reasoning, or necessary presuppositions (Foucault, 1972, p. 57). An example of this category of statements is scientific research. Everyone involved with modern medical discourse including healthcare professionals as well as patients seem to have unshakeable faith in what modern scientific research can offer. Here is an exemplar quote from an MS1 student.

> With the research coming up like, over the last couple decades, I definitely think it's getting better, even looking for things like HIV, and the recent studies on the cures and even the prophylaxis prevention, and also with the technology in the recent years, in the modern medicine is helping like a lot of patients, which I think is really cool. [MS1]

The field of presence also contains a range of statements that are subject to various levels of verification, presupposition and justification processes. In other words, they need to be critically evaluated before they can be accepted as true in. Such statements include those that are being criticized, discussed, and judged in modern medical discourse. Below, let us use alternative medicine as an exemplar topic to illustrate the diversity of statements in the field of presence and the resulting dispersion of its concepts. The following statements are pulled from the focus groups' data about the topic of alternative medicine (see prompt #5, FG Protocol, Appendix D). The field of diverse statements about alternative medicine can be divided into various subfields of approved, justified, verification needed, criticized, and more. The example illustrates how these different types of statements can all coexist under the same conditions of existence in the field of presence, in modern medical discourse.

> First, let's review statements that approve of the alternative medicine.
>
> Dr. Abraham B, he is a Stanford neurologist, had a really interesting talk about modern medicine; and he says that alternative medicine is kind of

> filling the niche in modern medicine, which is scientific-based due to previous health records, and the direction that medicine has gone, doctors have kind of gotten away a little bit from the interpersonal, emotional, and even spiritual aspects of medicine. And alternative medications are kind of filling in that gap now, like chiropractors, acupuncturists they touch the patient. They put that other side of the interpersonal play that does not happen as much in modern practices. The attention of mindfulness in emotional health, that's the alternative medicine's brain to this kind of gap that maybe scientific medicine is experiencing now. [MS1]
>
> Yeah, so as I said before, we do it all the time, but we just do not say it that we too are using alternative medicine and that not everything we do is scientific. Cause even our mind-body medicine class is really alternative medicine. Just another way of approaching health issues. [MS1]

The next subfield to look at here is one consisting of statements that are not only approving but also justifying the use of alternative medicine in the modern world:

> I think research is like that all the time, I mean, so for researchers, their findings ... ideally your finding is ought to be as spastic as possible, but when you are only recruiting certain type of people, or a certain gender, then your results become very narrow in a way. So, like, tradition does not pass down from generation to generation just like that, there is a power in that. So, I think the tension between bio-scientific medicine and alternative medicine is the tension between what we know and what we do not know… and it's just like what we do not know we do not know. It's easy to feel that, because there is a lot of things that we do not know, to feel that because we do not know, it has not occurred to many people. [MS1]
>
> So in one opioid lecture that we had that talked about how to move away from opioid addiction, physicians are now suggesting alternative medicine. So as we were just talking about it, for all that years they have been around but there was not like, enough research to back them up, but now that the opioid crisis has hit us they are like, oh, how about you try this to take care of your pain. So, we are actually, as medicine we are shifting, trying to get away from opioids at least in pain management. And that definitely switches. But I do not know if the research in medical chemical drugs is as much as in cultural, and others… so maybe those things have been useful all along, we just do not have enough research backing them up. [MS1]

Next is the subfield of statements that require proper verification of the alternative medicine techniques before they can be either accepted or rejected:

> I think there are a lot of random stuff out there and FDA does not necessarily have any control over them, so there is a lot of things that might harm patients as well, so there is this gray area… where you are not always sure what the side effects of something is and what the negative effects could be. But then there are things like acupuncture and yoga, that I do not see any reason to not do that but that is because those are things that are established by research, so… [MS3]

> There are some certified types of practice but for the most part they are not scientific, maybe? But then again, I do not want to say science is superior, but that's what we know and are taught. And there are some applications that might be harmful especially for the patients who are receiving multiple medications. On the other hand I am sure there are also things that are helpful so instead of taking another medication the patient could just use a certain type of herb, but the thing is that you may not be able to take it with certain medications so you need to makes sure to talk to your doctor first. [MS3]

And the last subfield consists of those statements that criticize the use of alternative medicine:

> So, like, there are some stories that people tell each other, like, for example, I know this guy who went to cardiac arrest because of taking a vaccine. So ironically, even though vaccine was there to help the person, he just died due to a vaccine. So kind of going back to… you know, like if my views on alternative medicine is based on, oh, this is gonna help me because it has helped generations in the past and everything, that's just… like talking about that aspect of mind and the body which is really important in healthcare. Sometimes if a patient is depressed you give them an antidepressant which treats their symptoms and everything but it's not getting them back to a healthy mind. [MS1]

Finally, attention needs to be paid to those statements in medical discourse that are part of the field of presence but are rejected or excluded from being part of the modern medical discourse.

> So, I'd still say things that are science-based are superior, because they are studied, there is evidence behind it, you know the side-effects for them, you know. [MS3]

> I feel like the evidence-based part is really important. So, my attending, earlier today was telling me about this patient who had a leiomyosarcoma on her leg but she decided not to have it resected, and to go and have

> alternative treatments done. So, it took her two years and the thing just kept growing before she came back for a surgery. At that point they had to take her entire leg off at the hip instead of just saving the whole thing. So, they could have saved the leg had she not refused the surgery before and opted for these non-evidence-based things. There are like a lot of these industries that tell patients things that are not really true and they are not held to it from a legal perspective. They are not held to like the same standard that we are. And some patients just do not know any better, so I feel like that's a danger. [MS4]

Relations between statements that are approving, justifying, verifying, criticizing and rejecting certain types of statements in the field of presence must also be established. One can establish multiple forms of ordering among these statements. First, there is a somewhat chronological order that is possible to exist among various types of statements–this would be the order of experimental verification and logical validation. For example, it takes time to take those statements that are being criticized and verify them by experimental research so that they may become acceptable and verified items in modern medical discourse. The second form of order that is possible to exist among some statements is that of acceptance justified by tradition and authority, commentary. In other words, some statements might be deemed as true and acceptable even without experimental or logical verification. An example of this are statements that count as true and acceptable just because they are being backed by the culture/tradition of medicine in general. Also, according to the rules of discourse discussed in Chapter 2, statements that are talked about most and are receiving the most attention are the ones that become acceptable, and in time also popular and even dominant statements of a specific discourse. Both forms of ordering/relations can be explicit (e.g., part of formally organized critical discussions) or implicit and present only in informal commentaries on the discourse of medicine.

Field of Concomitance. Field of concomitance includes statements that have been borrowed from other discursive formations (e.g., religion, education, philosophy, mathematics, business administration, etc.) and therefore concern and/or belong to a different domain of objects. Such statements are being used either as models and templates in modern medical discourse or have some other function that legitimizes their existence among other statements in the discourse of medicine. Let us look at some exemplar statements that belong to the field of concomitance, but still belong to the field of statements of modern medical discourse.

Examples of statements borrowed from humanistic philosophy and brought into medical discourse are provided below. They belong to medical discourse now too since they have the potential of affecting doctor's clinical practice if he/she believes in them:

> [I am] not a religious person. I take my moral values from more humanistic values. My moral values come from how I want to be treated in that same situation. I value patient's autonomy for ethical decisions. Making decisions based on the patient, be however they want you to be, thinking about myself, like, what's going to help me in my most evil state? [004]

> I kind of think by putting myself in others' shoes and say if I was that person, how would it make me feel. Being able to empathize with people. I have always found myself good with empathizing with people and being able to see things from their perspective. [012]

Examples of statements borrowed from religion that are likely to affect medical practice of the doctor who believes in them as their personal values:

> I am a veeeery spiritual person. Christian, not Catholic, I do not use identifiers to narrow down myself but I can use those values enormously in medicine to get motivations, like my motivation to treat people well, it is largely based on the fact that it's something God cares about and I love God, and I want to be like him, and I want to do things to please him. For me to try to restrain the effects of disease and illness, is like I believe that God is working through healthcare providers. [034]

> There is this thing in Buddhism that we call mindfulness, it's like this ability to have power over all aspects of your identity to be able to maximize your capacity and be able to fully do your entire job. So, it's about being mindful on what you're doing, why you came here, how are you going to do this, and all those things. [MS1]

Lastly, here is an example of the statements that are borrowed from business and brought into modern medical discourse. They too are likely to shape the medical practice in the event that the doctor believes in them:

> At least from my experience, there are a lot of business models that are coming to medicine ... it is just another style of doing the same thing… morally, it sounds right to you like, on the street, like, you should treat everyone you can at the same time ... well, what happens to your patients who *can* afford the treatment, if you do not stay up to date with your practice and facility because you cannot afford the fees of the building, or whatever it is that you need to pay for in order to have a private practice? [MS1]

Other subfields of statements found in the field of concomitance of the modern medical discourse include those consisting of the statements borrowed from the fields of mathematics (mainly statistics), education, and business administration and management. Statistical statements and related concepts are found abundantly in medical research articles whereas statements and related concepts borrowed from the field of education are easy to spot in the medical talk that occurs in the medical school (e.g., the way medical classes and lectures are organized, the way student assessments are setup, etc.). Last but not least, numerous examples of the statements borrowed form business administration and management can be spotted at the hospitals (the way patient records are saved, the entire medical coding and billing system, technicalities related to admission and discharge of patients, etc.).

Relations between statements (i.e., coming from humanistic philosophy, religion, business, education, mathematics, administration and management] in the field of

concomitance must also be established. No obvious system of dependence among different types of statements in the field of concomitance was spotted in this study. Yet, there is a system of hierarchy among them that dictates the amount of attention and time each of them receives in modern medical discourse. Statements that are borrowed from mathematics, especially those that relate to statistical information regarding disease and treatments are deemed as the most significant, objective, and useful part of the medical discourse since they are based on positivist values of scientific medicine. The next most significant types of statements that are deemed as necessary part of modern medical discourse and clinical practice are statements borrowed from the field of business administration and management–both institutions of medical school and hospital, and even private practices are currently relying upon these statements and need experts to be able to apply them in the field of medicine as best as possible.

Medical training also relies on statements borrowed from the field of education because they need to develop medical curriculum including lesson plans, teaching and learning material, etc., all of which requires educational expertise to be part of the modern medical discourse. Currently, the least amount of time and attention is invested in discussing statements that are borrowed from humanistic philosophy and religion and are being put to use in medical clinical practice. While medical students are often encouraged to develop their own moral values, there is no standard set of such values that everyone needs to follow. Thus, various individuals nourish various sets of moral values depending on their own personal, cultural or family backgrounds. In sum, one can affirm that statements in the field of concomitance in modern medical discourse are hierarchically organized. Statements that are deemed as important and necessary are often scientifically

measured, whereas those that do not enjoy much attention from the medical community are often attached to professionalism without having been discussed or researched in sufficient depth. This is one reason why prompts discussed in relation to professionalism (e.g., excellence, humanism, accountability, and altruism) are often vague and lacking in definitions (see Chapter 2: *What is Identity and Why it Matters* for a detailed discussion of how medical professionalism and concepts attributed to it are lacking a standard definitions in medical education research).

Field of Memory. Field of memory consists of those statements that are no longer accepted as true in the modern medical discourse. However, due to having been part of the medical discourse in the past, significant relations between statements in this field and those in the field of presence continue to exist. Surprising as it may sound to some, statements related to less obvious racism, sexism, and paternalism were found frequently among the data collected from medical student interviews and focus groups in this study. It may be helpful to remind ourselves of the fact that, not very long ago, medicine was considered to be a profession that is completely inappropriate for women (see Alfred Stillé's inaugural speech, delivered in 1871, for more). And up until recently (see Boy's in White, 1965, for more) medicine used to be a very White-male-dominated profession. It also used to be less interprofessional and so-called paternalistic in terms of the physicians' behavior. It is true that things like sexism, racism, and paternalistic behavior are no longer accepted today and neither do they have a place in formal discussions. Nevertheless, the echoes of what used to be are still not difficult to spot in modern medical discourse.

Examples of racist statements in modern medicine:

I had a good friend from Hispanic descend, and one of the first questions she was asked was: oh, so you are an illegal?! It was a student from Indiana coming from a very privileged family who asked her that. To me, that's shocking, it's appalling… so I can see, depending on who you meet, and depending on your cultural background, you know, this friend, had parents of Mexican origin and she had no control over that ... and she is a wonderful person. And it's a shame that someone from my home area cannot figure that out. It'd be different for a Caucasian from California, for example, to them it's all friendly, and there is no racial interaction, so it's very much different depending on the person. [004]

One night there was this thing that really annoyed me was that there was a call from a woman's apartment, she woke up with piercing headache… anything with that type of a symptom would have been taken more seriously, but the paramedic nearly dismissed it. But then me and my partner were like, no, she literally woke up from her sleep, and also, one person was like gripping her arm and I thought I felt as if her left arm was not dropping as her right arm was, so… they wrote a report and the chart and the chart was given to the physician, and the physician just went through that, and like literally for 15-20 seconds examination, like in seconds, and she comes out like, oh, these people are faking it ... and it's just a waste of resources etc. So, she completely dismissed any of her symptoms… not even like, she does not realize that she is okay, it's like, she is ACTIVELY faking it. I mean, how do you even know that? You took only 15-20 seconds. The patient was an African American, in her early 20s, and they reported low-income status. There was really no explanation as to why she would have these headaches, and she had no history of repeated visits to the hospital. So, she was not a hypochondriac, or anxious or anything, she was just, she literally woke up from her sleep with this pain. And was wanting to know why… So, it was kind of an experience seeing how the "others", the American "others" go through the healthcare system sometimes. [141]

It usually happens with my parents, like they get frustrated with their healthcare experiences. But [they are immigrants form Uzbekistan and] they have a language barrier ... So, my mom has arthritis and her legs hurt like all the time, but she feels like wherever she goes they do not listen to her. Her doctor, was a really demeaning person, she was a Russian lady, and she was just being rude to her, she was talking to her in a rude way. So, like my mom kind of stopped going to the doctor anymore even when she had pain. And I felt like should not happen… and she we had to change her doctor then. That doctor was known for begin rude to patients, in general. One other one, it was when my mom was removing her hemorrhoid, there was the language barrier, she speaks minimal English, and the interpreter problems. So, they removed something else from her in that region. And then whenever we went to her doctor, he was an Asian

> doctor, he got angry for that! And my mom was in so much pain, because they did not remove what they were supposed to remove, the hemorrhoid, they just got a polyp or something. So, the problem was probably the interpreter, because she had an interpreter that day, I was in school, everybody was at school ... So that was just another experience, like, you are not supposed to be mean to your patient. Because you're getting paid for what you're doing. I feel like it happens most of the time, to them, even to my dad, like he does speak English but I feel like they treat him differently than they would treat the White people. And you can see that. [161]

Example of sexist statements in modern medicine:

> My sister is a 3rd year medical student ... She is rotating now and she feels like she is being treated differently than her male classmates, and especially their surgery rotation, they are very male dominated. She says she is the last person that her attending calls in, her attending calls other students first who are male, and kind of gives them more information. She is left out, or that's what she feels like at least. She also said that her attending says if you are a female it's really hard for you to get into surgery; which I feel like you should never say that to anybody. Even though it's hard but… like you can see that some of these old attendings who have old mindsets such as like females should stay at home, they should focus on their families, surgery is not for you… [161]

Examples of paternalistic statements addressed to medical students:

> The intern was scrubbed in, I got there a little late because I had another surgery. So, I was just watching but she was assisting. So, he kept telling her like, wrong! No! Do it differently ... But without really giving her specific instructions on how to change. And then he drew me in: Oh, I bet Jenna could even do it better, look at her, like she is probably thinking that how much better she could do it if she was scrubbed in ... And I am there, a 3rd year medical student, she is the intern. And he kept going on like that for like 10 minutes. Me and her, like get along, I thought she was doing pretty well, but I was like horrified. Like how can you talk to someone like that?! That's an intern who is there to learn, you are not helping, and you're making her feel bad. [043]

> Firstly, this neurosurgeon was kind of older, he was in his 60s, of a whole different generation, of a whole different idea of what it is like to be a doctor. Physicians used to be, I guess, way more paternalistic. It's a lot more interprofessional nowadays. Secondly, neurosurgeons are kind of very bright, very smart, and have had to go to a lot of school. So, there is also kind of that reason like, they are so full of themselves. [103]

> They are like, I'm a big shot, like a surgeon or whatever, so I get it that they are good and passionate or whatever but they are also that stereotypical personalities. [023]

Examples of paternalistic statements addressed to other healthcare professionals:

> So on my surgery rotation I had this physician that I worked with, so she just yelled at a nurse because she was having trouble getting an NG tube on a patient and then she like, made me go put the NG tube in, and she was like, I had to bring in my medical student to do your nursing work, like, saying that to her. And, I thought that was kind of disrespectful because the nurse had obviously tried to do the NG tube and was having trouble with it and I do not know if she had help, but the surgeon helped me put the NG tube in, so it's not like I just magically did it by myself, laugh. I think her treatment was kind of indicative of the message that your job is less important and you could not even do that, and I just thought that was really unprofessional. [093]

> I feel like, again, it has become way better than before, than what it used to be. It used to be more paternalistic. I think everybody is working in the team, doing their part. Like, I can't do the part that a nurse does and the nurse can't do the part that I do, and then the pharmacist can't do the part of the nurse or PA. So, everybody is working toward the same thing, there should not be like, guess, oh I am higher than you, you gotta like, don't even come talk to me, like, that kind of thing. Everybody is doing their job; they are getting paid and go home. You shouldn't think like oh, I am their boss in this place. I have seen people doing that though, unfortunately. [161]

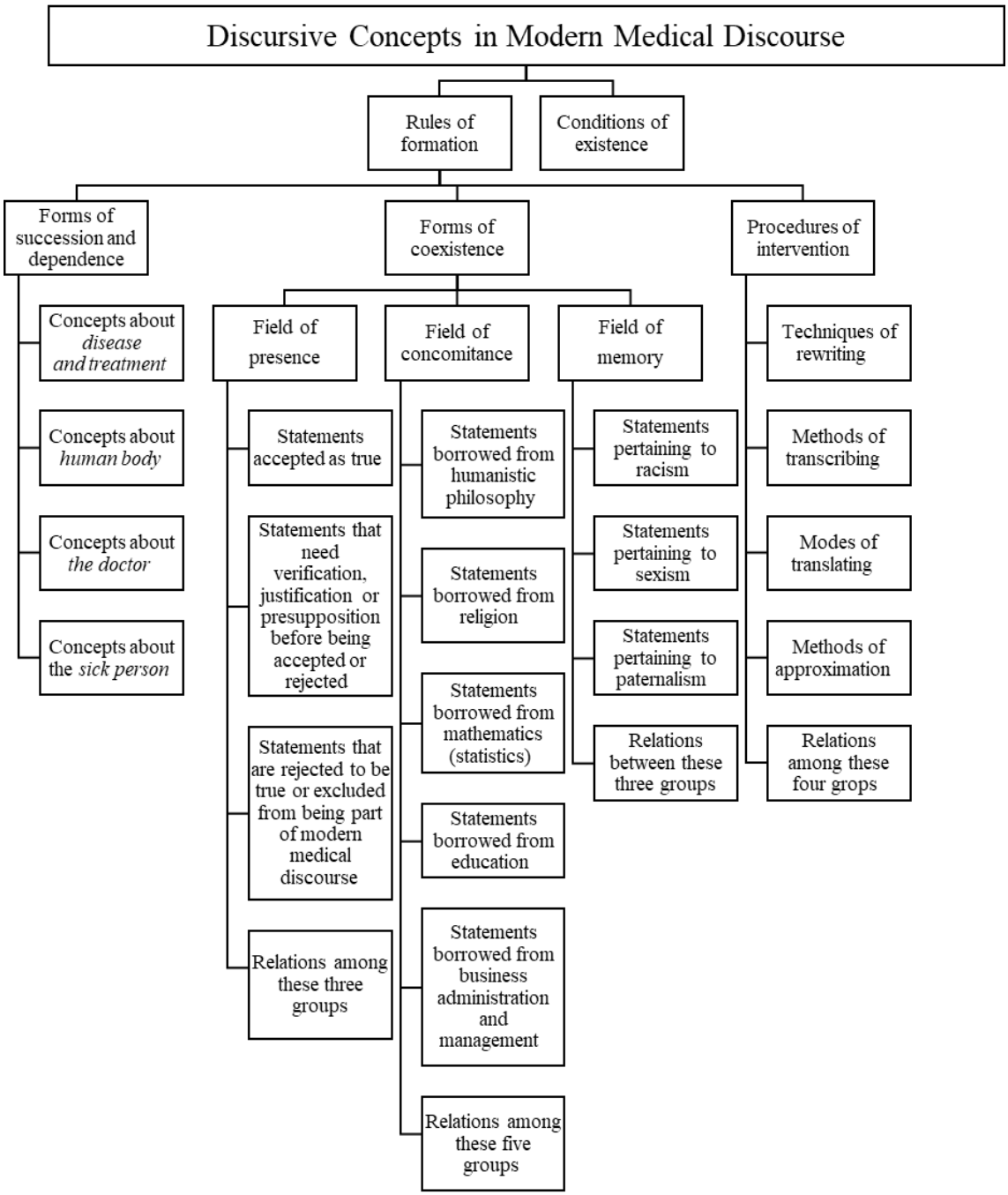
Relations between various types of statements in the field of memory (i.e., racist, sexist, and paternalistic) must also be established. Among the three types of statements currently found in the field of memory in modern medical discourse, paternalistic statements are the most common and most obvious type. A lot of medical students and physicians are not afraid to clearly articulate their support for the hierarchical arrangement of the healthcare team. Numerous comments coming from the data collected from medical student interviews and focus groups in this study support this claim. Likewise, there are a lot of physicians that actively embody the paternalistic behavior towards medical students - again, evidence from data collected in this study can provide several examples of this

type of physicians in the clinic. Whereas statements supporting sexist ideas are not as common and as obvious as paternalistic statements, their appearance is not completely scarce or secret either. Sexist and racist statements are often enunciated informally and as verbal or behavioral statement, they are almost never found in the written format or among formal enunciations in modern medical discourse. Even though an institution such as Indiana University may take a clear position against any kind of racist or sexist behaviors, this position is not necessarily shared by every single individual who is involved in modern medicine. There are controversies as to what is considered racist or sexist and what is not. Clearly, sexism and racism are not completely eliminated from the modern U.S. society, and the Indiana University School of Medicine is definitely not an exception in that regard. Figure 4.10 (at the end of this section) summarizes the archaeological model of analysis for discursive concepts used in modern discourse of medicine.

Lastly, relations between the three fields of presence, concomitance and memory must also be established. In terms of relations between various forms of coexistence (i.e., statements belonging to the field of presence, field of concomitance and field of memory) no obvious dependency among them were detected in this study. Nevertheless, there is a hierarchical relationship among them that dictates significance and amount of attention needing to be paid to each specific group. Field of presence consisting of all statements that are accepted true, need verification and those that are rejected is the one field that is always under the spotlight and is constantly receiving time and attention from everyone involved or interested in modern medicine.

Figure 4.10

Archaeological Model for Analyzing Concepts Used in Modern Medical Discourse



Field of concomitance, on the other hand, is not being discussed as much or receiving attention. While important of course, the statements belonging to this field are not under the spotlight for constant discussion, verification or justification. They are mostly considered as "done" and accepted as they are. Lastly, statements belonging to the field of memory are the ones that are receiving least time and attention among the statements of modern medical discourse. Theoretically they no longer belong in modern medicine they are not the popular topics of discussion in modern medical discourse either.

Procedures of Intervention. These include certain ways of dealing with a group of statements that are acceptable within the modern medical discourse. Procedures of intervention that were observed in this study include: techniques of rewriting (e.g., rewriting the lab results of a patient with high cholesterol and LDL levels in their blood in terms of their clinical significance such as, defining the patient as "prediabetic", "prone to strokes", "high-risk for coronary heart disease (CHD), etc.); methods of transcribing (e.g., transcribing patient's history that is presented in lay language by the patient - using medical terminology) ; modes of translating (e.g., translating what is obtained as purely perceptual measurements and descriptions during a physical exam into a written report of medically defined signs and symptoms for a certain disease); methods of approximation, which refer to the means used to increase the approximation of statements and to refine their exactitude; these includes the following three methods: techniques of delimiting the domain of a statement's validity (e.g., measuring accuracy of the alternative medicine by scientific research and measures–trying to define boundaries for statements that can be deemed as "valid" in modern medical discourse); transfer and application of a statement into a new domain (e.g., medical students using skills they

have been practicing on cadavers–such as observation and palpitation of internal organs, making skin incisions, suturing, etc.–on living patients); and methods of systematization of statements in medical discourse. The latter group includes methods of systematizing propositions that already exist, that have been previously formulated but in a separated state. Also, the methods of redistributing statements that are already linked together, but which can be rearranged in a new systematic whole (e.g., putting all relevant statements - such as blood and urine test reports, medical imaging and physical exam reports - together in a single domain of application to help determine the diagnosis and plan of treatment for the patient).

Relations between various procedures of intervention must also be established. The first three groups of procedures (techniques of rewriting, transcribing, and translating) are common technicalities used in modern medicine at this point. Most of them are practiced in the same way throughout the world (e.g., methods of transcribing) regardless of the country where the medical care facility resides and the language the procedure uses to transcribe patient's history. While one might be able to outline a system of dependence between them, there is no obvious hierarchical relationship between the first three groups of procedures. The fourth group of procedures which is the methods of approximation carries more weight than the first three groups because it involves measures of validity, application, and systematization for the statements.

Theoretical Strategies

So far in this chapter, we discussed *what* people talk about in medicine (discursive objects), *how* they talk about them (modalities of statement for each object), and what *general notions* exist about those objects (concepts) in the modern discourse of medicine.

In this section, we will see what *positions* are possible to be assumed by people in medical discourse with regards to the four discursive objects: disease and treatment, the human body, the doctor, and the sick person. I will delineate a range of theoretical strategies currently found within discursive formation of modern medicine. A theoretical strategy (or choice) emerges each time there are two incompatible discursive elements in the same discursive formation. For example, when two objects, two types of enunciation, or two concepts appear in the same field of discourse but are not able to relate to the same group of statements, it is considered a *point of diffraction* for alternative theoretical choices. It is possible for the alternative and even opposing theoretical choices to appear and coexist within the same discursive field and share the same conditions of existence. Paradoxical as it may sound, one must note that points of diffraction not only indicate *incompatibility* between two or more elements, they also imply *equivalence* of these same elements. That is, *incompatible* elements are still considered *equal* in the sense that they are formed in the same way: obeying the same rules of formation, upholding the same discursive and nondiscursive relations, and therefore sharing the same conditions of existence and possibility for appearing in the same field of discourse. They are situated at the same level but as alternative ways of thinking about a certain object. Moreover, these incompatible yet equivalent elements give rise to a coherent series of objects, modalities of enunciation and concepts, all of which owe their existence to the mere fact that alternative strategies can appear and coexist within the same field of discourse. In the latter sense, points of diffraction also represent the *link points of systematization.* (Foucault, 1972, p. 66).

In this section, I will first discuss the strategies for each discursive object that we have previously established. Next, I will outline the points of diffraction for each strategy. This will include the: 1) points of incompatibility between two or more strategic choices; 2) points of equivalence, which are the same as the rules of formation for each strategy; and lastly, 3) points of systematization for the entire group of strategies related to the same discursive object. When describing points of systematization, I will analyze the relations between strategic elements at various levels. From bottom up, these include relations between rules of formation for all strategies relating to the same discursive object; these would be discussed as points of systematization for the entire group. This will result in establishing, in part, the conditions of existence for all strategic choices that coexist in the discursive formation of modern medicine.

Rules for the Formation of Strategies. As detailed in Chapter 3 and briefly mentioned above, archaeological analysis in this study first of all seeks to determine the points of diffraction for various strategic choices made in the discursive formation of modern medicine. Incompatible strategic choices then emanate from each point of diffraction. Each choice thus made is considered a separate *strategy* for which we need to establish the rules of formation and the overall conditions of existence. Rules governing the formation of strategies that need to be established by analysis are as follows:

1. Rules concerning the economy of the discursive constellation
2. Rules concerning the nondiscursive structures

Strategies Concerned with the Disease and its Treatment.

Objectivity vs. Subjectivity: Are Discussions of Disease and Treatment Standard for All Patients? Discussions about the disease and treatments in the clinical settings, especially

among doctors, are often perceived as objective and standard. The reason for that is that discussion of these topics are supposed to be based on medical scientific knowledge that is both objective and standard so it is assumed that there should not be much variation in terms of applying this knowledge to patients. The reality is, however, that the practices dealing with disease and treatment at the hospital are anything but standard or objective. The knowledge maybe standard, but it goes through several human filters before it is actually applied to the patient.

First, just based on common sense, not all physicians are equally aware of and knowledgeable about the features of a certain disease and every single treatment option that maybe available for it. Some physicians are more dedicated to their profession and invest more time and energy to stay up-to-date with medical science. To complicate the issue further, the science of medicine is changing constantly and rapidly in our age. Second, every patient is different and unique in terms of developing and/or showing the signs and symptoms of a disease. Likewise, different patients respond differently to the same choice of treatment. Therefore, there is room for a lot of hesitation and uncertainty on the part of the doctors. The decisions doctors make about the diagnosis and plan of treatment for the patient are directly related to their level of knowledge and dedication, the amount of time and energy that they spend on a patient's case. Yet, more often than never, both diagnosis and choice of treatment happen to be the doctor's best guess and it also depends on an array of factors related to the patient. Third, sadly not every patient gets the exact same treatment and care from the healthcare staff at the hospital and there are various reasons for that, ranging from technical issues and implicit bias to racism and classism. As one can imagine, there is a lot of room for subjectivity and relativity in here.

Perhaps it is safe to assume that clinical practice is never objective in the real sense of the term. Below are a few excerpts pulled from the observation field notes to illustrate the above points.

Examples of uncertainty and hesitation on part of the attending and residents:

> Five minutes discussion among the team outside patient's door. Not a deep level of engagement. Resident 1 who presented the case to the team did not do a good job of explaining the case. Seems like he did not know much about the patient himself. Resident sounds clearly confused and hesitant. Attending asks: "I wonder if tachy is because of his lobectomy?" Resident 1 shrugs his shoulders. Resident 2 adds a side note that is apparently not important or relevant to the case. No one seems to take notice of the note. The team goes in. Resident 1 takes the lead. Patient is a 50-year-old man with small cell carcinoma. [Obs] [p.50]

> Intern asks attending: "do we do… before ...?" Attending smiles and looks a bit flustered. "We should be getting Tramadol now" not really answering the intern's question. [Obs] [p.54]

> Resident presents the patient case, skips some info, and does not seem to be sure about anything he is reporting. Begins and ends his statements with "I don't know", "I mean" [Obs] [p.51]

Example of investing less time and effort on part of the team (attending, residents, and others):

> Resident describes the patient for 1 minute. Attending leads the visit, checks patient's chest after surgery. [Obs] [p.53]

Examples of competence, confidence, and care on part of the attending and residents:

> Intern describes the patient to the team. Attending looks at her with an appraising gaze. The intern does much better than the resident did on previous patient. He looks concerned, a bit too detail-oriented, perhaps. [Obs] [p.55]

> Resident leads the team. It's a new patient. The attending acts very polite and humble. Both attending and resident listen to patient's lungs. Resident speaks confidently, concernedly, almost does not sound like a resident. I would have thought he is an attending physician if I were the patient. "Let your nurse know if you need anything else, okay?" says the attending as

the team prepares to leave the room. Resident looks at the patient and says "nice to meet you!" before leaving the room: [Obs] [p.57]

Points of Diffraction. Here we need to establish three categories of relations among strategic choices: 1) points of incompatibility (e.g., how strategic choices are different from one another), 2) points of equivalence (e.g., how strategic choices are equal to one another as they share the same conditions of existence), 3) points of systematization (e.g., how these strategic choices give rise to a series of objects, modalities of statement and concepts within the modern medical discourse).

Points of Incompatibility. To find points of incompatibility among different strategic choices, one needs to answer the following question: What different positions are taken regarding modalities of statements and concepts relating to the disease and treatment? Based on the present study, at least the following two positions are taken regarding the disease and treatment as an object of modern medical discourse:

A. Some invest more time and energy to hone their skills as physicians. As a result, they stay more informed about the updates in modern medical science about diseases and possible treatment choices. They also spend more time and energy with individual cases that they come across.
B. Some invest less time and energy to hone their skills as physicians and as a result, they practice medicine with dangerous uncertainty and hesitation when it comes to diagnosing the patient and determining the plan of treatment. They also spend less time and energy with individual cases they come across.

Points of Equivalence. To find points of equivalence among the two strategic choices above, one needs to show that they share the same conditions of existence. Conditions of existence for theoretical choices made in a discourse consist of rules for the

formation of strategic choices and the relations between those rules–as we have seen for the previous three elements of discourse (i.e., objects, modalities of statements, and concepts). First, let us discuss the rules for the formation of strategies that consist of: 1) rules concerning the economy of discursive constellation, and 2) rules concerning nondiscursive structures as they relate to the above-mentioned strategic choices.

1. Rules concerning the economy of discursive constellation

Here, we need to show how the choices made depend on the general constellation in which medical discourse is situated. Modern medical science is positioned in the same discursive constellation with natural sciences, technology, business, and capitalism in the USA, 2019. Though clinical practice is far from being one hundred percent scientific or objective, the knowledge of medicine that doctors across the globe draw from is mainly scientific, objective, and value-neutral. Bio-scientific medicine does not welcome the expression of emotions such as care and empathy on the part of the doctor. Thanks to a few scattered topics of social sciences such as medical humanities that are often discussed under medical professionalism, at least some students are aware of the issues of respecting the human dignity when handling bodies and why it is important to be vigilant of those. As a consequence of being in the same discursive constellation with natural sciences (e.g., biology, chemistry, etc.), medicine tends to identify with objectivity and value-neutral nature of hard sciences rather than humanistic values of medical humanities and social sciences. Moreover, being in the same constellation with business administration and management, which are inseparable parts of practicing modern medicine today, many people involved in medicine are under the influence of profit-

based measurement of events and seeking personal interests in all social events–including a medical practice

2. Rules concerning the nondiscursive structures

Nondiscursive structure within which the entire process of medical education is housed consists of the medical school. As is evident from data in this study, from an administrative perspective there seems to be no consequences for choosing any of the above two strategies unless things go too wrong with a patient which cannot be justified. For the most part, students, doctors and residents have the choice of going with either of those two strategies. Furthermore, what seems to be the obvious rules and regulations at the hospital is not always respected by all hospital staff. There can be issues ranging from minor neglect to major personal prejudices against certain patients. Let us look at a couple of examples of technical or other issues in clinical setting that can affect the standard patient care practices:

> Attending is talking about a patient whose surgical complications were not reported to him soon enough. He seem frustrated: "ultimately, system-wise, you are stuck!" He goes on talking about reliability, and confusion ... "Patient comes in at 8 pm, but won't be seen by neurosurgeon until the next day!" ... "Nobody documents or comments about the fall that happened in the hospital ... Oh God, did anybody look at this patient? They renewed the documentation system so nobody's physical exams are on the same page anymore ... And they finally gave him [two contradicting test results], 1 out of 5 versus 4 out of 5!" [Obs] [p.19]

> The two attendings are discussing a patient who came last night: "that's a system-break. I mean, that sort of thing doesn't happen quite often, true, but it takes only once, you know". Sounds like something went wrong with Propofol, MRI, CT, and lab report reading. Attendings discuss patient for 10 minutes standing in the hallway. [Obs] [p.27]

Points of Systematization. This is where we need to establish the link between each of the strategies about disease and treatment and show how they can affect the rules of formation for disease and treatment as an object of discourse, the rules of formation for

enunciative modalities about disease and treatment, and lastly, the concepts related to disease and treatment in the modern medical discourse. Points of systematization entails how each strategy contributes in production of statements (commentary) about an object, the types of statements about that object, and concepts that are born out of the specific relations among the rules of formation for objects and statement modalities. In this sense, as Foucault points out, "points of diffraction also represent the link points of systematization." (Foucault, 1972, p. 66)

Each of the strategic choices noted above (i.e., being a more committed medical professional or a less committed one) represent systematically different ways: of treating disease and treatment as object of medical discourse (delimiting it, grouping and classifying it), of arranging modalities of statement about disease and treatment (choosing them, placing them, and composing them), and of manipulating concepts regarding the disease and treatment (determining rules for their use and constituting the conceptual architecture of modern medical discourse related to the information about disease and treatment). In other words, each of the strategies above, are regulated ways of "practicing the possibilities of discourse" (Foucault, 1972, p. 70).

For example, we know that doctors and residents are important authorities of delimitation for disease and its treatment. They are also the ones who have the right to authoritatively speak about the characteristics of diseases and the treatment options that are available for the patients. Doing so, they draw from the authority of medical school, hospital, and the institution of medicine in general. People are most likely to believe that their statements are true because they are based on these authorities. Now, if a student or resident chooses to invest less time and energy learning about and applying the

knowledge about disease and treatments, this choice will affect his/her professional identity as a doctor in the future. The way she sees this matter as an authority of delimitation, the way she chooses to use the objective science of medicine in relation to the patient's condition, the way she chooses to talk about the disease characteristics and treatment choices, and finally the way she chooses to manipulate the concepts related to the disease and treatment in medical discourse will all be affected by her choice of investing less in keeping up with honing her medical skills constantly. This scenario is also true about the opposite case, where a student chooses to stay committed to refining her skills constantly enough. This decision too will affect her future professional identity as a doctor and will give rise to unique commentary and statements coming from her regarding how to deal with the disease and treatment in the clinic. This is how medical discourse is constantly produced and reproduced by people who are involved in medicine. The reason one can often see different and sometimes opposing behaviors from different doctors is that they each are using a systematically different way of dealing with a certain object of medical discourse, whether it's about a treatment choice, the body, the doctor's function, or the sick person.

It is also important to show how different strategic choices are linked to the function carried out by modern medical discourse in the practice of current capitalistic culture; and the role medicine plays in realization of interests and desires of the upper class in society. Modern medical discourse is defined by "a certain constant way of relating possibilities of systematization interior to a discourse, other discourses that are exterior to it, and a whole nondiscursive field of practices, appropriation, interests, and desires" (Foucault, 1972, p. 69). With doctors and medical scientists who produce the

science of modern medicine for use in the clinic, it is not difficult to see that certain choices are made by the upper class in society (doctors and scientists) that determine the way medical discourse is shaped. The information about recognizing the diseases and selecting treatment options for them are mostly pure scientific and included in medical textbooks that have no room for discussing the humanity side of medical practice. With medicine being dependent on the gigantic business industries such pharmaceutical and health insurance companies to name a couple, doctors being trained in medical humanities, developing traits such as empathy and compassion, and developing humane relationships with their patients will not be best suited to serve the interests and desires of the capitalistic society where business leads to serving the rich and ignoring the poor.

Strategies Concerned with the Human Body.

Objectification, Desensitization, and Personification: Medical Student Strategies for Dealing with the Human Body. Medical students' first authoritative encounter with human body happens in the first year of medical school, in gross anatomy lab. Different students experience the time they spend in the anatomy lab differently; for some it is an emotional roller-coaster dealing with the death and dissection for the first time whereas for some others it is merely a unique learning experience. Based on personal values and preferences, students choose their own strategy to help themselves make the most out of their experience working with cadavers' bodies. Student strategies that were discussed in personal interviews with medical students in this study range from complete objectification of the body as a non-living thing to a paralyzing personification of the cadaver's body that hinders student's learning process. The full spectrum of attitudes toward cadaveric bodies include objectification, desensitization to be able to work with

the body, balanced behavior standing on the middle grounds between objectification and personification and at times alternating between the two, and, full personification of the body impeding learning from a cadaver's body let alone dissecting it. Example of comments referencing each strategy are provided below.

Exemplar statements denoting objectification of the human body:

> I was over-stressed about how well we will dissect that body ... I do not think I actively tried a strategy, but I think subconsciously I dehumanized the body. I think I even referred to it as "it" at times. I am not sure why. I had not really considered, I guess, I was interested to know what caused him to die and trying to figure out like, different comorbidities he may have had, but by no means had I ever wanted to know his name, or what his family was like. I was definitely appreciative that he did give up his body - once he no longer needed it - to teach me. But I did not ever feel like I kind of owed him anything. Maybe just because I did not really think of him as a person before I started cutting him. 103]

> I was just so involved in the act of trying to learn the actual anatomy because I had not taken it before and I did not know anything, I was just so fascinated by it ... but no, it did not bother me. I never felt like this was a person, no. I did not feel like that at all. I already was desensitized so, I do not know [laugh]. [043]

Exemplar statement about desensitizing one's self toward the human body in order to be able to overcome one's emotional reactions and effectively work with the body:

> We often called our cadaver our first patient. I get that, we appreciate it, they dedicated their body to us and everyone deserves respect and dignity ... however, rather than seeing it us our first patient, I took it more as a learning experience, where this is something I learn from, rather than a patient encounter where I am advocating what's best for my patient. My decisions kind of really matter more, like the decision that we were chopping off the leg, while I would not do that for a living person lightly. So, the emotion for me was not a huge factor ... the student who was very shy had had a surgery 6 months before and she was hesitant about cutting the human body, which I can get her point. But for me, I took it more as a learning experience. So, like, working on the face, it is a sensitive area, and at the end, bisecting the head when it does not really look like human anymore… so that was the part for me where I was like, whoa! We just did that! If I did not desensitize myself, there comes almost a little bit of a

> paralysis of decision making like, people who are in the surgery often experience that feeling. [004]

Exemplar statements against desensitization strategy chosen by some medical students:

> If you are going to become a physician and you need to desensitize yourself to a cadaver, then I think medicine will be very difficult for you. I think you can, if it helps you, but then how are you going to make it through a real person that's alive than dying? You have to be able to confront the fact that this was a real human being who was kind enough to dedicate their body to the education of stupid first-years who do not know how to use the scalpels you know; we are not doing a good job…. I mean I see why people would do it [desensitize themselves] but then it'd concern me that you should think about everything as a real human being, you should think about every one of them as your first patient and do your best for them ... It was truly our first patient that we saw every day that we had goals to do ... If you desensitize, then how are you going to move on? There might be patients in the future who are in a gross state, you can't just forget about their humanity and think of them as an object just to be able to work with them. [063]

> I mean, I think everybody including me said something at some point that if the patient or their family could hear, they would not be happy. Because, we would look at it objectively, and like, oh my patient is thin, thank God! And if you had an overweight patient then all you could comment about is like oh my God, they are so fat, how did they live like that ... so, things like that ... It's just objectifying the patients to the point that, that's the thing, if you desensitize too much, then it stops you from seeing that if they were your patients, and if the patient or your parents were here, could you still say what you said. And if not, then do not say it. [063]

Exemplar statements denoting extreme personification of the cadaver's body which impedes student's learning processes:

> I am not afraid of any of that. The reason I was so afraid of the anatomy lab is that they [cadavers] actually look like a dead person. I did not want to be around that, I was thinking of that these people have families, are their families okay with this? I kept thinking that what if it was my sister with all of this happening to her ... so what if their families did not want this? And, I do not know, it was just very hard for me to ... So, I was just never able to desensitize myself, I know people do that as a strategy to be able to work with cadavers, but I just - thinking of it spiritually - I could not do that. [051]

> Human dissection was just very hard for me. Like, I was like, I do not wanna do it. But it was like, here I go, I am walking through this waterfall, I am crossing this line ... but I was fully cognizant that it's not a normal thing that people do, it's kind of a special privilege, a responsibility almost and it's kind of sick in a way and it's kind of wrong, and it does feel wrong ... so, did I objectify the guy's body? No. I never wanted to treat him like an object, I saw him as a human being, and I always was cognizant of the fact that I was defying this guy's body, I was taking his body apart like a machine. Was destroying him. So, I felt bad. I felt like it was a defilement and it *was* defilement ... but specifically, what coping mechanisms did I use? I do not know. I always, padded him on the shoulder, when we got to work on him, I was like: here we go buddy… and I would call him "buddy" [smile]. [081]

Exemplar statements about personification of the body which does not impede learning processes but rather helps it:

> So, we knew the real names, and ages, and met our donor's families. I met with the daughter of my cadaver, I sent her an email. We had a memorial service, so afterwards I got to set with his wife, and my donor's step-daughter and talked to them about him and they shared memories of him. And it was cool, like, I had just had a month doing horrible things to his body but because I knew all along that he was a person, he liked polish pastries and he loved dancing, knowing these things about him, it was easier for me trying to be respectful of him and his body when I was doing things that otherwise were really gruesome. And not really making any comments about him, like, because I knew him as a person. But I also had classmates who did not answer the email, and like, did not go to the ceremony because they were like, I can't think about "it" being a person. It was an optional thing, like, you did not really have to do it if you do not want to. There was a woman who died of breast cancer, so she and her family made a slide show of her life and she saying things, like, here is what I want you to know about me, about her life, kind of a little video that she made by herself. Her body was in the lab ... I think it was good to keep the humanity side of it, it was helpful for me. [023]

> We were not allowed to call them donors, we had to call them first patients. It was instilled in us very early that we were kind of their first care-taker after death. And we should treat them as patients with respect… and I like that, that was kind of my memory of the anatomy lab. I think it can help to desensitize yourself, yeah… It would not have helped me, because it helped me more to think of the whole system as this was a person. And I think it was not an issue for me because I was an MT prior to med school. I was no stranger to death or dead bodies, so it was not a shock to me when I saw a dead body… I mean yes it was a shock to see

> that they did not have their skin on, but I was not rattled by that. I was not disturbed by that. I was expecting it and I knew that it needed to come. [134]

Exemplar statements about choosing a balanced strategy–midway between extreme objectification and extreme personification:

> It was strange to think of it at times, but when the body is flipped over and you are just working on the back you kind of forget that it's a human being. But when you see the face, the hands with finger nails like some cadavers have nail polish, or you see hair on some body parts, then it kind of, at least for me it is, you know, stop and appreciate them, do not treat your cadaver poorly. Somebody gave their body to do this, and so you know you completely forget for an hour again but then again you remember what it is that you are doing. You know like, nobody else in the world has got this, it's such a weird privilege. [063]

> I wanted to treat their donated body with the most respect, I was not just setting there being comfortable, like some people would make jokes like, oh, do the hand-shakes, and like ... Look, I am gonna do what I am here to do and respect this person's body. And I would not do anything that I'd perceive this person would not want me to do. Not that they are watching me right now. Like, this is a corpse, it's no longer a human peer ... this person is dead, I do not have the same feeling as I was cutting through a living person, which I actually did when I was in the surgery rotation. But even though this person has passed away, I still want to honor their wishes, and I am gonna be respectful and treat their body in a respectful way. [034]

> With my donor, I was using a mindful objectivity, like understanding that this is not an instrument that this person is ... and not to treat this person as a "thing". I think there is an interesting transition between a person and a cadaver… So, like there is a different aspect of meaningfulness in desensitization. I mean, you can't function, if you completely think about that this is a human that you are working with, and unfortunately, that's I think the kind of compromise that you have to make. To honor your cadaver and not letting her donation be wasted on you, you need to learn what you need to learn, and to be able to help the hundreds or thousands of patients in the future, you have to objectify this one body to a level that enables you to function. And it's not like you are cutting someone's body against their will, at least you know that the person you are cutting has given their consent for this to be a learning "tool" - for lack of a better word. But there still needs to be that balance between being mindful and objectivity. Sometimes the balance does not hold up and one side takes over, like you objectify the donor to an extent that you completely forget

> that this was a person and needs to be treated with the due respect. And other times, some students fall completely on the side of personalizing their cadaver that all they see is a person who is a human, is somebody'd loved one, has had a life, etc. In that situation too, they can't really function and learn and the entire process kind of goes for nothing ... So, you need to remember that it's not a tool to the extent that you just treat it like a toy. So, it can't be a toy and it can't be a person. It needs to be something in the middle of those two poles/extremes for everything to go well. [141]

Points of Diffraction. Here we need to establish three categories of relations among strategic choices: 1) points of incompatibility (e.g., how strategic choices are different from one another), 2) points of equivalence (e.g., how strategic choices are equal to one another as they share the same conditions of existence), 3) points of systematization (e.g., how these strategic choices give rise to a series of objects, modalities of statement and concepts within the modern medical discourse).

Points of Incompatibility. To find points of incompatibility among different strategic choices, one needs to answer the following question: What different positions are taken regarding modalities of statements and concepts relating to the human body? The answer based on the present study is: At least the following three positions are taken regarding the human body as an object of modern medical discourse:

A. Some see the body as merely an *object* for learning (cadaver's body) or practicing medicine (patient's body).
B. Some see the body (alive or dead) as a *person* who has (or had) a life outside the doctor's learning activities or medical practice. This cohort believes that human body should not be objectified because it belongs (or it did in the past) to a whole person with many connections with the outside world.

C. Some say there needs to be a balance between personifying the body to the point that one is unable to learn from it, and desensitizing one's self to the point that one is unable to respect it anymore.

Points of Equivalence. To find points of equivalence among the three strategic choices above, one needs to establish the conditions of existence for them and show how they all share those same conditions. Conditions of existence for theoretical choices made in a discourse consist of rules for the formation of strategic choices and the relations between those rules–as we have seen for the previous three elements of discourse (i.e., objects, modalities of statements, and concepts). First, let us discuss the rules for the formation of strategies that consist of: 1) rules concerning the economy of discursive constellation, and 2) rules concerning nondiscursive structures as they relate to the above-mentioned strategic choices.

1. Rules concerning the economy of discursive constellation

Here, we need to show how the choices made depend on the general constellation in which medical discourse is situated. Modern medical science is positioned in the same discursive constellation with natural sciences, technology, business, and capitalism in USA, 2019. Though clinical practice is far from being one hundred percent scientific or objective, the knowledge of medicine that doctors across the globe draw from is mainly scientific, objective, and value-neutral; it does not welcome the expression of emotions on the part of the doctor. Thanks to a few scattered topics of social sciences such as medical humanities that are often discussed under medical professionalism, at least some students are aware of the issues of respecting the human dignity when handling bodies and why it is important to be vigilant of those. As a consequence of being in the same

discursive constellation with natural sciences (e.g., biology, chemistry, etc.), medicine tends to identify with objectivity and value-neutral nature of hard sciences rather than humanistic values of medical humanities and social sciences. Moreover, being in the same constellation with business administration and management, which are inseparable parts of practicing modern medicine today, people involved in medicine are often under the influence of profit-based measurement of events and seeking personal interests in all social events–including a medical practice

2. Rules concerning the nondiscursive structures

Nondiscursive structure within which the entire process of medical education and handling of cadaver bodies are housed consists of the medical school. Rules and regulations of medical school in general and the department of anatomy in particular do not identify an effective standard for handling cadaver bodies by medical students. The few verbal directives encouraging students to respect their cadavers and be mindful of their human dignity, which are often delivered on the first day of the course, are apparently the only checkpoint after which students are allowed to develop their own strategies for handling their assigned bodies. As is evident from data in this study, from an administrative perspective there seems to be no consequences for choosing any of the strategies. Students have the choice of objectifying or personifying their bodies with no interference from the faculty or course administration. As for handling patients' bodies, there are no standards in place at the hospitals as well. Doctors have the choice of treating their patient's bodies as an object of their medical practice or as a whole person, depending on their own preference, moral and ethical code, and other factors.

Points of Systematization. This is where we need to establish the link between each of the strategies about human body and how they affect the rules of formation for human body as an object of discourse, the rules of formation for enunciative modalities about human body, and lastly, the concepts related to human body in the modern medical discourse. Points of systematization entails how each strategy contributes in production of statements (commentary) about an object, the types of statements about that object, and concepts that are born out of the specific relations among the rules of formation for objects and statement modalities. In this sense, as Foucault points out, "points of diffraction also represent the link points of systematization" (Foucault, 1972, p. 66). Each of the strategies above (i.e., objectification, personification, or balancing between these two extremes) represent systematically different ways: of treating human body as an object of medical discourse (delimiting it, grouping and classifying it), of arranging modalities of statement about human body (choosing them, placing them, and composing them), and of manipulating concepts regarding the human body (determining rules for their use and constituting the conceptual architecture of modern medical discourse related to the human body). In other words, each of the strategies above, are regulated ways of "practicing the possibilities of discourse" (Foucault, 1972, p. 70).

For example, we know that doctors, residents and students are among the most important authorities of delimitation for human body. They are also the ones who have the right to authoritatively speak about the structure and function of the body as an object of medical discourse. Doing so, they draw from the authority of medical school, hospital, and the institution of medicine in general. People are most likely to believe their statements are true because they are based on such magnificent authorities. Now, if a

student chooses to objectify the body (cadaver or patient), this choice will affect his/her professional identity as a doctor in the future. The way she sees the body as an authority of delimitation, the way she chooses to use the objective science of medicine in relation to the patient's body, the way she chooses to talk about the body and finally the way she chooses to manipulate the concepts related to the body will all be affected by her early choice of objectifying the human body. For instance, this student is more likely to become a doctor who cannot see the patient as a whole person and chooses to speak more objectively (in terms of objective scientific facts, and statistical conclusions) to the patient rather than trying to create a human-to-human relationship with them. This doctor is also more likely to use paternalistic statements (or what Foucault calls the medical gaze) regarding her patient's body–whether in a surgical specialty or not–she is more likely to refer to the patient's body as an object for the medical practice. All this will create more commentary and is likely to affect other junior doctors around this doctor who might see her as a role model in the clinic and try to learn from her the appropriate way of dealing with human bodies.

This entire scenario is also true about the opposite case, where a student chooses to personify the body in a balanced way. This decision too will affect her future professional identity as a doctor and will give rise to unique commentary and statements coming from her regarding how to deal with the human body in the clinic. This is how medical discourse is being produced by people who are involved in it at the hospitals, for example. The reason one can often see different and sometimes opposing behaviors from different doctors is that they each are using a systematically different way of dealing with

a certain object of medical discourse, whether it's the body, the treatment choice, the doctor's function, or the sick person.

It is also important to show how different strategic choices are linked to the function carried out by modern medical discourse in the practice of current capitalistic culture; and the role medicine plays in the realization of interests and desires of the upper class in society. Modern medical discourse, is defined by "a certain constant way of relating possibilities of systematization interior to a discourse, other discourses that are exterior to it, and a whole nondiscursive field of practices, appropriation, interests, and desires" (Foucault, 1972, p. 69). With doctors and medical scientists who produce the science of modern medicine for use in the clinic, it is not difficult to see that certain choices are made by the upper class in society (doctors and scientists) that determine the way medical discourse is shaped. On the other hand, doctors who are getting trained in objectivity of medical sciences and have the choice of objectifying the human bodies as part of medical practice are in a way more beneficial to the overall capitalistic culture of the modern U.S. society. With medicine being dependent on the gigantic business industries such pharmaceutical and health insurance companies to name a couple, doctors being trained in medical humanities, developing traits such as empathy and compassion, and developing humane relationships with their patients will not be best suited to serve the interests and desires of the capitalistic society where the purpose is serving the rich and ignoring the poor.

Strategies Concerned with the Doctor.

Competence or Compassion: What is the Most Significant Characteristic a Doctor Should Possess**?** In this section I will report various positions taken by medical students when

asked about the most significant characteristic(s) that a doctor should possess. Many of the students were not clear in their responses. They seemed to be confused about what it is that is wanted from them and what it is that they need to set out as a personal goal to achieve as a doctor. As a result, student responses were quite varied. It is remarkable that this matter receives little to no attention from the current education system. The problem is that students find it difficult to articulate who they are and what the number-one thing that will define their identity is, as a physician–all with no apparent consequences to their student status or assessment. Below are exemplar student comments in response to the following focus group prompt: "Is there this one thing that if you don't have then you can't even be a physician?" (See prompt #6, FG Protocol, Appendix D). Responses are divided into several groups as follows.

Exemplar statements fully (or partially) denoting medical knowledge competency as the most important characteristic a doctor should possess:

> I think that something that every physician needs regardless, is the knowledge of medicine. Like, obviously you need a lot of other things like there is a human side, there is like a lot of etc. etc., but I think that the baseline every physician needs is the knowledge of medicine. [MS2]

> I mean you cannot separate knowledge of medicine from a medical care professional, so yeah. And also like, how to acquire the knowledge you don't know yet ... Obviously, like, that's a life-long mission. [MS2]

> I want to say study well. Like, I wanna care for patients but to do that I need to be competent. If I don't know how to help them and I don't have enough tools to help them then how can I say I am actually going to help people? So, that motivates my study. So, I think if you are really a true physician, then you are a smart physician, you are a well-studied physician, and X, Y, Z. [MS1]

Exemplar statements denoting some sort of "care" as the most important characteristic a doctor should possess:

> I'd say caring. [MS1]
>
> Caring, empathy [MS3]
>
> Compassion [long group silence follows] [MS3]
>
> The best doctors I have worked with have been the best listeners, and good communicators. Like, they used their knowledge to communicate with the patient, so the way they explained patients' condition to them, I think that was the best thing that hit me. [Long silence follows] [MS3]
>
> I think empathy is important across the board for all specialties. Like there are a lot of physicians who try to protect themselves so hard, that does not mean that they are not good at what they do, but with regards to aspects of being a doctor. [MS4]

Exemplar statements denoting both care and competence as the most important characteristics a doctor should possess:

> I do not think there is any one [characteristic for being a good doctor] that would suffice, because you can have like, someone who is really smart but is not good at interacting with patient, so may not be the best at caring for the patient for that reason, and vice versa. [MS1]
>
> Compassion is the true measure, if you are not compassionate what kind of a physician are you… I mean, when I say compassion there is kind of already so many checkpoints on intelligence and reliability that you have to go through to be a doctor, you know what I mean? So, in my mind, it's almost like a ... I guess this person is gonna be like, have the mental capacity to keep up with all those things, but I kind of see that the general opinion is that most doctors are very smart, but maybe a lot of them are not compassionate. So, I think being compassionate is not a true measure, but I think it's the measure of a great physician. So, it's like an extra thing, but it's not exclusive. So, what's the true measure of a physician? Oh boy, then I guess it'd be the other thing, which is not necessarily reliability but, you know, medical knowledge. Medical knowledge is kind of the true measure because you have to have medical knowledge, if you do not have that you're not really a physician, are you? So, the point with compassion is that if you do have a medical knowledge but do not have compassion, I mean you are still a doctor, but you are not gonna be a great doctor to care about your patients, so. [MS3]

Exemplar statements devaluing the importance of care in medical practice:

> So, like, "caring" and being "mindful", I think they are just terminology, and everyone's definition for it kind of varies. Like, there are people who may not be able to show the emotions like everyone else, but he is caring in his own way, like he is doing everything that another person who shows the emotions would do… so, like, where is that line, between whether someone cares or not? [MS1]

> And that's what actually goes on in a lot of places today, you know. So in this hospital they got a new chief surgeon, and he does not see the autistic guy as, like, he does not have empathy for patients… so, he like basically comes from a surgical program to do pathology because he is curious, and he is so smart, and he can do wonders here, but you do not have that aspect of being [a caring] doctor. So that's basically what they are measuring as being a true physician. So, like, he doesn't get to be a surgeon anymore just because he doesn't have that aspect of…? He does, I mean, he still cares, but he can't show it, so. [MS1]

Finally, here are exemplar statements denoting things other than knowledge competency and care as the most important characteristics for the doctor to possess:

> I'd say, white coat [is the true measure of a physician]. [MS2]

> I think it depends on the type of physician. Like, if you are a pathologist, and you're doing autopsies, you are gonna be needing to have much attention to patient's details. But if you are like, the best surgeon it might be dexterity, and if you are a psychiatrist it's gonna be the ability to connect with people. I think it's different for different physicians. [MS2]

> Intelligence. [MS3]

> Maybe character. I feel like the best physician is also a good person, who is trustworthy, reliable, moral, and so that is like a good character. So, if they do not know the knowledge you can teach them that, but for some reason teaching character to people is not that easy, unless the person is willing to be a good person, so… [MS4]

Points of Diffraction.

Points of Incompatibility. Different positions taken about modalities of statements and concepts relating to the most important characteristic of *the doctor* are as follows:

A. Some say the most important characteristic of a doctor is to be competent in medical knowledge.
B. Some say the most important characteristic of a good doctor is to have compassion and care for the patient.
C. Some say it is important for the doctor to possess a balanced mixture of both competence and care in order to be successful.
D. Some say most important characteristics of a doctor are things other than competence and care.

Points of Equivalence. The above four strategies are all equally possible to emerge on the surface of the discourse since they are all sharing the same conditions of existence. Again, conditions of existence for a theoretical strategy consists of the rules for their formation and the relations between those rules.

1. Rules concerning the economy of discursive constellation

Again, here, we need to show how the strategic choices made above depend on the general constellation in which medical discourse is situated. As discussed in the previous section, modern medical science is positioned in the same discursive constellation with natural sciences, technology, business, and capitalism. Though clinical practice is not fully objective, the knowledge of medicine is mainly objective, and value-neutral that does not welcome the expression of emotions on the part of the doctor. Having been exposed to a few scattered topics of medical humanities that are often discussed under medical professionalism, at least some students are aware of the importance of care and compassion in medical practice. Again, as a consequence of being in the same discursive constellation with natural sciences (e.g., biology, chemistry, etc.),

medicine tends to identify with objectivity and value-neutral nature of hard sciences rather than humanistic values of medical humanities and social sciences. Moreover, being in the same constellation with business administration and management, people involved in medicine are often under the influence of a profit-based measurement of events and seeking a personal interest in all social events–including a medical practice. Hence, some students are focusing on the abilities of the physician for the sake of the physician (e.g., wearing a white coat) not for the sake of a better healthcare for the patient.

2. Rules concerning the nondiscursive structures

According to the rules of the modern medical education at Indiana University School of Medicine, vast majority of time and resources are invested in training medical students on the hard science of medicine. That means objectivity and value-neutrality are indirectly being promoted throughout the medical training. In the hospitals, in addition to the scientific objectivity, the business models for management of care for the patient is under the spotlight. According to the data collected in this study, humanities have a tiny part (if any) in formal medical education; thus, only minimal interest or attention is paid to research produced in the fields of medical humanities. Students seem to attach minimal significance to what they sometimes refer to as “the wishy-washy” and “fluffy stuff” of medical professionalism during their medical school training. There are no serious assessments related to the humanistic side of medical practice, and knowing or not knowing at all about them is not going to affect students’ grades or their performance on the NBME exam. Having pretty much no incentive to learn professionalism is further reinforcing the neglect toward social aspects of medicine on the part of the students. This is despite the fact that IUSM has approved adoption of the six ACGME competencies as

the guiding framework for their new curriculum at the institutional level. These competencies include medical knowledge, patient care, practice-based learning and improvement, interpersonal and communication skills, professionalism, and system-based practice. Theoretically, professionalism should be part of the objectives for all courses. Is Medical Professionalism Just a Fancy Term for the Way Doctors Act**?** In this section, student responses about medical professionalism will be reported. According to the evidence from this study, definite opinions about what medical professionalism is are at best idealistic (as opposed to realistic or rationalistic), confused, and awfully dispersed. For the most part, students are thinking in terms of the doctor for the sake of the doctor and the profession–not for the sake of better healthcare delivery to the patient. For instance, many students remarked that professionalism stands for the things that the doctor should do with him/herself to embody a good professional: such as learning how to manage their time, responding to emails, dress up professionally, etc. It rarely came up that a student defined professionalism in terms of things to do in order to improve the outcomes in patient care. Let us look at some exemplar groups of statements below.

Exemplar statements denoting a definite idea of medical professionalism that is mostly idealistic, often unpractical and not generalized. Moreover, every student's definition of medical professionalism is different, though definite:

> My take on medical professionalism is that the doctor should, like, they treat patients with respect and they are always the bigger person. They do not get frustrated, are always looking at things from the patients' perspective ... I know there are people who have had bad experiences but I think for the most part, when I think of a doctor they are much on the patients' side, they are respectful of them, they are seen as an authority figure but they are not overbearing, they are not trying to make all the decisions. They are a source of knowledge that the patient comes to and that helps them come to a decision. [012]

> Respectful. I followed a physician who had a 16-year-old girl who came with 50 lbs. a year, I mean, he told her, you need to start laying off Taco Bell if we are going to see this weight go down. So, I found that to be atrocious and just extremely unprofessional… so again, like, also exploring the patient's perspective, [being] the doctor who cares, and asks personal questions, creates an environment where they [patients] can share what's going on. It is good because they will be more comfortable to share more with you, so they are not gonna give you just short pieces of what's going on they are gonna give actual story of what's happening because they trust you. And they feel cared for, which is a huge thing in medicine. So also like, just being really smart. So, like, that guy who was talking about Taco Bell, he was really good. So, you know, his patients were afterwards like, oh he is such a good doctor. So, I think it is important to show up personally for them but you also need to be a good doctor in terms of seeking out diagnosis and good plan and all. So I think it's about pursuing absolute excellence in your specialty that people can rely on you and you have really good outcomes alongside being friendly and make the patients feel welcome. .. So outside of that, I am trying to think ... I think working well on the team is important, being willing to do the consult stuff that doctors do not really want to do. [072]

Exemplar statements denoting a definite idea of professionalism that is based on concepts of a medical morality. These ideas include being respectful and impartial towards patients:

> I feel like it is about being respectful to everyone no matter if you are an attending or a first-year student, for example. I read this a while ago, like someone was having a gynecological surgery and they put a local anesthetic in her vaginal region or whatever and he said, "I bet she is really enjoying this right now"! And I am like, this is something that I do not think is appropriate and I absolutely do not like this type of thing, to say something whether your patient is conscious or not, or to ever take advantage of them. Like, the power difference ratio, or to ever make them feel like they are dumb or they do not understand something. That's just something that I really hate. So, I do not know ... just kind of being respectful to everyone regardless of their race or gender, like if it's a transgender, or whatever you should treat everyone equally and never make it sound like they are different. And I think it should not be allowed to treat patients differently or deny them care just because they are, for example transgender or something. Like, even if you do not like it or approve of it you should just try and overlook it in your patient. [051]

> I think that kind of embodies professionalism that you're there to help people and you should treat them with respect, so they will also treat you with respect. [012]

> From a patient's standpoint, I would not say professionalism is synonymous with making someone feel good or kind of gentle aspect of it but, I think professionalism is, in an abstract way, treating the patient the way you yourself want to be treated. Interpersonally, treating them with human dignity regardless of who they are; like, being an alcoholic does not dissuade you from giving them the proper treatment because you think they are not worth it. I do not think that's professional. [034]

Exemplar statements denoting a definite idea of professionalism that is based on common sense:

> I mean I think a lot of it is common sense, just like it starts at being respectful with the person, like yeah… Treating them like you want to be treated, like not being distracted, not being on your phone, not making jokes about stuff that they are talking about, being kind to them, taking them seriously, if they are saying something is going on do not just flush them off as though you already know what's going on, just treating them like a human. [121]

> Like, you should not show up late to see your patients, wear jeans, like, that kind of professionalism… Like, being on time, being organized, being considerate like, if you are gonna be late, say, hey excuse me I had some one, or if you have to go take a phone call. Like sending emails to people when you need help and copying the clerkship people so everyone is in the loop and knows what's going on, showing up when you need to show up. Poor professionalism, is like, if you are not gonna be somewhere, just let them know that hey, I was in a car accident or something, communication is a huge part of professionalism. And ... If you are in a pair of leggings and like a workout top then I'm like, ooh, you do not look like a doctor! So, I think it's important to look put together as a physician. To look like you did not just come out of your bed, you are not just back from the gym, you do not have to wear a suit or tie or a blazer but you should look like you showered, and that you are taking care of yourself. [023]

> General things like being on time, being dressed appropriately, all those types of things but I also think of maintaining appropriate boundaries with your patients, asking about their preferences, in a way that it allows them to be kind of driving their own care. So, those are the main things that I can think of about professionalism. [093]

One exemplar statement denoting medical students' idea suggesting that professionalism mainly refers to the way a doctor behaves is provided below. According to this idea, professionalism includes just anything the doctors does, the way they carry themselves inside or outside the clinical settings. In the excerpt below, student remarks that a doctor going out and getting drunk outside of the working hours is a fault in his professionalism. This is an example of extreme thinking in terms of the doctor when it comes to defining medical professionalism–as opposed to thinking in terms of the patient and healthcare delivery.

> Like, one of our teachers told us a story about a student who was rotating, and went out one night and got really drunk. And it was such a small town that everyone knew who he was, so even though he was not in the hospital, that'd still be something that you need to be professional. So, like, I think just carrying yourself well. I mean, you can go out, you can have fun, but just making sure that you're always representing yourself well. [121]

Exemplar statement signifying the value of role-plays in medical professionalism. Many students believe that professionalism is something that can be *played as a role* on the part of the doctor. The idea is that when doctors need to look more knowledgeable, confident, or put together than what they are in reality, they should be able to act out the part in front of their patients and other staff–even when they are "screaming on the inside":

> I think external confidence is incredibly important, patients need that; they need to believe in you as a medical professional. Even when you are screaming on the inside, it's only having them believe in you and that's important for the physician-patient relationship. So, being able to be confident. So, you'll have to learn to put that confident face when you need it. It has to be part of your toolkit. [134]

> I do not know, it's like, we can act. I mean if the physician is the leader at that situation, so like act like you know what's going on, or it's ok to say if you do not know what something is, but you have to act like, you have to be the one that's like okay, you have to be the one who's holding it all together. So, it reminds me of an incidence which is not medicine related,

> but, so, I was on a flight one time and the flight attendants for some reason were like telling everyone about how bad the turbulence is gonna be and their voices were like, you could hear in their voices that they were scared and they were like running around like ponies, so like, if you are the doctor, you can't do that, even if you feel that way, you can process it later or anything, but you have to be the one who is keeping it all together. [171]

Exemplar statements denoting the idea that professionalism is highly subjective and its codes and rules vary from person to person, thus medical professionalism cannot be defined in a definite way, rather, it will always remain vague and subjective.

> I think it's very subjective. What's professional in Japan, is not the same level of professionalism [in the U.S.], you know. There might be different customs, different expectations. So, to be a good medical professional? I mean I have a tough time with that because if I was to be the perfect medical professional, I would know what everyone else expected of me, I would always know. I would have a sixth sense and I would just do whatever everyone wanted me to do, whenever they wanted me to do it. I'd always do whatever it is that they expected of me. Like, for example, when you are eating, you gotta eat this with the small spoon and that with the large spoon, and you'd know exactly which fork to use for what. Not that it matters, or at least it does not matter to me ... but if you wanna talk about real professionalism, you have to know what all the rules are that everyone has, every little quirk and thing, and if you were the perfect professional, then that's what you'd do: you'd know exactly what everyone wants and just do it. It's based on, not even rules, it is unwritten rules ... it's the culture. And it is fluid; it changes from day to day or year to year–probably not every day, but it's evolving. What was professional in the 60s is not professional today ... If I were to eat a sandwich with my hands, they might say that's unprofessional, you need to cut the hamburger into pieces and eat it with your fork. So, it [professionalism] is a collection of everyone's silently agreed-upon expectations and rules. And what's professional to one person, might not be professional to another person. You know, it's subjective ... it's a fluid thing. I think it'd be hard to put rings on it, it's fluid. It's sort of like language, but it's not really written down here. It's kind of like, unspoken social norms, you know, and you can write about it, you can make rules about what's professionalism, like, you know, when to use the small spoon, when to use the big spoon, like all that stuff ... So, there are a lot of things that people would do but I do not consider it unprofessional. For example, if my doctor walked into the room with a little juice box or a sippy cup, I think that'd be cool, and I would like that and I would still be interested in this doctor. Other people will find that unprofessional. But what would I find

> to be unprofessional? Disrespecting someone, the patient, for no good reason. I think that's unprofessional. Being rude, and part of that subjective thing is, like, doing something that the other person is not ok with. Whatever that maybe, and it's different for different people. So, if I am not okay with you standing close to me, then that's unprofessional. I am gonna write it up, if you give me a survey, I'd say he was unprofessional, he stood too close to me. And then he goes to the next room and they would say, I like how he stood close to me, it made me feel important. [181]
>
> That's actually a question that everybody asks, and nobody has any so-called definition for it ... I think [professionalism] means exercising your duties to the best of your ability and ensuring that some abilities are honed as best as you can, so that's like, life-long learning. So, me as a med student now and after I have become a physician, I'll need to keep up with learning so that you learn how to be humane to your patients, and to do what's best just for the patient, and other times, what's also best for the system you know, and other physicians. [184]

Exemplar statements denoting the utter confusion of some medical students when asked about what medical professionalism means:

> So, like, I have some abstract understandings about what to do with my patients in the future. But now that I think of it in this way, I feel like my mind is completely devoid of any specific definitions for professionalism [smile]. [141]
>
> So right now I only know about professionalism among medical students; I do not know how that plays exactly with everyone above us. But, so, they have been talking to us about things that make you good professionals, or like, even things like, how to write an email professionally, or to respond to certain emails when you need to respond to them, and then there is a certain element of dress, I do not know if that's really that big of a deal… Also, I think… ah…actually I do not know… [Student sounds frustrated]. [How about from patient's perspective?] Ahhhh… I do not know… [Sounds frustrated, but laughs]. I think being like, attentive and not serious because you can make jokes or whatever, still being clear that you care about what's happening in front of you and how you are treating that patient. [171]

Points of Diffraction.

Points of Incompatibility. What different positions are taken regarding medical professionalism?

A. Some say professionalism can be defined and put in action by the doctor. The definitions provided by different students are different from one another. Most definitions are based on common sense and/or personal codes of ethics and morality. Some also defined professionalism as everything a doctor does, and some others as something that can be played like a role in order to look confident and knowledgeable to the patients.
B. Some say professionalism cannot be defined once and for all, it is highly variable depending on subjective preferences on the part of the patients. Thus, professionalism will always remain vague.
C. Some are completely confused as to what medical professionalism is.

Points of Equivalence. All three theoretical strategies are equally possible to emerge on the surface of the discourse since they share the same conditions of existence.

1. Rules concerning the economy of discursive constellation

The strategic choices that students make regarding medical professionalism depend on the general constellation in which medical discourse is situated. As discussed in previous sections, modern medical science is positioned in the same discursive constellation with natural sciences, technology, business, and capitalism. Again, as a consequence of being in the same discursive constellation with natural sciences (e.g., biology, chemistry, etc.), medicine tends to identify with objectivity and value-neutral nature of hard sciences rather than humanistic values of medical humanities and social sciences. Moreover, being in the same constellation with capitalistic culture, people involved in medicine are often under the influence of a profit-based measurement of events and self-centeredness in social events, including medical practice. Hence, some

students are thinking exclusively in terms of the doctor (e.g., what should he wear, how should he carry himself outside the hospital, how should he respond to emails, and show up on time, etc.) as opposed to thinking in terms of providing a better healthcare for the patients–when it comes to defining medical professionalism. As a result of medicine being in the same constellation with business administration, many people confuse medical professionalism with business professionalism as well. Hence certain directives about dressing up, time management, and responding to email communications, looking nice and put together, etc. All of which have very less to do with the quality of patient care a doctor can provide to the patient.

2. Rules concerning the nondiscursive structures

According to the rules of the modern medical education majority of time and resources are invested in training medical students on the hard science of medicine. Thus, objectivity and value-neutrality are indirectly being promoted throughout the medical training. As for hospitals, in addition to the scientific objectivity, the business models for management of care for the patient are in place. Teaching medical professionalism has a tiny part in formal medical education and therefore, only minimal interest or attention is paid to talk or learn about professionalism on the part of the students. Many students seem to think of professionalism as a marginal discussion in medical education, "the wishy-washy" and "fluffy stuff" that can be "annoying" and "just a waste of their time". For example, in response to the question of "do you think professionalism should be thought as part of medical education?" many students used vague or negative observations such as these:

> I think that a lecture [on professionalism] would be poorly received and I know many times when there is a lecture that people are forced to go to

> but they do not themselves think it'd be important to them, they'll be very opposed to it, and they'd think that it's just a waste of their time. [112]
>
> We had a couple of professionalism reflection sessions ... [I have] mixed feelings. I like them because we need to do stuff like that, but they are annoying to me as a student who is asked to do that. Like, having to come to the course, or whatever. [023]

One of the reasons why students show less interest to learning professionalism is that there are no serious assessments related to the subject and so, knowing or not knowing at all about it is not going to affect students' grades or their performance on the NBME exam, for example. According to the data collected in this study, if a student does a something that is considered "unprofessional" by one of the faculty or senior physicians, they can receive isolated deficiencies that can end up having repercussions that may influence their course grade, or result in them receiving a warning email from their superiors. However, this is not the same as an assessment of professionalism values in all students which should exist regardless of whether or not someone does something gravely wrong to attract the senior's attention. Again, according to the students, unless someone does something wrong, they are not really taught about various aspects of professionalism in a systematic and standard manner either in medical school or in the clinical settings. What students understand of medical professionalism is mainly based on their personal experiences with senior physicians in the clinical settings, and thus, those experiences are not standard and the same for all students. However, the bigger and more important reason behind students' disregard to the importance of medical professionalism is the fact that discussions of professionalism are not scientific, and therefore, they are rarely promoted and encouraged [if at all] by faculty who are trained in scientific basic science or clinical subjects. If faculty members teaching physiology or clinical radiology

have not been properly trained in medical professionalism themselves, they cannot teach it to their students, or even take it seriously enough to encourage their students frequently enough to learn about professionalism. Currently, little to no information about what is considered *professional*, and only minimal information about what is considered *unprofessional* in medicine is being provided to medical students during their formal medical training. Let us look at the student comments below:

> When you make a mistake onsite then they will tell you that it was wrong [like it was unprofessional]. You need to learn how to be humane to your patients, and to do what's best just for the patient, and other times, what's also best for the system you know, other physicians. [184]

> In transition-1 course, which was for 2 weeks at the beginning of the first year, we had things like socioeconomic aspects of health, professionalism, it was a lot of that wishy-washy topics… and, it kind of just been once together, and it's been a while since we have seen those… You might get an email from the course director saying, hey I have a concern about your professionalism. If you do not dress well for the OSKE [the clinical exams] then you get that email about professionalism. But if you do not do anything wrong, then there is nothing. Not that I could remember ... I think in 3rd year we still do not get professionalism lectures or anything, but you will pick it up from the doctors that you are working with. But then, that might be good or bad, like, you might not be rotating with someone who is very professional. Hopefully that teaches you that, ok, that's not what I wanna be like [112].

While it is expected (or hoped) that someone will tell the students if they do something unprofessional, there is no in-depth teaching as to why an act is considered unprofessional. Even less, little to no formal teaching of the behaviors that are considered as professional, which students would need to learn and adopt, are being provided. Students are expected to somehow "learn how to be humane" to the patients, without there being much discussion of humanities at all in medical education. Also, students are supposed to "pick it up" from the clinicians that they are working with, and as the student points out in the comment above, that can be good or bad. Thus, it is not clear who

exactly is responsible for teaching or not teaching professionalism to medical students given the current place of professionalism in medical educational curricula.

Sacrifice or Self-care: Why people come to medicine? In this section I will report student statements as to why they think people come to medicine. They discuss their own motives for joining the path to becoming physicians as well as the hypothetical figure of Alex, a 12-year-old who is interested in becoming a doctor when he grows up (see prompt #9, FG Protocol, Appendix D). Some students affirm personal gain such as financial stability and social prestige as major motivations for them to become a doctor, and some say they joined medicine to be of service to others. There are those who think doing medicine is a sacrifice on the part of the physicians because they spend the best years of their lives in libraries missing out on the fun and financial gain that they could have had if they did not come to medicine. They also see doctors as selfless providers of healthcare who only work to serve the patient. Nevertheless, there are also those students who think many people come to medicine not to help others but rather, in pursuit of their own self-centered goals.

Let us look at some exemplary groups of statements further describing each position. In the first part we will see statement groups denoting the importance of self-care in medical practice and in the second part of this section, we will see statement groups discussing the sacrificial nature of pursuing a medical career. The third part of this section will report the statement groups that indicate involvement of both self-care and sacrifice on the part of the doctors as valid reasons for pursuing a medical career.

I. In part one, first, we will look at the groups of statements denoting the importance of social prestige, for various reasons, followed by groups of

statements denoting the importance of money, again, for various reasons as provided by medical students.

Exemplar statements indicating the importance of social prestige for making you feel good about yourself:

> I liked having a skill set that was specialized, like, people would rely on, that they needed my help, so it felt good to be me… since I have been here in med school too, it did not disappoint me ... Like reading a patient's description is like, okay, I know what this person has and I know how to treat it, or what this person needs to get better, so it feels very good. [012]

> I wanna go to ophthalmology or some other surgical specialty. I also want to be the chief resident. That's where you have this added responsibility that you are in charge of leading a lot of other residents ... I feel like, for me a lot of it boils down to respect. Other people look up to you, other people come to you because they know that you can help answer the questions. One of the things that I love to do is teaching… it feels good to me when someone like, anyone that they could talk to, they come to me and like, can you help me understand this? To me, that makes me feel great. It makes me feel like people really think that I can help them. That I have something that I can make them better and they think about me in that way. [012]

> I can't remember a time when I did not wanna be a doctor. As young as I remember, I have always wanted to be a doctor ... I think the social prestige is definitely a big deal. And I mean you can help people in other roles as well you know, you can be a nurse, you can be a respiratory therapist, a social worker, and those are all fantastic and they help people. But social prestige does not come with it. And I'd be lying if I said that I had not thought about that. I do not think it's the number one reason why I am doing medicine but it's a part of it. And for finances, I think definitely, if I was not gonna be paid a lot, I would have reconsidered. [134]

Exemplar statements indicating the importance of social prestige for proving your worth to others:

> So where I got the idea was two of my teammate friends from high school, they both went to med school. So, I was like if they can come from the country in Indiana and make it then maybe I can do that too ... When I was at school I was always like an outcast kind of, so like, I know, I just never really fit in… And I just always felt like I was really different from everyone. I did not have any friends. So, I guess I have had my ups and

> downs with people. So, like when I wanted to be a doctor, I have thought about people whom I knew there at school and they were mean to me, they will feel bad, and like, one day I will be like: look! I am not the worst person. [051]
>
> I just wanted to do something good and important with my life, you know, make a difference. I have had a bunch of goals and mission type of things for myself. I've got this 10-years plan that I have got to meet. So that keeps me busy in the present with always doing something to build towards my little plan that I have got going. And then, there is my daughter, I have got a daughter who is 6 years old. Sometimes when I get discouraged or whatever, then I think about her… and I wanna make her proud of me, and if I were to not succeed then what would she think? You know, she would be disappointed. And then also what motivates me, the 3rd thing is other people's doubt in me. So that really drives me to succeed ... The money is kind of a nice bonus, really, but the social aspect ... And part of that is that I want other people to see that I am doing something good, I want other people to view me as a winner. I want people to see me as a valuable member of society. So yeah, that's probably a very big part of it ... So, without medicine, could I? Sure, but not to the same extent maybe, you know, there is a balance between what makes me feel good and how I want other people to view me ... I wanted that prestige and everything so. [081]

Exemplar statement indicating the importance of social prestige for making your family proud:

> Growing up, my parents always wanted me and my brother to become doctors, he did not end up getting into med school ... he is 5 years older than me… I found that I did like sciences and I was good in my academics in school, so I kind of stuck to it going to college taking medical science classes knowing that I am going to med school… If I were to fail in med school and go back home, my parents will be very disappointed because I know they have very high hopes for me like, "oh, he's gonna do what we wanted for both our kids to do, so there is the pressure on me in that sense. [012]

Exemplar statement indicating the importance of money for setting your family up:

> We do not have a physician in our family so my parents are excited. We are middle class. There were people I knew when I was growing up whose parents were doctors so they had tons of money doing all these cool things, and all… and I do not really care so much about the prestige, but I kind of wanted to set myself and my family up for a financial security in the future. I never really had to worry about money as I was growing up,

> but I did. I went to private school and I was very aware that there were people who had tons of money. I was very aware. So, I wanted to set myself and my family up to a point that we get comfortable and do not have to worry about money, but I was not in it for the money. [023]

Exemplar statements indicating the importance of money for achieving the lifestyle that you want:

> So, I did not see anything else ... like, I did not want to do business; that did not seem like something I would want to do. And my whole life had been medical, it was hard to imagine other careers. I literally could not think of what people did as jobs. My grandpa was a doctor, my grandma was a nurse, kind of everybody around me were medical, my friends' parents were doctors, we had parties and stuff, so that was all anyone would ever talk about. So, when I went to college I really did not know what other jobs would there be ... so business? nah ... ok, what else ... maybe I could be a teacher but you know, I grew up with the lifestyle of my parents being a doctor so, I was like, I do not care, I want a career that pays well ... It was like, you know, my parents did it, they liked it, money is good, you like people and science, why not? [063]

> There are some doctors who are motivated by that at least in part. I'll be honest, like that's a pretty big motivator for me [financial aspects?] No, the lifestyle. Like, setting your schedule to get through time, being able to do what you want to do, have kids and all, you know. [MS2]

Exemplar statement indicating the importance of money for paying off your student debts:

> I will be just honest like, yeah. It's not the reason I chose medicine but it's definitely a strong supporter of why I'd want to do it. So, let's just think like if the pay was half, I think it would have been less of a motivation because, physicians, they mostly work very hard, especially certain specialties harder than others. So generally, they pay more to compensate you for that but if they were not, then, it's just, all this work, well what am I, like, how am I gonna get, like, how can I support my family and everything? Because, even during bachelors, I have paid a lot of money to come here and everything, so it's nice to be reimbursed for that. [151]

Below, are exemplar student comments in response to a Focus Group prompt that was basically asking: Are physicians selfless in their efforts to help the sick? (See prompt #2, FG Protocol, Appendix D). All students responded in negative to answer the question,

discussing various reasons as to why physicians are not necessarily selfless, rather, they work for various other reasons for including but not limited to money, prestige, having a cool career, and so on.

Exemplar statements indicating the importance of making money as a part of medical practice:

> I do not agree. I do not think that most physicians are idealistic benefactors… it ends up being a job for people and it's a tough job, but it's a well-paying one. I do not wanna be cynical or something, I think there are a lot of really idealistic hardworking and so on people, and that ends up being really protective for some people, but it does not… I do not get the impression that physicians are selfless, necessarily, all the time. [MS1]

> Physicians are some of the most powerful, well-paid people in our society. so it's not exactly that, I mean, I do not disagree with the fact that there are some things, but there is something more complex, it's not like that we are going to be monks or swirling in poverty, and like, going and helping the sick… so, it's like maybe that high pay is sort of empowering people to do a better job, but there is certainly some sort of compensation that you receive for the efforts. But I think going in to it, somehow the decision to take on the life is that some sort of good? Like, I do not know… I am struggling with that. [MS1]

> I do not think there is any profession out there that always has every single person in it always has 100% best interest possible. I think there are definitely doctors out there who are like, I want to make as much money as possible, as quickly as possible, so I can live a comfortable life, go on a vacation, or like, live in a big mansion, you know, or whatever it is that they want to have money for. I mean maybe to the detriment, like I have to agree that there are some out there that are even doing it to the detriment of their patients, like order brain scans that they do not need to, or perform procedures that they do not need to, because you know, you get some money. And I do not think the profession as a whole is 100% perfect. There is always a single doctor out there that does not do that. I do not think it's "most" but I do agree that there is "some". [MS2]

Exemplar statement indicating the importance of social prestige as a part of medical practice:

> I think the question is whether they are selfless in their efforts to help the sick, especially that a lot of physicians get burnt out, and I think some are more jaded. Some people whom I have interacted with are like, I do not think they are necessarily going into the medical profession as selfless to kind of see the sick people, I think it's more for them, about the status you get for being able to say, I worked hard to become a physician. And now I get to hold this certain status in the society. I do not think, so like, this is what makes me feel better about this whole thing, that, I do not think in order to become a physician you have to be selfless, I do not think to become a medical student you have to be selfless. I think it makes it easier maybe, if your goal is to serve others, and makes it more worth it, cause if it does not feel like… I do not know. I would not say that I'm selfless in my efforts to help the sick all the time. [MS2]

Exemplar statements indicating the importance of having a "cool" and interesting career as a part of medical practice:

> I think for some people it's really about, like I wanna be in charge, and I do not think that's a bad thing, I think some people just do it because it's really interesting. So, it's not like that they just do it to be selfless and help the sick. Like, I think medicine is awesome, and I want to be, like utilize the… like, I would not know everything, but it's like yeah, it's great to do, but what you get to do is to act really selflessly to help the sick. But I do not think it has to be selfless act. I mean, I am doing this because I think this is just really cool, you know. So, I think like, that's also another factor. [MS2]

> My issue is sort of with "selfless". I do not see myself as I am doing this completely selfless, like for some noble… like oh, it's not about me it's all about the patients. Like, I want a career, I want a stable job, and I want these things… if I could do it being in a career that helps a lot of people and you know, do my best with that, then that's great. But if it's gonna be volunteer work for ever, you know, then I'm not gonna sign up for that. I feel like most people might agree with that, at least, you know a lot of times people do not say that way because they do not wanna sound bad, to a degree. [MS4]

> I guess I always wanted to be a doctor but at the same time, I want a stable career, so it was not completely just selfless, no. And that's not to say that you can't do selfless acts, you know, but like, sort of the main overarching theme is still like yes, so you are giving something and you're getting something back, a little bit. [MS4]

Below, are exemplar student comments in response to another Focus Group prompt that was basically asking: A 12-year-old boy wants to become a doctor when he grows up; what do you think are his major motivations? (See prompt #9, FG Protocol, Appendix D). Again, all students responded by denoting various reasons for self-care, including money, prestige, and having a cool career–as possible things to motivate a 12-year-old to want to become a doctor when he grows up.

Exemplar statements indicating the importance of money in motivating a young person to want to become a doctor:

> The 6th graders that I talk to are usually like, they wanna be a doctor because like, a family friend has a Tesla, or they are going on this really cool vacation, so I think money is, at least in that age, money is also one big factor. [MS2]

> Also, money and career, I mean even at that age you will have think about those things. Like, they see a good future in being a doctor, a more stable future that many other jobs people have could not bring it. [MS3]

Exemplar statements indicating the importance of social prestige in motivating a young person to want to become a doctor:

> As a 12-year-old he probably has little idea of the sick, just sort of like the social prestige, that he can help people, like, it's all happy and great. You know. So, there is some of that. I mean, I'm gonna be a doctor and it's gonna be awesome ... And you can make a decent living too. Everybody will be happy; my parents will be happy and all [MS4]

> And definitely like, the societal culture. Like in some cultures, medical doctors and lawyers, and… those are the things that they want you to become when you grow up. So, it's mostly like oh it's a fun respectable job, maybe makes some good money too, but I think that would be a side-thing at this age. I mean, not that there is anything wrong with that… [MS4]

Exemplar statements indicating the importance of having a "cool" job in motivating a young person to want to become a doctor:

Like, it sounds good to become a doctor, I wanna know people, doctors help people, so I wanna become a doctor. [MS2]

I think in my experience, kids that age have had some prior experience with doctors, and kind of like how respected they are, so as a kid, I mean it can be really inspiring you know, seeing that people look up to you [the doctor]. They see the doctor as someone who is really smart, knowledgeable and successful yeah, and when you are that young, you do not kind of know what goes into it, like all the effort that goes into it, all the long hours that they work as a doctor and all. As a kid you will just see a doctor and think like, okay, this is somebody that I want to be like when I grow up. Almost like a hero, you know, that they want to be like. [MS3]

II. In part two, we will look at the exemplar statements pulled from interview and focus group data followed by the statements pulled from the field notes of direct observation - denoting the sacrificial nature of pursuing a medical career.

Exemplar statements by students who see medical practice as pure service:

I would love to practice in an underserved setting. I wanna go somewhere that if I do not go, people do not have access to care. Because I want to meet needs that are not being met. Not just, to like, oh, look at me I am the super altruistic guy who is wanting to do what no one else does… it's just that those are needs that are not getting met and I have the ability to meet them. I care about those things. It could be here or overseas; I do not know about that. I will be open though. [034]

I think there is something unique that I bring, like, a different background, without having doctor parents and without having any money or anything like that. I think I can be more understanding to people of that type. I think in society in general, I feel like I can be more understanding to middle class people, as well as to people who are poor, because I actually come from there. I want to be a family practitioner. I hope I am in a more underserved state, I want to go somewhere that they do not have anyone else to go there and practice there. Maybe I am the only doctor around there for miles and miles, so if I was not here then these people won't have access to medical care. That's what I want, to serve just somewhere that nobody else wants to. [051] 8%

Exemplar statements by students who see medical practice as a sacrifice on the part of the doctor:

> In general, to consider that you are in school for ever, you will be in a lot of debt, you risk burn out, depression and even suicide. That's hard work and selfless. [MS4]
> I guess the right reason [for coming to medicine] is the strong desire to give up yourself and make sacrifices for the benefit of other people even if you have not met them before. Medical school is a sacrifice. Especially I struggled with these 4 years in my 20s, all of my friends are having fun, getting married, and buying houses, and I am like, I just have to study for an exam tomorrow. And it's like, I think, knowing that you're getting yourself into that and still having that desire to be that physician who helps others, is the right reason. [134]

> I'd argue that we are like, literally giving up our youths for this career, like, my brother, my siblings are asking me like, I cannot believe you're doing this, cause they see how little free time we have, you know. So, I think if you are not selfless, then the way this training is set up it'd make you become one ... Like, this is the path to the most impossible. [MS2]

In response to the above comments, there were comments denying that people who come to medicine are sacrificing themselves. Rather, several students voiced against the above comments and pointed out, instead, the selfish reason for pursuing a medical practice. Below is an exemplar statement that sums it up:

> If you are in science, you kind of never get that opportunity to say okay now I can help someone… which is, I'd want to say, not "selfless" but the goal is to help people ... But I feel like they just wanna be that person who jumps in and says, "I can do this!" And then the other person is paying like $300 for you to be able to do this [help them], and that's not selfless. In fact, it's very selfish, I think. [MS2]

Examples of selfless acts and behaviors as documented in the field notes written during the direct observation of medical practice at IU Methodist Hospital:

> Residents, interns and 3rd year students are all looking at their desktop screens checking patients' labs etc. before morning rounds. Residents are super busy, do not talk to anyone, just reading their screens, writing down notes ... Seem super focused and concerned, but are doing their work enthusiastically. They seem to be into it. No extra conversations at all, except about patients. [p.85] No one is talking except every now and then the phone rings and residents pick it up. Tense, dry, environment. A lot of stress in the air, they are thinking and talking only patients. [Obs] [p.14]

> The team has been going up and down the stairs for the 6th time. This is too much work for me, I am out of breath keeping up with the team. [p.7] the team talks about the patient's diagnosis and meds for another 10 minutes standing in the hallway. My legs are dying! [Obs] [p. 24]
>
> Attending sounds stressed and tired, but is still in a good mood. Says he forgot to drink anything the entire day without the need even "crossing his mind". He gets home drained out and drinks something, then he remembers he had not done that the entire day! [Obs] [p.27]

Things like this brings another side of the medical practice in light. One can tell from the above comments that medical practice is not all about technicalities, it's not just a job that gets done. Doing medicine does generate emotions in those who act as care-takers of the sick since they are nothing but humans themselves. Doctors do express their emotions, they get happy and sad, laughing and crying with their patients. Celebrating the number of people who get well and get discharged, and sighing about patients who refuse to take their medications are good examples of how emotions are expressed in the clinic. Let us look at some exemplar statements denoting this point:

> Attending: x, y, z (patient names) did so and so… "I thought everybody pooped yesterday, everybody!" He sounds excited to share this news. The entire team laughs. [Obs] [p.61]
>
> Resident says laughing: "do you know how many discharges I have today, three! Let's celebrate!" 1:25 PM, we are back from the morning rounds, back on the dock at the 8th floor. [Obs] [p.43]
>
> I say good morning to the resident. No response. After almost an entire minute: "good morning!" he says. A few minutes later he is talking to the other resident: "oh… [Deep sigh]… I wonder if Mr. Richardson will see the daylight today". The other resident replies: "it's terrible…" [Obs] [p. 65]
>
> Resident: "So, Mr. Richardson had a bowel movement yesterday at 6:30 pm!" Others: "oh, boy, great!" Smiles all around the room, they are glad that he is doing better. Stressful laughter. [Obs] [p.79]

55-year-old patient, happy and interactive, smiles at all of us. She is sitting on a chair with a blanket on her legs. Attending and the resident look up the screen. Attending smiles, he seems genuinely happy. “She’s doing well, good for her!” says the resident, smiling. The other resident listens to the patient reporting, talks to her, answers her questions. Attending is happy, sounds like a happy kid now, speaking in a very soft voice. Phone rings, resident leaves the room to answer it. Attending is still smiling at the patient, happily. [Obs] [p.37]

III. In part three we will see exemplar statements denoting a middle ground between self-care and sacrifice when it comes to motives for joining a medical career:

I think it’s a mix of things like, career, money, their own choices, helping others, that motivates the doctor ... as far as helping people, I think that’s definitely a big part of why people go to medicine, there are a few that maybe go in for money, but… I mean there is a part of you that wants to have a good professional career that wants to have a good lifestyle, and also that part of you that wants to help people. So, it’s a good mix of things for those who want to push themselves, and are hardworking… so I do not know. I feel like selfless is a bit extreme, maybe? Because there are two sides to it, some things you do for yourself and some others for the patient. I feel like, if you go completely to the selfless part, you end up burning out, you give so much of yourself to your patient… so I feel like people who have gone that far have actually ended up resenting the profession altogether. So, I think that we should not have to be selfless [MS3]

So those [prestige and money] really were not my motivations. I mean, if they were completely absent, if people hated the doctors and I’d be working for peanuts, I probably would not have done it. [Laugh]. There are ways that I need to benefit from medicine so that I can keep doing it for them. I need to feel fulfilled, I need to wake up in the morning excited to go in, I need people around me that I enjoy working with, I have a lot of needs that have to be met for me to be able to have a 30-year-career as a person. But it’s not about I want to enjoy this just as much as I possibly can. It’s for the sake of me being able to do what I am doing and not burning out, and feeling like that I need to quit and find something else to do ... People’s ideas do change like, in 15 years from now, I do not know what it is, if it’s the infrastructure, or the demands, and burning out, or whatever, people change. They lose sight of that sense that “wow, this is a really privileged thing I get to do”. [034]

Points of Diffraction.

Points of Incompatibility. What different positions are taken regarding modalities of statements and concepts as to why people become doctors?

A. Some say that physicians are idealistic and selfless in their efforts to help the sick.
B. Some say it is the social prestige, financial stability and the idea of having a "cool" job that draw people in to join medicine.
C. Some say it is a combination of things, without any of the above having an exclusive influence on the person's decision to become a doctor.

Points of Equivalence. All three strategies have an equal chance of emerging on the surface of discourse because they share the same conditions of existence. Conditions of existence for theoretical strategies include the rules for their formation and the relations between those rules. Let us discuss the rules for their formation below:

1. Rules concerning the economy of discursive constellation

Again, the strategic choices made above depend on the general constellation of discourses in which medical discourse is located. We know that modern medical science is positioned in the same discursive constellation with natural sciences, technology, business, and capitalism. As a consequence of being in the same discursive constellation with natural sciences medicine tends to identify with objectivity and value-neutral nature of hard sciences rather than humanistic values of medical humanities and social sciences. Moreover, being in the same constellation with business and capitalist culture, people involved in medicine are often under the influence of a profit-based and self-centeredness goals in social relations, including medical practice. That is one reason why many of the

students cannot see the humanistic value of practicing medicine and rather pursue it for their own self-interest. The idea of being a doctor is no different than the idea of having any cool job that can get them financial stability and a high status in the society.

As a result of medicine not being in the same constellation with medical humanities, these fields do not share much in terms of using each other's research and scholarship. Humanities including morality are not being taught in medical school so even those students who want to see the humanistic side of medical practice do not have a clear idea about how exactly that should work. Same is true in the case of medical professionalism; students who want to think of professionalism as medical morality often do not have a firm grasp on their own personal code of morality and get confused when facing difficult clinical scenarios. Here too, students who want to see the humanity side of medicine often lack a firm ground to base their statements upon. Many of them were confused when asked questions such as why should not you care about money more than what is best for the sick person, for example. At best, students replied with, because that is not right. They cannot explain *why* or based on what rules it is not the right thing to do. In other words, they cannot explain what is right and what is wrong by basing their argument on any firm grounds of a personal or communal moral code.

2. Rules concerning the nondiscursive structures

As a result of a heavy focus on teaching the hard science of medicine in Indiana University School of Medicine, objectivity and value-neutrality are indirectly promoted throughout the medical training. In the hospitals, in addition to the scientific objectivity, the business models for management of care for the patient is under the spotlight. Humanities have a very small part in formal medical education and therefore only

minimal interest or attention is paid to research produced in the fields of medical humanities. The two main nondiscursive structures where medical discourse resides are medical school and hospital. Below are exemplary student comments about how the rules and regulations in these two structures affect who they are as medical professionals and their desire to be better. The following discussion shows how these nondiscursive structures (including the system that backs them up) shape professional identity of students as they go through the training to become doctors.

Exemplar statements denoting the clash between individual and the system. These statements were uttered during the discussion of whether doctors are selfless benefactors of humanity (see prompt #2, FG Protocol, Appendix D):

> In my experience with shadowing a lot of doctors, the general attitude is I think kind of more "realistic"… I think what is said in the quote is the ideal, that's the goal. Like, especially modern medicine with kind of having most of their time spent on modern technology and stuff, it can seem like an occupation a lot. It has become a conveyor belt of patients. I think there is still an element of, like, in order to be efficient, you kind of have to numb yourself to the interests of others and I think that's where you need that sixth sense to be still able to see the human aspect of it. [MS1]

> I hope that the intention starts there at least, like, at our level, we do come in at least like we are gonna be idealistic benefactors … but I'd agree that a lot of us will lose that along the way, I mean not lose the intention but lose the action part of it. I think the intention is really there, you are going to med school to be overall beneficial and helpful and selfless and all those things, but we do not necessarily have the kind of system in place to cultivate that. Only try-hard personality types could still keep it. [MS1]

> So, there is also a system that is in tension between the individual, their wants and desires, like, the individual physician and what the system needs you to be doing as a whole. Because it does take a lot of investment in order to go through this track. Therefor the people who finish this get some of the high-paid jobs to be able to recover that time lost, (well it's not necessarily lost but…) and opportunities, you know, therefore the system is like, in order to get admission you have to seek the standard venue to be able to pay all the money until you graduate from here, and

> once you graduate they pay you, so it's the cycle of what the system needs the individuals to go through, that's how we have it here. So, it's kind of a vicious track, and you can see why people maybe more interested in fees that they "should" be. [MS1]
>
> I think we need to add in there the need to make also the administration happy. So, one of the ways that they are happy is to make sure you're checking all your boxes and charging all your patients, making the hospital money. It's not necessarily something like: oh, now that I have used all these cards, and if I do not do this, I lose my job. Yeah ... so, I think that is a factor too, keeping the hospital administration's interests in mind as well. [MS2]
>
> I think there is a pro-money structure… as long as you… if you take from someone's age 22 traditional to 29 until they finish residency, and if you were to work for 6 years and put money into your account, so how much that'd be compared to what you'll start making at 29 or later depending on when you started? And the other part is that most of us are gonna be minimum $100,000 to $200,000 in debt by the time we graduate. And if you do not get compensated for that, like, money has to be a factor, you cannot work with $200.000 in debt and not be in position to make… or later people who do not make it into residency are like stuck in a hole that they really can't get out, and the only way to pay back that much money is to doing things that a doctor does. So, that' why it's like, yes, we should be money-centered, but we should not be doing it for that, but like, if you have been doing this for so many years of your life without making money, you can't just be like, oh we are gonna do everything for free. Not at least in the early years after you become a physician. [MS1]
>
> I think there's an interesting difference between physicians and other people who are just part of medical system as patients, because it's like, we know, how much debt we are in, like, we know how much work we need to put into this before we can pay off this debt. Whereas for the patients, we are just getting all these fees, they do not kind of see all these other sides, it's like obvious why I'd be frustrated with them also, because I think it's part of the bigger problem like the healthcare system, medical education system, the confront between the two, and… it's like hospitals want you to make money, doctors generally want what's best for the patient, but we also have a lot of debt we want to pay off, so like all these things kind of come together to clash over the who gets to decide how interested the doctors should be in fees… [MS2]

Below is an exemplar statement pulled from a one-on-one interview with a 4th year medical student. This is a typical example of assuming some sort of sacred "core" to the

medicine and giving it a transcendental immunity. The student below believes that medicine has some sort of humanistic core that has been travelling through the ages and it is being affected by "outside stressors" that are "muddying the water" in our time. Whereas the assessment provided below is clear and to the point, archaeological theory and analysis does not agree with the transcendental core of the medicine. In archaeology, it is believed that medicine in any age is only as good as people involved in it can make it. There is no sacred core or outside stressors; rather, all factors taking part in shaping the discourse of medicine are its forming factors. They are all part of the discourse itself, not internal or external to it. Except for that matter, the rest of the student comments below resonates well with the issue at hand here, regarding the tension between the individual's desires and the system.

> I think at the heart of it, the idea and the spirit of medicine is still there, going back to, you know, someone needs help and you are the person who can help them. I definitely see that at the core of it but I see a lot of other things seeping in, you know, trying to be the biggest medical school, create the most number of doctors, focusing so much on what numbers you can produce on the exams and where you're gonna match yours students… I know that it's all important, but sometimes, I feel like, you lose sight of what was the original purpose of medicine. And in the larger healthcare world, I mean, for-profit hospitals and the amount of money that these hospitals bring in… it is kind of disturbing to see all of that, and to see how much hospitals focus on the bottom line [of making money]. Being a medical student, and to look at that, and to see it for your career, do I wanna practice at the county hospital or at a for-profit hospital, are very different. And I think again, that they both still have that spirit of medicine at the core but there are a lot of other things that are kind of muddying the water I think. [Can you give a few examples of these "other things"?] Money, definitely, position too in some specialties. So, I know there are people in my specialty too, in the emergency medicine, there are very high paying jobs, you move around the country and some people do that, you know, they personally want that money. Other things would be the prestige aspect of it, like trying to be the biggest medical school and to say that you're training the most doctors, and you're keeping the most doctors in the state, and then research. I mean research is incredibly important and I think it needs to be here… but when you focus more on

> that than the patient in front of you, I think that's when it can be a problem. [So, you think that some people might lose sight but others are still on the right path and see the core?] Yes, definitely. [Would these things affect professionalism on the part of the doctors too?] Yes. I think in an ideal world, everyone going into medicine would keep that original idealistic view of medicine as, you know, I am going into this to serve others, you know and this is my job and whatever it takes… And I think there are some people who are able to keep that with the outside stressors of the medical world today but there are a lot who can't. For example, short amount of time with patients, you're overworked, and like, if you are on the consulting team and you think this is what is best for the patient, and the care team physician says no, so I think those things definitely get on the way of "professionalism". [134]

What's The Doctor's Role in the Interprofessional Healthcare Team? In this section I will report various strategic choices made by medical students regarding the positioning of the doctor in an interprofessional healthcare team. Medical student statements can be divided into two basic categories: 1) Those who think physician is often the most knowledgeable (and sometimes the smartest) individual in the team; so they should be at the top of the hierarchy for good reasons and they should always be the leader of the healthcare team; 2) Those who think that physician is but one team member among the others; they are not the most knowledgeable in all areas related to the patient (and definitely not the smartest person in the room). Let us first look at some exemplar statements coming from the first cohort.

Exemplar statements denoting the doctor as the outright leader of the healthcare team who needs to be at the top of the hierarchy for good reasons:

> Usually, the physician is the one who is highly trained in diagnosing and treating the patient. Everyone else is kind of geared toward that role. Nursing has the role of executing directives from physician. Usually they are the ones who are closest to the patient. PT, OT, Social worker, all of these are auxiliary, they come in for a different amount of time every day or other day and help out. So, it's usually the physicians leading and everyone else kind of carrying out the orders to get the patient better. There are a lot of nurses who bring in the expertise to treat the patients,

> hey we have seen this thing done before, can we try doing this, and they do help in figuring out how best to execute the job within their realm ... Usually, there will be a team (nurses, social worker, pharmacy etc.) every morning, so the physician is the one who is taking all the inputs from everyone and saying, ok, we're gonna do this. [004]
>
> I think definitely, the physician is more of an expert and knows more and has had so much more training that anyone else in there so of course they are gonna know much more, so I think it makes sense to have the physician kind of like on top ... you do not want someone doing something that they do not have the experience for or the training for. Nurses do a lot, for example, I do not know much about the majority of things that they do, their job is like very critical, but I think it's more about who goes to medicals school versus who goes to a PT or PA school, cause I know people who are good at nursing school, good a PA school, and they are not as smart as the one who goes to medical school. And that's why they did not go to medical school [Laugh]. That's why they became a nurse, that's why they became a PT. And I think with any school, there is obviously different levels, but there is also a different personality associated with each specialty and it's very different. [043]
>
> I think I might be a bit biased, but I think I am okay with that [hierarchical structure of healthcare team with the physician on top], because that's like your job if you are the one with the most training. But, I feel like it should be a cellular model as opposed to a pyramid, like the physician should be the nucleus who integrates all these other professionals together, with the patient themselves. So instead of a pyramid, the relationship should rather look like a concentric circle. [Around physician, not the patient?] ... I think if you have the more training then you are able to put different inputs together and create a well-organized plan which you would then represent to the patient. As far as the difference in social prestige, so, I have kind of a mindset that the more hard work you put in the more… like, doctors, they get a longer education and training. So, not in terms of social prestige, but I think the physician should be the leader to integrate things together and not overwhelm the patient with so many different people at once. [141]

Exemplar statements from students who had a confused idea of the work other allied health professionals are doing. For instance, it was assumed that nurses can suggest drugs or treat the less complicated patients, where doctor is not needed. These students seemed to now understand that nurses and other health professionals have their own specific

skills that the doctor may not possess at all. These students, of course, believed that the doctor should be the leader and at the top of the hierarchy in the healthcare teams:

> I can't agree with the statement of the physician, nurses, and the OTs and the social worker are at the same level. They are the same in terms of what they contribute in the team, but I feel like they all have different levels, for a reason ... Like, nurses are trained in a specific way to treat some cases but most of the times when something comes up that's pretty complex, they refer that to the doctor. So, I think that's where the prestige comes in ... I mean, that's still a hard question, because, all of them are really important and everything ... but I do think that there is a knowledge difference, and that they are pretty much trained in a different way and everything ... In terms of the physician being the leader of the team, I think yes. I'd say most of the time though, like the physician can also ask the nurse something like, oh, what should we give them? And the nurse is perfectly capable of suggesting a medication or whatever. So, I'd say for the most cases yes. But there is gonna be those instances where the physician kind of says, okay patient is doing fine, so you guys know what to do, so the nurses and everyone else can do on their own. So… A physician can't work by himself, he needs nurses, he needs PTs, and he needs social workers ... But I'd say that everyone has a different weight though. [151]

> Being a good leader with your team members and making sure that all of your team members feel valuable. That no one feels like they are an inadequate part of the team, everyone feels like they have a position. So, some physicians feel like, you know, that's not my job for the nurse to feel useful. But it kind of is. Because, they are part of your team and they need to have feedback, positive and constructive from the person in charge in order to get better and to get your patients better. [134]

The latter student is assuming that the doctor somehow knows everything about how to do a nursing job, for example, so he should give nurses feedback on how to become better at their job. This is another example of medical students not having a clear idea about what other health professionals' job is and what exactly they are doing to help the patient. Many medical students have only a preliminary understanding of allied health professions and assume that their job is a less complicated and less developed version of

the doctor's job–like, they go to their professional schools for a shorter time because they are only leaning a simplistic version of medicine.

Exemplar statements coming from those who are aware of the doctor's role as the leader of the team and agree with the hierarchical system in the healthcare teams that puts the doctor on top. However, these students are also suggesting that doctors should treat other healthcare professionals with respect, because everybody deserves respect at a personal level:

> From a decision-making standpoint, the hierarchy is there for a good reason. People have different levels of education, different proved competencies to do certain things, but just because you are higher up the chain in medical decision making, it does not mean that you should ever be treating someone on a different level differently just because they are not at your level. You should not look down on them, not on a personal level. They should be treating the nurse for example just as good as another doctor or like their boss ... Like, I saw a physician who knew the janitors by name, on first name basis, that's a really special work culture. So that janitor felt like they were doing something to contribute to the healthcare team. [034]

> So the hierarchy is set up in a way that there are roles and responsibilities, and I think each person is important in that setup, so whether it's fair or not is not the right question maybe ... But, I think, you're not the smartest person because you're a physician, it's a skill set, it's very very honed, but it's not a mark of intelligence for the person. So, I guess in my head, I am not better than the nurse. They are professionals being nurses and I am a professional being a physician. I do not think you can play the role differently, if I tried to do all those things, I'd be terrible at it so I actually need those people to be very good at what they do, because then I can be good at what I do ... In terms of who makes the patient well, I'd say the physician is leading the team. If it comes to patient care, based on what I've known, I think yes, it should be the physician who leads the team. But just because you're leading the team, it does not mean you are gonna be playing all the roles and kind of passing a privileged time ... I'd suggest that the physician should be leading the team. The idea is that it's his job to come up with action plans, and I think he is the best suited for that. [184]

> While you still have to be cognizant of the fact that everyone on that team do not have the same job, and the same level of training, people have their

> own mesh to kind of fill in, still being able to recognize everyone's contributions ... I do see the hierarchy that sits the physician at the top ... The difference in prestige is partly due to the length of training. PA goes to school for 2 years, and did not even have a residency. This person went to school for 4 years and they did a residency so they must know more. There might also be the implicit bias as far as they went to school longer and therefore, they are more committed, they are more dedicated, they are better at their job. That's I think what puts those personal biases, but if you look at the actual performance, obviously this probably do not correlate as much. Like you may get a really good PA and a really poor physician–and they still have different amounts of training. [112]

Exemplar statements denoting the significance of the doctor as one team member among the team of healthcare professionals:

> I do not agree with the difference in social prestige among people on the healthcare team. I do agree that our society has put different stratifications, but I do not agree that it's a good thing. I personally hope to kind of dismantle that from the inside, I'd like to. I guess it's different because we also have the hierarchy of individuals in military. So, like, there is a nurse who is an admiral, by no means I could be persecuting her, she would be my superior, like six times over ... I think part of the reason why doctors are kind of maybe, considered above the rest is that it's kind of their name on the line. A patient does not go to a clinic or hospital for a nurse, they go there for the doctor. And it's also the doctor's name that's on the medical insurance, so if something goes wrong it's the doctor who is gonna be sued, not necessarily the nurse ... like, I'd say the two most useful tools in a doctor's toolbox is a really good nurse and a really good pharmacist. Like, behind any good doctor, there is either one of those ... In short, it is a teamwork; and it's not the doctor's decision to make on every single thing when it comes to treatment, at least not singularly. [103]

> Doctors go to school to get training and become physicians, but it does not make them better than anyone else, and that's a key part of the professionalism. Like, doctors are still people and they are still part of the team, they just have a different skill set than some other part. And part of that professionalism comes down to like, you should not give out a sense of superiority. Like everyone is an equal member of the team. Part of professionalism is like being aware that you have a different skill set, and you put a lot of work into it, but you're supposed to be humble and listen to them and treat them as equal, because it boils down to that we are all people. And you do not have a right to trample over anyone [012]

> I do not think there should be this power hierarchy, because I think everybody brings something from their own area of expertise. I do not

> really think that the doctor should always be positioned on top necessarily, it just depends on the situation ... I think that money plays a huge role in which school you go to, med school is way more expensive than PA would be. Or maybe you want the PA school because you think you can reasonably get through without much hardship. And I guess, there are some people who really do want to do that other job rather than medicine, like I do not think it comes from whether you were smart enough to come to med school ... And I do thin money is a big part of everything again, like taking the MCAT is like $400 and it's $500 to do an application and if you are applying to more schools, then secondary application, which is another $100. So, I think that there maybe are people who would really like to go to medical school but they can't afford it so they go to nursing school instead- but they are still just as smart. [051]

Below are a group of statements in response to the focus group prompt # 8 (see FG Protocol, Appendix D). The prompt was showing a picture of the entire healthcare team–including physician, nurse and other healthcare professionals–and a picture of a sick person, asking the following question: Who gets the patient well?

Exemplar statements denoting the role of the doctor as the leader of the team who will get the patient well, with the help of others in the picture:

> So, the doctor is going to make the patient well by diagnosing the problem and prescribing a treatment plan that will resolve the condition. Those other ones are just administering the treatment plan, which the doctor usually sets up. So, I'd put the main responsibility on the doctor. I think making the patient well is all about developing a treatment plan and that's the role of the doctor. I don't know. So, I'd say the doctor is playing the pivotal role in this scenario. [MS3]

> I definitely know the physician as leader so I'd say: the doctor will help this patient get well, with support or guidance, or _____ (blank) of the other people. [MS4]

> I think it's the doctor who diagnoses and treats the patient. I mean, I guess everyone has a role on this panel, but I think the doctor should be the one who is driving the ship but… so, in two sentences: the doctor will lead a team of experts to help make the patient better. [MS4]

Exemplar statements denoting the role of the doctor as a team member in the healthcare team. This group believes that it is a group of people who work as a team to get the patient well:

> In a healthcare team there are people each with a different skill set but all are working towards helping with the health of this patient. Who all have knowledge about different aspects of how to make this patient well. [MS2]
>
> The biggest thing to say about this is that it's a team, you have to sort of acknowledge that they all have certain knowledge and you guys all need to work together to make sure that patient gets well. [MS2]
>
> I'd say everyone in that picture has different expertise and a different role, and together their knowledge and their abilities should make this patient well. [MS4]
>
> Everybody comes together so the whole team make the patient well, there is no one individual specifically who can make the patient well, in my opinion. So, all of us will make the patient better, I play a little role, and they play a little role, we all make a big ball to make the patient better. [MS4]

Points of Diffraction.

Points of Incompatibility. What different positions are taken regarding the position of the doctor in the interprofessional healthcare team?

A. Some say the doctor is the leader of the team and the person who has the main responsibility of making the patient well. Other healthcare professionals help out with executing the care and treatment plan which is developed by the doctor alone. Some among this cohort also believe that the doctor is the smartest and/or the most knowledgeable person on the team, hence the difference in social prestige between the doctor and other healthcare professionals is there for a good reason.

B. Some say the entire team carries the responsibility of making the patient well, and the doctor is a team member in the healthcare team. It is believed that each team member brings their own specific skill set that is indispensable to the team. Most people in this cohort believe that the doctor is not necessarily the smartest and/or most knowledgeable person on the team, and therefore difference in social prestige between the doctor and other health professionals should not exist.

Points of Equivalence. The above two strategies are equal in the sense that they both have an equal chance for emerging on the surface of the discourse, as we saw in this section. That is because both strategies share the same conditions of existence, including the rules for the formation of theoretical strategies below.

1. Rules concerning the economy of discursive constellation

The strategic choices made above depend on the general constellation of discourses in which medical discourse is located. We know that modern medical science is positioned in the same discursive constellation with natural sciences, technology, business, and capitalism. As a consequence of being in the same discursive constellation with natural sciences medicine tends to identify with objectivity and value-neutral nature of hard sciences rather than humanistic values of medical humanities and social sciences. Moreover, being in the same constellation with business and capitalist culture, people involved in medicine are often under the influence of a profit-based and self-centeredness goals in social relations, including medical practice. It is difficult to respect the human dignity of all allied health professionals the same as that of their physician colleagues, for many doctors. The objective and scientific value-neutral mindset promoted at the medical

schools and hospitals can affect medical students' professional identity in a way that in certain cases, all they can see and value is the amount of objective knowledge of medicine someone possesses and the number of years he/she has studied in school.

As a result of medicine *not* being in the same constellation with medical humanities, these fields do not share much in terms of using each other's research and scholarship. Humanities including morality is not being taught in medical school so even those students who want to see the humanistic side of medical practice do not have a clear idea about how exactly that works. This too was noticed in the statements coming from some students who could not let go of the hierarchically superior position of the doctor in the healthcare team. As for the students who do see the value of respecting everybody's human dignity and believe that the doctor is not superior than anyone else on the healthcare team since everyone has their own skill specific skill sets, it is hard to say where they get those values from. It might be that these students have had more real-life experiences of working with actual healthcare teams and are therefore understand the value of every team member on interprofessional teams better. Also, it is possible for some to reach these conclusions through making use of their personal codes of morality (e.g., religious beliefs, humanistic philosophy, parental and community upbringing, etc.) even when they have not yet had much experience working in interprofessional healthcare teams.

2. Rules concerning the nondiscursive structures

As a result of a heavy focus on teaching the hard science of medicine during medical school training, objectivity and value-neutrality are indirectly promoted throughout the medical training. In the hospitals, in addition to the scientific objectivity,

the business models for management of care for the patient is under the spotlight. Humanities have a very small part in formal medical education and therefore only minimal interest or attention is paid to research produced in the field of medical humanities. The two main nondiscursive structures where medical discourse resides are medical school and hospital. Below are exemplary student comments about how the rules and regulations in these two structures affect who they are as medical professionals and their desire to be better. The following discussion shows how these nondiscursive structures (including the system that backs them up) shape professional identity of students as they go through the path of becoming doctors.

> I don't like it [the hierarchy] so much because I worked as a patient care-tech at the hospital, and I was at the bottom of the little totem pole, and I saw some terrible things, I got a little burnt out, I didn't get burnt out myself but I could see that it's a TOXIC environment. And they gotta fix it, they gotta do something to fix it. Because it's not right, the hierarchy, it's not good. And I don't know, I have thought about it a lot, like how are they gonna fix it, what can they do, you know? And with the insurance and health, and hospitals, I mean this is a giant machine there is a lot of things that need fixing, but just specifically the hierarchy, ummmmmhhhh. So yeah, I don't think it's good, I don't agree with it, I mean I don't have a suggestion on what would be better, but I think it sets up a toxic environment in a lot of ways. [081]

> First, I do not think med students are necessarily smarter than everybody else. Second, to say that would be downplaying the effects of the system and the pressure it puts on some but not all types of people. For example, med school is expensive, even applying to med school is expensive. I had to work for a while to even pay for my applications to become a med student. So, there is already a bias towards people who can afford that. And that does not mean all those who can afford that possess a higher biological intelligence in terms of a higher IQ. And then there are studies showing that social factors have, if not the most significant but a crucial effect on IQ… so I do not think people going to med school are the smartest, there are the ones who had the resources to be able to do that. I think they are smart, but not all smart people are in medical school… So, I think currently, it has to be the physician who is at the top, not because they are the smartest, but it's just necessary because of the way the

> institution of medicine is set up, and the power structures were initially constructed, it just gives the biggest responsibility to the doctor. [141]

What Is the Ultimate Goal of Medical Practice from a Doctor's Perspective? In this section, I will report student statements regarding the ultimate goal of medicine that a doctor should pursue. It is a significant part of medical professional identity of a doctor to know what to aim for and what the ultimate goal of his/her clinical practice should be. Student comments reported below were pulled from the focus group data in response to the following prompt (see prompt # 10, FG Protocol, Appendix D). *Question*: What is the ultimate goal of providing medical care that a doctor should aim for? *Answers choices*: A) to fix/mend/recover the human body, B) to eliminate the disease, C) to alleviate human suffering, D) other. Most participants in all four focus groups picked the answer choice "C".

Exemplar statements denoting "to alleviate human suffering" as the ultimate goal of medical care:

> I think there is a lot of overlap, like if you want to eliminate the disease then you'll probably alleviate suffering from that disease, so if I want to pick one broad category like, to alleviate suffering, I think that hits more boxes and is more likely to maybe hit all boxes. [MS2]

> If I had to pick one it'd be C, I feel like that's the most achievable, realistic, and ethical and ideal goal. And like, the other stuff, I think they also achieve C in a way and a lot of times, but you can't always eliminate the disease, can't always, at least fully, fix or mend or recover the human body. But you can almost always do C, one way or another. [MS4]

> I'd probably choose C, cause, I think that falls the most in line with ... and suffering it is unique to each individual. Sometimes when people have like terminal diseases, they are not looking to fix or mend their body, for some patients, they'd just like to go to a hospice care and to relief their suffering they'd like to spend as much time as possible with their friends and family. And be comfortable. So, they are not trying to eliminate the disease nor trying to fix the body they are just trying to get us help them end their suffering, which in this case would be, going to repeated chemo, staying

> away from their family and always be tired. So, if I had to choose between A, B and C, then I'd go with C. [MS2]

A few of the participants in focus groups picked the answer choice "A". Exemplar statements denoting "to fix and recover the body" as the ultimate goal of medical care:

> I think there are a lot of times that you are unable to eliminate the diseases, and then we don't always alleviate human suffering in medicine, like to be in hospital is no fun and no one likes to go to the doctor so, you know, I don't know if it's necessarily alleviates the suffering. So, the idea is to attempt to mend the body. [MS3]

Very few students in focus groups picked the answer choice "B". Exemplar statements denoting "to eliminate the disease" as the ultimate goal of medical care:

> I think mostly the money and research goes into curing the disease, so I think it's kind of the most attractive sounding goal, I'd say, that most people would want to invest in research for curing the disease research. Like, trying to find a cure for HIV, cure for breast cancer, things like that. [MS3]

> I'll probably go with the first one. That's like the primary goal… to eliminate the disease is kind of a new possibility with vaccines and everything. [MS3]

Some students did not pick any of the provided options and responded with "other", denoting one or more of the following options as the ultimate goal of their future practice: 1) to help the patient through whatever they are going through 2) to enhance quality of life for patients 3) to enhance the quality of public health services for all. Below are exemplar statements indicating something "other" than alleviating suffering, recovering the body and eliminating the disease as the ultimate goal of medical care.

> (1)

> I think, to help as many people as possible, to be able to live their own life. Something that one of our teachers says, I think it sums it up pretty well, is if someone wants to smoke a box of cigarettes and drink 10 bears every day, then you have to do everything you can to make sure they can do that for as long as possible. So obviously, you'd want them to stop

> doing certain things, but people are gonna live the way they wanna live, and I think it's our job to just help them to be as happy as possible with the lifestyle that they choose. I think that's the ideal. [121]
>
> I'd say "other", and I'd say the ultimate goal of medical practice is to help the patient achieve their goals, whatever that may be. Because that's gonna vary based on the patient and the type of disease, so. [MS2]
>
> I'd pick D, and I'd like to help people through their health condition whatever it is, like you may not be able to fully recover the body, or eliminate the disease. You may not be able to alleviate their suffering either, I mean it depends on the condition, but my goal would still be to help them through those conditions, in whatever way that's possible to make it a better experience for them than it'd otherwise be. [MS3]
>
> (2)
>
> I'd go even beyond just alleviating suffering to maybe even increase happiness, like not just taking care of mental troubles or fixing issues, but help your life become better. Like, for example, physical education in high school, and stuff like that you know, not to just get people out of their sickness but also help them physically become healthier and happier. [MS4]
>
> I think I'll go with the other, like in addition to A, and B, and also trying to alleviate suffering, I think we should also try to improve the quality of life for people, and like try to improve public conditions of life. [MS3]
>
> (3)
>
> I'd say to improve public health in general. So, if you consider like a vaccine, a flu shot or whatever, like, a flu shot does not technically mend the human body, or it does not eliminate the disease or viruses… so more of preventive medicine. [MS4]

When students were asked the same question (what would be the ultimate goal of their practice in the future) during one-on-one interviews without having the answer choices to pick from, they were mostly confused and could not come up with any concrete answers to the question. Below are a couple exemplar statements pulled from the interview transcripts:

> I am assuming that the goal is like, to improve everyone's health, but I do not know. It's maybe just about money, I don't know. So, like my personal goal would be to help people. [051]
>
> I think the goal is to pursue excellence in whatever it is that you are going in to. So, like being a good doctor, getting down the tools that you need to succeed. And once I am getting that down and I am achieving mastery in that working on this personally to become a physician who cares, you know. Picks up on asking good questions about personal things, to get their perspectives as I am caring for my patients. [072]

Points of Diffraction.

Points of Incompatibility. What different positions are taken regarding the ultimate goal of medical practice that a doctor should aim for?

A. Some say the goal should be to alleviate human suffering to the point that it is possible.
B. Some say the ultimate goal of medicine is other than alleviating human suffering. They indicate other things such as: mending the body, eliminating the disease, enhancing quality of life, helping the patient get through whatever state they are in (or wish to be), increasing public health measures, and more as the main goal a doctor should pursue.
C. Many students are utterly confused as to what the goal of their practice would be as a doctor (when they do not get options to pick from).

Points of Equivalence. The three strategic choices about the ultimate goal of a doctor's practice that are made above have equal chances of coming to the surface of modern medical discourse–as seen in this section–partially because they all share the same conditions of existence including the rules of formation noted below:

1. Rules concerning the economy of discursive constellation

As we know, the strategic choices made above depend on the general constellation of discourses in which medical discourse is located. We know that modern medical science is positioned in the same discursive constellation with natural sciences, technology, business, and capitalism. As a consequence of being in the same discursive constellation with natural sciences medicine tends to identify with objectivity and value-neutral nature of hard sciences rather than humanistic values of medical humanities and social sciences. This seems to be the reason why most medical students could not articulate any clear humanistic goals for medical practice when they were asked to do that during one-on-one interviews. As for the focus groups, many students picked "alleviating human suffering" as the ultimate goal of their future practice as doctors. This could be due to one or more of the reasons below: 1) Medical students' familiarity with certain topics of professionalism that are sometimes discussed in formal sessions such as intersessions I and II. 2) Medical students' familiarity with their own personal code of morality dictating the alleviation of human suffering as the main goal of medicine, 3) Students' familiarity with real-world practice of medicine and realizing that fixing the body and eliminating disease is not always possible to achieve, 4) and lastly, students' being under the influence of popular transcendental traits of idealistic medicine and what it should aim for under the ideal condition. As a result of medicine not being in the same constellation with medical humanities, these fields do not share much in terms of using each other's research and scholarship. Humanities including morality is not being taught in medical school so even those students who want to see the humanistic side of medical practice do not have a clear idea about how exactly that works.

2. Rules concerning the nondiscursive structures

As a result of the heavy focus on teaching the hard science of medicine in medical school, objectivity and value-neutrality are indirectly promoted throughout the medical training. In the hospitals, in addition to the scientific objectivity, the business models for management of care for the patient is under the spotlight. Humanities have a very small part in formal medical education and therefore only minimal interest or attention is paid to research produced in the fields of medical humanities. The two main nondiscursive structures where medical discourse resides are medical school and hospital. Below are exemplary student comments about how the rules and regulations in these two structures affect who they are as medical professionals and their desire to be better. The following statements illustrate how these nondiscursive structures (including the system that backs them up) shape professional identity of students by limiting the possibility of things they can do as physicians in the future. Many students are now only aware but they also advocate against the limiting current healthcare system that creates tension between the individual doctor's wants and desires and what is being dictated by the system itself:

> If you want to alleviate human suffering, that's not necessarily limited to medicine, that'd be like why don't we mend our broken medical system and then you can eliminate their suffering by giving them the chance to apply to more opportunities to have healthcare and stuff like that. [MS2]

> I think at the heart of it, the idea and the spirit of medicine is still there, going back to you know, someone needs help and you are the person who can help them. I definitely see that at the core of it but I see a lot of other things seeping in, you know, trying to be the biggest medical school, create the most numbe74r of doctors, focusing so much on what numbers you can produce on the exams and where you're gonna match yours students…[134]

Points of Systematization. Now that we are at the end of this sub-section concerned with strategies about the doctor, we need to establish the link between each of

the strategies that were made above about doctor and understand how they can affect the rules of formation for the doctor as an object of discourse, the rules of formation for enunciative modalities about the doctor, and lastly, the concepts related to the doctor in the modern medical discourse. Points of systematization entail how each strategy contributes to production of statements (commentary) about an object, the types of statements about that object, and concepts that are born out of the specific relations among the rules of formation for objects and statement modalities. In this sense, as Foucault points out, "points of diffraction also represent the link points of systematization" (Foucault, 1972, p. 66).

The strategic choices made above (e.g., opting for competence or care as the most significant trait of a doctor, taking professionalism as dressing up and providing timely responses to one's emails, pursuing medicine for the sake of money and social prestige, seeing the doctor either as the ultimate leader or as a team member in the interprofessional team, and, aiming for fixing the bodies as the ultimate goal of one's medical practice) represent systematically different ways: of treating the doctor as an object of medical discourse (delimiting it, grouping and classifying it), of arranging modalities of statement about the doctor (choosing them, placing them, and composing them), and of manipulating concepts regarding the doctor (determining rules for their use and constituting the conceptual architecture of modern medical discourse related to the doctor). In other words, strategic choices made above, are all different but regulated ways of "practicing the possibilities of discourse" (Foucault, 1972, p. 70).

Let's take an example here. We know that doctors are among the most important authorities of delimitation for *the doctor* as a function. Moreover, the medical students

today will become not only the doctors, but the faculty, the hospital administrators, the persons in charge of policy making organizations and professional bodies of tomorrow. In other words, they will be the ones who will have the right to authoritatively speak about the function of the doctor as an object of medical discourse. Doing so, they will draw from the authority of medical school, hospital, and the institution of medicine in general. People are most likely to deem their statements true because they are based on quite outstanding authorities. Now, if a student chooses to define medical professionalism as "wishy-washy" and "fluffy stuff" that is only a waste of his/her time, this choice will definitely affect his/her professional identity as a doctor in the future. The way she sees the function of the doctor as an authority of delimitation, the way she chooses to talk about the function of the doctor and finally, the way she chooses to manipulate the concepts related to the doctor will all be affected by her early choice of objectifying the human body. For instance, this student is more likely to become a doctor who cannot see the patient as a whole person and chooses to speak more objectively (in terms of objective scientific facts, and statistical conclusions) to the patient rather than trying to create a human-to-human relationship with them. This doctor is also more likely to use paternalistic statements when referring to the patients. All of this will create unique commentary about who the doctors are and how they should function in the clinic. Such commentary is likely to affect other junior doctors around this one doctor who might see her as a role model in the clinic and try to learn from her the appropriate way of functioning as a doctor.

This entire scenario is also true about the opposite case, where a student chooses to see professionalism as the morality of medicine. This decision too will affect her future

professional identity as a doctor and will give rise to unique commentary and statements coming from her regarding how to function as a doctor in a clinical setting. This is an example of how discourse of medicine is being constantly produced by people who are involved in it. The reason one can often see different and sometimes opposing ways of acting as doctors in the hospital is that every doctor is using a systematically different way of dealing with certain objects of medical discourse such as the function of *the doctor*.

Finally, it is also important to show how different strategic choices made about the function of the doctor are linked to the task carried out by modern medical discourse in the practice of current capitalistic culture, and the role medicine plays in the realization of interests and desires of the upper class in society. Modern medical discourse is defined by "a certain constant way of relating possibilities of systematization interior to a discourse, other discourses that are exterior to it, and a whole nondiscursive field of practices, appropriation, interests, and desires" (Foucault, 1972, p. 69). With doctors, medical educators, hospital administrators and policy makers who produce the common image of the doctor and the way he should function in the clinic, it is not difficult to see that certain choices are made by the upper class in society (senior doctors, faculty, administrators, and policy makers) that determine the ways in which medical discourse is constructed and shaped. On the other hand, doctors who are getting trained in objectivity of medical sciences - and have the choice of opting for competence as the most significant trait of a doctor, taking professionalism as dressing up and providing timely responses to one's emails, pursuing medicine for the sake of money and social prestige, seeing the doctor either as the ultimate leader in the interprofessional team, and, aiming

for fixing the bodies and eliminating disease as the ultimate goal of one's medical practice - are in a way more beneficial to the overall capitalistic culture of the modern U.S. society. All of these strategic choices, in one way or another, get their validity drawn from the basic values of objectivity and value-neutrality that is being heavily promoted in medical education. With medicine being dependent on giant business industries such pharmaceutical and health insurance companies to name a couple, doctors being trained in medical humanities, developing traits such as empathy and compassion, and developing humane relationships with patients and the healthcare team will not be best suited to serve the interests and desires of the capitalistic society where the goal is serving the rich and ignoring the poor.

Strategies Concerned with the Sick Person.

How Medical Students Define Their Code of Morality and How Likely Are They to Use it in Their Future Medical Practice**?** In this section we will look at the strategic choices medical students make regarding their personal code of morality and how that may affect their future practice as physicians. During the one-on-one interviews, students were asked the following question (see question #6, INT Protocol, Appendix C): *What is your personal code of morality and do you plan to use it in the future as a physician? How can you tell the right from wrong when making important decisions in life?* Some students said they get their moral code from their religion, some said they will use humanistic values, family values, laws and personal feelings when making tough decisions in the field of medical practice.

Exemplar statements from students who indicated religion as the main source for their personal code of morality, which they are also planning to use in their medical practice in the future:

> I am a veeeery spiritual person. Christian, not Catholic, I do not use identifiers to narrow down myself. I can use those values enormously in medicine to get motivation, like, my motivation to treat people well, it is largely based on the fact that it's something God cares about and I love God, and I want to be like him, and I want to do things to please him. For me to try to restrain the effects of disease and illness is like, I believe that God is working through healthcare providers. [034]

> I grew up Catholic and went to Catholic school for 13 years. Was baptized, made my communion, my parents are both Catholic ... I will go to church when I am home with them, but I do not go when I am not with them. As for drawing values form it, I definitely think so. I think like, service to others and giving of your compassion, I think all of those were kind of instilled in me at a young age, especially in high school. It was a requirement for our graduation that every semester we had to do certain hours of community service. So that just kind of taught us how to go back and how good it felt doing that, then I just kind of continued that going forward. [134]

> I am a Buddhist. As for drawing values form it and making ethical decisions in medicine, yes. For the most part, yeah. I think I'd use a good mixture of religiosity and personal experience, as to how people should and should not be treated. [141]

> Christianity. Not Catholic. I do draw values from it and could use some of those values being a physician in the future, yes, I think so. For me growing up and reaching where I am now in my life so far, understanding some of the personal and social things, my faith has always been there guiding the way. So, even though I would like to keep my religion personal to myself and not make it social, I feel like it'll guide me if there is like a gray area. [184]

Exemplar statements coming from those who admitted being religious and drawing values from their religion about what is right and what is wrong in general, yet, they would like to think of their religion as something separate from their professions as a doctor in the future:

> I was raised Catholic, so I guess I am still a Christian. But I do not really follow the things ... I do believe in God, in Jesus, but I do not follow anything. I do draw my values from it though. I do believe that if I am to be a Christian, even if I do not follow all the rules, I will still like to be my best self for God, you know. I guess I do not relate compassion etc. to religion, like if you are in the field of medicine then you should be compassionate and all. I do not really connect me being a doctor with me being a Christian. [063]

> I have trouble identifying with one religion, I was raised Catholic, but I just believe in God, in a higher power. That's all I really know, and I can't really be sure about anything else ... I don't know if I would draw my values from it in medical practice. I think, ethics is different than religion, but I also think like, to just treat people how you want to be treated yourself. So, you could say that, Jesus said that so you could say it's religious, but I separate spirituality from ethics and that kind of thing, you know ... I don't know … it gets a little messy. I think legally it's gonna have a little bit more precedence for me, and ethics over religion, religion is something like, it's me personally, it's not a professional thing ... And I don't think that there is a connection between religion and charity. I think there are people who are very generous without even being religious or anything. I almost feel like it's a genetic thing, it is like, altruism rather than your religion. So, it's kind of where I am coming from. So, I don't know. I am not the most altruistic person; I am kind of just, like, a medium tipper. I am not like a super generous person, but I am a fair person. So, I am just right there in the middle. [081]

Exemplar statements from students who indicated humanistic values as the main source for their personal code of morality:

> [I am] not a religious person. I take my moral values from more humanistic values. My moral values come from how I want to be treated in that same situation. I value patient's autonomy for ethical decisions. Making decisions based on the patient, be however they want you to be, thinking about myself, like, what's going to help me in my most evil state? [004]

> Both my parents are religious, but I never really hopped in, the most spiritual I get is that I think if I am a good person, in some type of afterlife, then it just feels good for me to be nice to people. If I am not a good enough of a person that way, then there is not a place like a church or temple where I need to be, so ... I was basically the only Indian person at my school, majority were white, in high school ... So, being a minority, I knew how bad it made me feel, so I kind of think by putting myself in others' shoes and say if I was that person, how would it make me feel. So,

> being able to empathize with people ... I have always found myself good with empathizing with people and being able to see things from their perspective. [012]
>
> I guess spiritual but not religious. Just humanistic values. I draw values from the latter, yes. [103]

Exemplar statements from students who indicated family and community values as the main source for their personal code of morality:

> I am not religious. I went to church on Sundays as a kid, have not gone since. My parents are Orthodox Christians. If I have to make a tough decision, I think as if my parents were next to me, and what would they want me to do. I imagine if they were next to me what would have they done? [121]
>
> I was raised Catholic ... but I would not say I am a full-blown Catholic. I have a special relationship with God as of my own. So, I'd say, relationship, yes, but religious, not really ... but I do believe in God. As for drawing values and morality from it, yes ... I do think that my relationship with God, and my religious beliefs in general, do have a strong relation and influence on how I would practice in the future. Where do I get my moral beliefs from? Ah, that's a hard question ... So, I'd say, the commonality, I mean it's just the way I was raised. And that teaches me to like, I think people should be treated how God tells me that they should be treated… so with religion… like I can't pinpoint to one specific thing, I just want to say that it's just the way I was raised, my parent's influence, I have good parents they are great people ... and just kind of taking the philosophy of my father and my mother and testing on… like seeing other people and ask questions like how did he do that? That's just selfish and everything. So, I'd say what I consider moral is just how I was raised. [151]

Exemplar statement from students who indicated laws and personal feelings as the main source for their personal code of morality:

> I'd say personal ethics, also those that have been imposed by society and the system. So, laws and personal feelings will be the main ethical determinants for me. [112]

Below, we will see student statements in response to a focus group prompt (see prompt # 4, FG Protocol, Appendix D) that was asking the following question: *If you get an*

undocumented immigrant patient who cannot afford to pay the fee but is in a life or death situation that you can manage in your private clinic, would you see him and treat him? This question was asked as a basic test to see whether students incorporate their personal code of morality to make a decision, or if they prefer to remain objective and value-neutral toward the patient. Below are exemplar statements coming from both groups– those who said yes they would treat this patient, and those who said no, they would not treat this patient. Below are exemplar statements coming from students who responded with "Yes" to the prompt and indicated that they will treat this particular patient regardless of anything that might become a problem. Would they actually be able to do this given the real situation of the nondiscursive conditions such as hospital rules and regulations or those of a private practice? That is a discussion that needs to be had at another time. Let us look at the exemplar statements from those who responded with "yes, always" without setting any conditions:

> And I have been in that situation myself, being an immigrant and needing to access healthcare so I do understand the struggle ... No matter what the narrative that people may make, I mean, this is what we do. Even if it's going to affect my job… I'd still like to advocate for them. I mean, if you're not gonna do it so who is gonna do it, you know? That's still what I think ... I have no line for them to be treated [MS1]

> For me, there is no amount of money that you can give me ... like, seeing a patient who can't pay that would make me feel good about my trying personally. That would like, hurt me, if I couldn't do that, like, not seeing a patient who needs my help just for money? [MS2]

Exemplar statements coming from those who responded with "yes, maybe" depending on various conditions such as: 1) seriousness of patient's medical condition, 2) number of similar patients who cannot afford the fees 3) the time and mood of the doctor on a particular day.

(1)

Yeah, I'd still treat them. I mean it kind of depends on his health condition as well, like if he comes to your office looking perfectly fine, then it's different than if they come to you seeking urgent help for something that essentially needs to be treated, then yeah, I'd treat them. I mean if the person needs your help, then I'd treat them. [MS3]

I am assuming this is presenting like something necessary, so yeah, I'd do as best as I can. It may not be like physically or financially a profitable case to me, but yeah, it's nice to try. [MS4]

(2)

I think, if you'd say this is a life or death situation, I'd definitely treat them and everything, but I mean, occasionally I am okay with that but if that's going become a process and then that could be a problem. So, I am not saying I'm not going to treat him and everything, but I am saying that just because I get that sentence, I am not gonna be like, yes, for sure, I'd treat them. But I think it'd be something to consider depending on other factors. Like, for example depending on whether this is a life or death situation, is it just a stabilization case, or this is just a not so serious ... I mean, something that is not life or death situation. So, I am not sure, you know, but I just can't see myself being 100% sure that I'd definitely treat this person just because he is undocumented, nothing against that crowd or anything but just… I also have the responsibility of my family members, like I have to pay off debt, you know, provide food for the household and kind of maybe put my own family first before some case. But again, occasionally, I have no problem with that, but if it becomes something like, ok, maybe half my patients are not gonna pay the fee then that's gonna become an issue that is threatening my practice. I'd not be able to make enough money, as I could be, to provide for my family. [MS1]

I worked for private practice and there were slots dedicated for people who had Medicaid. Who are still paying at the state levels but what they are paying is not comparable with the sum you receive from a private insurance. So, they have like 2 slots a day for those, which is I think is a good compromise in a situation like, there is not only you can support your private practice but you can still be in the service of the community, but at the same time also see some patients who need care but are not quite at the… [MS2]

(3)

If there is time, then yes. I mean, if there isn't another patient that has already been put on the schedule. [He has an appointment so he is in his own time-slot]. Well ... then, yeah. Absolutely. [MS2]

> I am more business-minded, I guess you could say… I don't know, it's tough. I mean, is it a business or is it a nonprofit organization? Cause, if I was running my own clinic and it's my personnel like, I have 4 or 5 people, and they [the patient] did not have insurance? You know, the nurse says, or the secretary says, this person does not have insurance, do you wanna see them? I think it'd almost depend on my mood that day [laugh]. I mean, I may say sure send them in, or, no I do not have time for this, send them to an urgent care. I think it'd also depend on his condition you know, if he had a really severe condition then maybe I would not be able to treat him so I would need to send him to emergency room, maybe call him an ambulance or something ... say, he sliced his hand or something while he was working in the field, [laugh]. So, maybe I would not feel comfortable taking that patient in, you know, it's kind of… but if it was a nonprofit place like a hospital, then I think you'd have to treat that person, you know. It all depends on your mission statement. [He can't go to an urgent care or hospital because he is undocumented, and he does not need to go to ER, he is just been vomiting and has diarrhea. Needs simple stabilizing]. Sure, I'd talk to them, if I had the time. [What if you don't have the time, but he is dying?] Well, if I don't have the time, then I might not be able to see him, ah ... [Laugh]. I don't know. [But you do have the time because he has an appointment and he is showing up in his own time slot, you just learned that he doesn't have insurance though. Would you still see him in that time slot?] Yeah. Yeah…. I guess so. I mean, if I had the time, and if I was in a good mood, sure. I'll see him. [MS3]

Exemplar statements coming from those students who responded with "no" to the question of whether they would be willing to treat the undocumented patient who cannot afford to pay the fees.

> I think like, it may also be possible to have a person designated for that, like if one person comes like that who is in a life and death situation then there will be a designated doctor that helps them, which is obviously like morally and ethically great but it's take a toll on your practice, and so there are really a lot of important things to think of if you are in that situation. So if you are in this situation that you get people coming in, I'd want to let them know about the services nearby who can help them longitudinally because it probably isn't sustainable anyways, since like everything you need for their treatment needs money, like if it's that lab or the imaging or anything like that, they all charge money and you can't just pay all of that out of pocket to treat this patient. So, knowing about the local services that can provide free healthcare services for people, and helping that person get to them and register for whatever service that they are providing would be a better option to go with. [MS1]

> I agree with that, because you are still helping them but necessarily by treating them yourself, but by referring them to the right services where they do not put a toll to the local practice. So I thing that's a good balance between interests of all sides. [MS1]

Points of Diffraction.

Points of Incompatibility. What different positions are taken regarding codes of morality as it relates to treating the sick person**?**

A. Some medical students draw their moral values from their religion (e.g., Christianity, Buddhism).
B. Some medical students draw their moral values from humanistic philosophy (e.g., traits such as empathy), their families- especially parents, the way they were raised, the overall commonality, personal feelings, and laws.
C. Some medical students say they have a code of morality (any of the above) and directly draw from it when confronted by a tough clinical scenario.
D. Some medical students say they have a code of morality but they do not draw from it when confronted by a tough clinical scenario.

Points of Equivalence. The above four strategic choices are equally possible to emerge on the surface of modern medical discourse because they all share the same conditions of existence including the following two rules for their formation.

1. Rules concerning the economy of discursive constellation

Again, the strategic choices made above depend on the general constellation of discourses in which medical discourse is located. We know that modern medical science is positioned in the same discursive constellation with natural sciences, technology, business, and capitalism. As a consequence of being in the same discursive constellation with natural sciences medicine tends to identify with objectivity and value-neutral nature

of hard sciences rather than humanistic values of medical humanities and social sciences. Let us look at a couple of student statements below:

> I think it also brings up a good point of like, how we learn the scientific stuff in school, we become really hard in terms of like vaccines are good, you know change programs are good, and then anything against that we become very objective, I guess, so like we are entirely just [objective-minded] [MS1]

> I don't want to say science is superior, but that's what we know and are taught. [MS3]

Moreover, being in the same constellation with business and capitalist culture, people involved in medicine are often under the influence of a profit-based and self-centeredness goals in social relations, including medical practice. That is one reason why many of the students cannot see the humanistic value of practicing medicine and rather pursue it for their own self-interest. Here is an example of a statement from a student supporting this claim:

> At least from my experience, there are a lot of business models that are coming to medicine it is just another style of a primary thing… Morally, that sounds right to you like, on the street, like, you should treat everyone you can at the same time well what happens to the patients who can afford the treatment, if you don't stay up to date with your practice and facility because you can't afford the fees of the building, or whatever it is that you need to pay for in order to have a private practice. [MS1]

It rather shows that the healthcare system and the way it is set up based on the models borrowed from business administration and management discourses is not supporting the humanity/morality of medicine. Rather, it's inherently opposed to it.

As a result of medicine not being in the same constellation with medical humanities, these fields do not share much in terms of using each other's research and scholarship. Humanities including morality is not being taught in medical school so even those students who want to see the humanistic side of medical practice do not have a

clear idea about how exactly that should work. As a result, student responses were all over the place, as is noted in this section. It is remarkable that this matter receives little to no attention from the current education system. The problem is that students find it difficult and at times simply impossible to do what they feel is right as human beings. They are bound by the system that limits the things they can say, do, and even think about in modern medical discourse. On the other hand, there is no reward or punishment system setup in medical education to require - or at least encourage - students to think about medical morality and how it can be practiced by physicians under difficult clinical circumstances. Rather, the focus of medical education is on teaching students the scientific medical knowledge and avoiding as many subjective topics and attitudes as possible. The question is: Are these subjective attitudes important in healthcare delivery and shaping the discourse of medicine in the society? Are these subjective takes and codes important in shaping professional identity of our future doctors? I would like to affirm: yes they are.

2. Rules concerning the nondiscursive structures

As a result of the heavy focus on teaching the hard science of medicine in medical school, objectivity and value-neutrality are often indirectly promoted throughout the medical training. In the hospitals, in addition to the scientific objectivity, the business models for management of care for the patient is under the spotlight. Humanities have a very small part in formal medical education and therefore only minimal interest or attention is paid to research produced in the fields of medical humanities. The two main nondiscursive structures where medical discourse resides are the medical school and hospital. Below are exemplar student comments about how the rules and regulations in

these two structures affect who they are as medical professionals and their desire to do better. The following statements illustrate how these nondiscursive structures (including the system that backs them up) shape professional identity of students by limiting the possibility of things they can do as physicians in the future. Many students are now only aware but they also advocate against the limiting current healthcare system that creates tension between the individual doctor's wants and desires and what is being dictated by the system itself.

Exemplar statements denoting the clash between individual and the system:

> This really reminds me of some conversations people have about faith, and I don't wanna talk about any specific faith or anything but this contrast between these ideals, high values that people are taught about, and then like what actually happens in the real world… at least for me, I have this sense of like what my ideal role as a physician would be and my ideal responsibility. For example, I feel like I want to profess to people that I have like a commitment to say like a preferential option for the poor. But the understanding that there is this very real sense that it's just not a thing that's always going to be able to happen or like that we serve this high value system or like we serve our profession or something. But in reality, we all are sort of employed by private entities, or employed by the state, or like, we receive money you know, and so that tug of war, it's just like, inherent to the job… so we are all very aware, and I am not challenging anybody who is saying this, it's their right, when you are a realist somehow you get more things done, right… or people who are like, oh that's nice to say, you know, that like, you'll treat every undocumented immigrant, in fact you want to have only undocumented immigrants as your clients, so that would be something that I'd want to say, right? But it's like, oh then how many people are you really gonna help, because you're not gonna have resources or something, you know, like, these debates are really like inherent in moving forward and I think a disillusionment that happens at some point in the career ends up leading to burn out and stuff, I don't know. [MS1]

> I feel like, there is definitely sort of a teaching of a system of ethics, or like an ethical identity that we are being asked to take on, but then that identity is just gonna get challenged and muddled all the time, so it's like important to be able to maintain that while being able to operate in the real world. So, there is a component for us to advocate for our patients that the system may not advocate for them, so we are gonna be the first people to

> set the regulations right ... and I wanna treat these people, if you get yelled at for treating people who can't pay, you gotta push back on that. So, like we are still able to advocate for them. [MS1]
>
> The other thing to think about is that if it's a private practice, then you are responsible for paying your team. So, like if half of your patients are on Medicaid or something, well then, you'd have to consider that that means you'll not be able to pay your team. That's something that you would want to consider too, I mean how can we like, I mean obviously, you'll still treat the patient but like, how can we get rid of these things that are on our way? [MS2]

Who is Most Deserving of Care? Attitudes Leading to Equity/Disparity in Patient Care**.** In this section we will see medical students' statements on how to determine the most deserving patient to receive attention and care at the hospital. Some of the statements below are pulled from interview data whereas others were stated in response to the following focus group prompt # 3 (see FG Protocol, Appendix D). Students were also told to assume that none of the three patients are in a critical condition or else that might just determine the choice of patient to visit first. Here is what they were told at the beginning of the discussion: "Let's say, all 3 of them were in a motor-vehicle accident and got the exact same experience. Like their injuries are the same, there is no health-based thing that you'd say like oh, this person has celiac disease or that person has a bronchitis." Student responses can be divided into two categories: 1) responses from students who feel bound by principles of social justice and equity in healthcare delivery, and 2) responses from those who do not feel bound by principles of social justice in healthcare delivery system. Below are exemplary statements from each group.

1. Those who advocate for equity in healthcare delivery are basing their opinions on: moral principles of social justice, empathy, personal and/or professional judgment.

Exemplar statements supporting equity that are based on principles of social justice and person experiences:

> It's possible that the system in which you work tends to exclude the population that you'd like to serve. Like, we were just talking about the "Others" in healthcare system. I think, many people tend to see it as though being a low-income is the person's own fault, while it's mostly the system that either maliciously *Othered* them or just didn't know how to include them to the current structures. And I think to have an innovative mindset [as a doctor] is to look at something that is in front of you, and not only linking it to its immediate manifestations, but also linking it to a greater context which is probably the cause of it. And being able to innovate the system that caused that situation. [141]

Exemplar statements supporting equity that are based on the doctor's personal and or professional judgments:

> I'd probably lean toward the homeless person for the reasoning that he has been through medical system and has kind of been let to fall through the cracks so ... I mean he has been here before and this is his 4th time being admitted ... As far as the 80-year-old lady, I mean, just because you happen to be married to someone who is also a doctor, I'd not put them before my other patients. [MS1]

> In terms of helping someone who… I think I'd go and help the homeless person because he keeps discharging himself so you know, maybe he will discharge himself again if I leave him to be helped by interns or… I would not just choose patient A. Obviously, if A is the one who is most sick then maybe, but I do not wanna just choose her because she is the wife of an attending. That's not… [MS2]

> I think that is exactly why they need your help, because if they are not able to take care of himself then he needs help and that's why he is here at the hospital. The other two patients will seek help whether or not you help them here today, they will go and seek help elsewhere, whereas C is someone who is struggling, and he needs your attention and help. [MS3]

Exemplar statements supporting equity that are based on the feeling of empathy–where the doctor is thinking from the patient's perspective:

> To me, as a patient, I believe he needs more of our attention, and in the grand scheme of the case, I think sometimes you can be really less fortunate like, maybe you met with someone, whom, like you needed a

> little extra time, you know, trying to encourage you a bit more to stay and believe in your treatment, you know, so…. [MS4]

2. Those who do not feel bound by the principles of equity and social justice in healthcare delivery use concepts such as professional courtesy, fear of disobedience punishable by superiors, personal judgment and career ambition in order to determine which patient is the most deserving of their time and attention.

Exemplar statements *not* supporting equity that are based on the concept of professional courtesy:

> It's the professional courtesy of some sort so, I don't know. In my experience, I have seen people cut the line 3 times because they were related to someone inside, not because they were medically urgent, like, there were people who were more sick than them, but they did that… so, it happens, it happens all the time. And I talked to a doctor afterwards and they justified it, they were like, this is our professional courtesy so we do that. If we don't take care of ourselves then who will? [MS1]

> I used to work at an urgent care and there was no real triage system. So, basically, they see people, like, those who are actually their friends or families in the place of a patient who is supposed to be on the chart; and one time they cut like 115 people in this g-technology device called a PPD, and he was like, "oh, it's just a PPD", so… yeah. [MS1]

Exemplar statements *not* supporting equity that are based on the fear of disobedience punishable by superiors:

> So, I can also see like, if I want to go and talk to patient C, and my boss comes to me and he is like, why were you talking to this homeless person who keeps leaving all the time, he is not even interested to take care of himself, and like, why didn't you go talk to so and so's wife instead ... So, that can be a very real situation! So, like, I chose C, like, I am not super afraid about the consequences, but I am also aware that it exists. So, like, A is also something that I might have to consider because if I just went to see C then I might have to be answerable to my boss later as to why I chose him over the A. [MS2]

> Okay, [laugh] so, I think we are seeing the situation as idealist students, but once we get into practice, I don't know the pressures that would be there at that moment, like, I can't appreciate the pressures of actual clinical practice at this early stage in our education, so it's possible that in that case I'd lean towards patient A [who is an attending's wife rather than the homeless patient]. [MS1]

Exemplar statements *not* supporting equity that are based on the doctor's personal judgment and career ambitions:

> Oh, tough… okay. I would not choose the homeless guy because he is noncompliant. Even though I worked with homeless people, I mean, you can't help somebody who does not want to help himself. And between the other two, chance of getting sued or upsetting the attending physician, mmh… Being completely honest, I'd probably, you know, I've got 10 minutes only and the 80-year-old women is very talkative. Normally I'd go have a little chat with her, I mean 10 minutes would be enough for a little chat, but she might take too long so… otherwise I might choose her. But with 10 minutes, I wanna choose the easiest one because I am being crushed for time here, so I just wanna pop-in and give somebody some information and check up on them ... So, with 10 minutes I'd visit B, with 20 or 30 minutes, I'd set down with the 80-year-old woman and chat with her, and try to make a good impression on her. [MS3]

Points of Diffraction.

Points of Incompatibility. What different positions are taken for determining which patient is most deserving of medical care**?**

A. Some say all patients are equally deserving of care but if the doctor is being pressed for time then he/she should go with the patient that requires most medically complicated treatment.

B. Some believe patients can be categorized into more important and less important categories by making use of concepts such as: doctor's personal judgment, career ambition, professional courtesy, and fear of disobedience punishable by doctor's superiors.

Points of Equivalence. The strategic choices above have an equal chance of surfacing at the level of the medical discourse because they share the same conditions of existence, including the following two rules for their formation as possible strategic choices that can be made in modern medical discourse:

1. Rules concerning the economy of discursive constellation

Just like any other strategic choices that are possible made in modern discourse of medicine, the strategic choices made above depend on the general constellation of discourses in which medical discourse is located. We know that modern medical science is positioned in the same discursive constellation with natural sciences, technology, business, and capitalism. As a consequence of being in the same discursive constellation with natural sciences medicine tends to identify with objectivity and value-neutral nature of hard sciences rather than humanistic values of medical humanities and social sciences. Moreover, being in the same constellation with business and capitalist culture, people involved in medicine are often under the influence of a profit-based and self-centeredness goals in social relations, including medical practice.

All in all, for many people doing medicine is simply about having a job that pays well and having a high status in society. They want to keep their job and are likely to have ambitions of getting promoted, so they want need to be nice to their superiors in order to facilitate that. In the meantime, as they are busy doing all this, are they likely to create further disparities in healthcare delivery as they practice, in the name of their own personal benefits, ambitions, and professional courtesy? The answer is yes–as we have seen in this section already. Of course, this is not true for all physicians, however, it is true for many of them and that should be enough to stimulate medical educators and

policy makers to pay further attention to the matter if they are hoping to decrease the disparities in healthcare delivery that frequently happen in the U.S. society due to these and other similar reasons.

2. Rules concerning the nondiscursive structures

Again, as a result of the heavy focus on teaching the hard science of medicine in medical school, objectivity and value-neutrality are indirectly promoted throughout the medical training. In the hospitals, in addition to the scientific objectivity, the business models for management of care for the patient is under the spotlight. Humanities have a very small part in formal medical education and therefore only minimal interest or attention is paid to research produced in the fields of medical humanities. The two main nondiscursive structures where medical discourse resides are medical school and hospital. Below are exemplar student comments about how the rules and regulations in these two structures affect who they are as medical professionals and their desire to do better. The following statements illustrate how these nondiscursive structures (including the system that backs them up) shape professional identity of students by limiting the possibility of things they can do as physicians in the future. Many students are now only aware but they also advocate against the limiting current healthcare system that creates tension between the individual doctor's wants and desires and what is being dictated by the system itself. Exemplar statements denoting the clash between individual and the system:

> So, I'd lean toward the homeless person but I can't say for sure because it just depends on the environment, like, as of my experience right now, it's not like, because I know someone, I'm gonna treat you this way or I'll treat you before so and so. But I have not even been through the clinical years yet, so… [MS1]

> So there are like some ethical ideas that we got introduced to in our preclinical years, like, we shouldn't think about things like the hospitals

> getting sued, or like, somebody who is related to a physician or something like that in terms of a problem. But I have the impression that it is a big scene of medical life. [MS1]

Doctor-Patient Relationship: Idealistic and Humane or Just A Job Requirement**?** In this section, I will report student statements about the nature of a doctor-patient relationship. While some students were inclined to attach some sort of transcendental, sacred, and idealistic traits to the relationship between a doctor and patient, other students admitted that sooner or later, the relationship becomes part of the doctor's job. The latter cohort believes that just because the doctors are involved with personal information about their patients it does not mean that they personally care to know about those things and have a real human to human relationship with the patient. Below, I will provide exemplary comments from both groups of students. Some of these statements below are pulled from the interview transcripts whereas the rest were statements provided in response to the focus group prompt # 1 (see FG Protocol, Appendix D).

1. Some say that a doctor-patient relationship is more than just a job getting done on part of the doctor. They say this relationship is more humane because it is deeper, stronger, more intimate, and personal.

> So, I think there is some level of similarity between doctors, butchers and plumbers, because you are still receiving a service and you are paying for a service. But I think when it comes to doctors you need to have a little more of a personal relationship, a more deeper relationship than just a plumber or butcher. Because that's someone whom you trust to tell your personal history. So, it's the person who kind of runs through that type of information by your choice. [MS1]

> I think just generally, doctors taking a patient's life history, I think it runs through certain aspects of things, in it can be kind of a 5-minute job versus 3 days for a plumber. It's just that the medical work is gonna be different and it'll offer different relationship like a stronger relationship. [MS1]

> I think even if you are that doctor who is not making any attempts to make personal connections, when you look at the full spectrum of it, you still have a more intimate relationship simply because, that person is gonna be working on your body ... So, I think even though you're as cold as possible, it's still gonna be a different relationship. [MS2]

It is also said that the doctor-patient relationship is more humane because it is sensitive, high-stakes for the patient, and there needs to be trust on both sides for this relationship to work.

> I think there are certain matters that you probably don't want to discuss with anyone else, it's just with your plumbers. And certain matters are limited to your relationship to your doctor. Like some patients will share with us things that they have never really shared with anyone else, and we are being trusted to carry that to the extent that our relationship with that patient holds up. [MS2]

> I think the service that doctors provide are a little bit more important, not saying that doctors are more important but, my health is more valuable to me than my toilet and the quality of meat that I get, you know. So, the type of service is a little bit higher stakes, I think. It's more intimate. And you're not (hopefully) being judged by your doctor for the health condition you have, it's really important in doctor-patient relationship to feel like you're not gonna be judged by your doctor so it's more intimate I think, and it's more sensitive. [MS4]

> So, the type of service you are providing makes it different that these alleged professions, and that it's more sensitive information and there needs to be more trust and more feeling of like you're not being judged. [MS4]

2. Some say just because the doctors have access to more intimate information about patients, it does not mean they care about those patients. This cohort says sooner or later it become more like a job for the doctor - where patients merely receive the service that they are paying for.

> I mean, the point is like, so many doctors are just doing their job. So, if they are asking for your detailed information it's because they need it for the history not that they actually care, okay?! That's what this [the quote in the prompt] says, like, they are not actually your friends, they are just doing their job, just like the butcher is doing his job. I think some doctors,

> it's sadly true, that they get it done but they do not actually care about people. I think it's hard to become the doctor who actually cares. [MS2]
>
> So, just because it's a more intimate physical relationship between you and your doctor, it does not necessarily imply that they care, and that they have your best interest at heart. I mean, this is certainly not true for most doctors but I think to a certain group of doctors, it could be true. [MS2]
>
> I think people sometimes look at us like we are their friends, and I think it's about the intimacy of how we have to get information and what type of information. That's the type of information that they may share only with their close friends so they may look at us like their friends, but in actuality, we are not what I would define as a "friend" per say, that's not what we are. [MS4]
>
> I don't know because I have had some experience with doctors before, like not really good ones. I'd actually tend to agree in the sense that doctors are no different than anyone else. And there are good doctors and there are bad doctors, just like, there are good plumbers and bad plumbers, you know. Some plumbers really care about their job, you know, they really wanna do a good job for you. And I think it's the same way with some doctors. They really care about their patients and they love them and wanna do whatever they can for them. But then, some other doctors you know, like, if they have had to meet with 50 patients that day, they just wanna get through it as quickly as possible and so, I'd say in some ways I agree with it the quote. [MS4]

Points of Diffraction.

Points of Incompatibility. What different positions are taken regarding the nature of the doctor-patient relationship**?**

A. Some say the doctor-patient relationship is inherently more humane than other services that are simply provided in return for payment. They say this is so because the relationship is deeper, strong, intimate, personal, high-stakes, and trust is required on both sides for this relationship to work.

B. Some say the doctor-patient relationship is not always so humane. They say there are doctors who do not really care about their patient but simply do their job of providing them with medical treatment. This can be due to lack of time

and energy the doctors usually have to invest in order to build more humane relationships with their patients.

Points of Equivalence. Theoretical choices made above have an equal chance of emerging on the surface of medical discourse due to the fact that they both share the same conditions of existence, including the following two rules for their formation as strategies that are possible to be made in modern medical discourse.

1. Rules concerning the economy of discursive constellation

Again, the strategic choices made above depend on the general constellation of discourses in which medical discourse is located. We know that modern medical science is positioned in the same discursive constellation with natural sciences, technology, business, and capitalism. As a consequence of being in the same discursive constellation with natural sciences medicine tends to identify with objectivity and value-neutral nature of hard sciences rather than humanistic values of medical humanities and social sciences. Here is a student comment that sums it up:

> I think the quote really advises to the preclinical years really well, in terms of like, uh… butchers and plumbers, really does make me think about what I am doing, you know ... so just speaking of the pressure and things like that… and how you end up learning just a lot of biomechanics and a lot of like, this muscle connects this bones, and this muscles connects this muscle, if you don't watch out - it can be really distracting you from the big picture of why you are here in the first place. So, the quote [about plumbers and butchers] is really interesting in general. [MS1]

The problem is that with such a huge focus of modern medical education on mechanical and technical training of medical students, how can one expect them to think personal about medicine? Furthermore, being in the same constellation with business and capitalist culture, people involved in medicine are often under the influence of a profit-based and self-centeredness goals in social relations, including medical practice. That is one reason

why many of the students cannot see the humanistic value of practicing medicine and rather pursue it for their own self-interest. The idea of being a doctor is no different than the idea of having any cool job that can get them financial stability and a high status in the society. Here is a student comment touching the core of the issue:

> In my experience with shadowing a lot of doctors, the general attitude is I think kind of more realistic… I think what is said in the quote is the ideal, that's the goal. Like, especially modern medicine with kind of having most of their time spent on modern technology and stuff, it can seem like an occupation a lot. It has become a conveyor belt of patients. I think there is still an element of, like, in order to be efficient, you kind of have to numb yourself to the interests of others and I think that's where you need that 6th sense to be still able to see the human aspect of it. [MS1]

As a result of medicine not being in the same constellation with medical humanities, these fields do not share much in terms of using each other's research and scholarship. Humanities including morality is not being taught in medical school so even those students who want to see the humanistic side of medical practice do not have a clear idea about how exactly that should work.

2. Rules concerning the nondiscursive structures

With the heavy focus on teaching the hard science of medicine in medical school, objectivity and value-neutrality are indirectly promoted throughout the medical training. In the hospitals, in addition to the scientific objectivity, the business models for management of care for the patient is under the spotlight. Humanities have a very small part in formal medical education and therefore only minimal interest or attention is paid to research produced in the fields of medical humanities. The two main nondiscursive structures where medical discourse resides are the medical school and hospital. Below are exemplar student comments about how the rules and regulations in these two structures affect who they are as medical professionals and their desire to do better. The following

statements illustrate how these nondiscursive structures (including the system that backs them up) shape professional identity of students by limiting the possibility of things they can do as physicians in the future. Many students are now only aware but they also advocate against the limiting current healthcare system that creates tension between the individual doctor's wants and desires and what is being dictated by the system itself. For example, in this study, many students believed that it would be ideal to develop intimate, personal and humane relationships with their patients, if they would have the time and energy to do it. They thought it would make their work more enjoyable to know their patients on a personal level. However, developing relationships like that requires time and energy that is difficult to invest while working under normal hospital environments. Doctors do not have enough time to invest getting to know their patients when they did not even get enough sleep the night before and they are seeing so many patients during the day.

Exemplar statements indicating the clash between individual and the system:

> You do not have time due to being student or doctor, you can't afford to invest a lot of time in your patients to become intimate with them. The system is just not set up in a way that could support this more humane relationships between doctor and patient… I was just thinking of my friendships this year in class and also in undergrad, you are now running out of time for a lot of people you care about, I think, entering this phase of life [being a medical trainee]… I mean, a lot of professional people I know that have to develop these intimate relationships but they have to be very sort of professional with the people they are taking care of because if they start to get close and deeper, then they sort of end up dropping some other plates they have been spinning, you know. So, I just think that the word "friend" is not very interesting to think about in terms of being a doctor or something. [MS1]

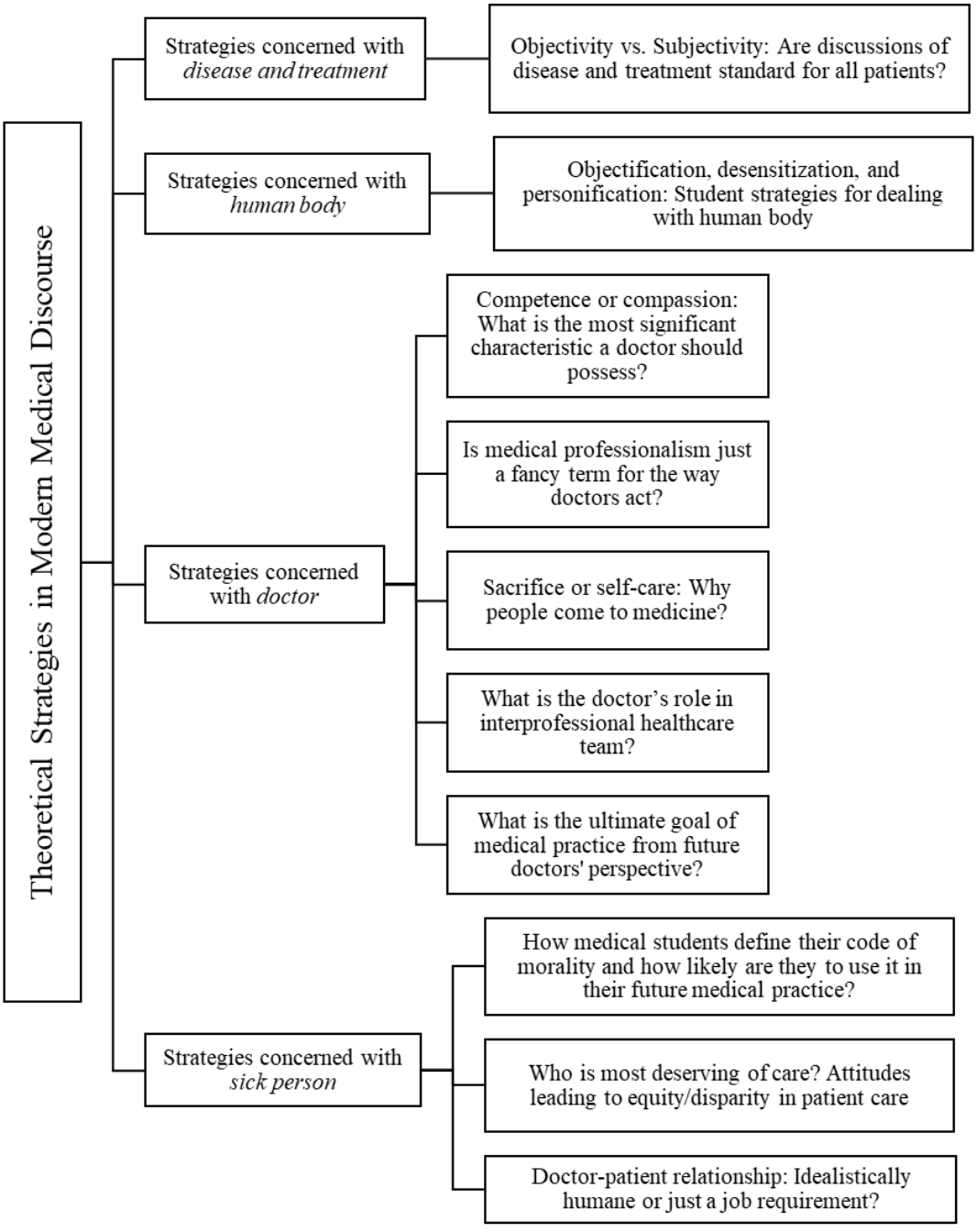
> My experiences in the clinic has mostly been just routine checkups. I did not come out of it super happy, like oh yeah, this is what I wanna do every day. And I understand that they are busy. Especially now as a medical student I know how much stuff they have to deal with, how much charting

> they need to complete, how many patients they have to see, how many shadowing etc. I know that doctors sometimes have to schedule multiple patients at the same time because the odds are that someone will not show up. So, they end up having to see too many patients sometimes. Plus, if both patients do show up, then someone is gonna be waiting. [012]
>
> I think it's kind of a shame, like, so if I go and shadow in a clinic. The physician sees a patient every 20 minutes and has to spend hours and hours charting so they can get the billing codes, reimbursement and all that. I think that kind of takes away from the experience of the physician where your one goal should be to spend as much time as you can with the patient. You have to chart, obviously, but I think when you have to chart to get your money, that's the way for you to get reimbursement, then I do not think that is right. Then I can see why people would lie, or cut down their patients' times so they can chart more and get reimbursed for it. I think that's just a shame. And then, they don't have time for medical student because things are so rushed, you don't have any time to waste. So, like, my parents chart until like 9 PM sometimes. And it makes them hate what they do. Which is why I think being med student is better because you don't have to do anything like that and instead you can just go and hangout with the patient. [063]

Points of Systematization. Here, we will establish the link between all strategic choices that involve the sick person and see how they affect rules of formation for sick person as an object of discourse, the rules of formation for enunciative modalities about the sick person, and lastly, the concepts related to the sick person in the modern medical discourse. Points of systematization entail how each strategy contributes in production of statements (commentary) about an object, the types of statements about that object, and concepts that are born out of the specific relations among the rules of formation for objects and statement modalities. In this sense, as Foucault points out, "points of diffraction also represent the link points of systematization" (Foucault, 1972, p. 66). Figure 4.11 summarizes theoretical strategies related to all four objects of modern medical discourse according to the results from the present study.

Figure 4.11

Archaeological Model of Theoretical Strategies in Modern Medical Discourse



The strategies choices made in relation to the sick persons above (e.g., using or not using religion as a personal code of morality, advocating for equity or disparity in

healthcare delivery, and having or not having an idealistic relationship the patient) represent systematically different ways: of treating the sick person as an object of medical discourse (delimiting it, grouping and classifying it), of arranging modalities of statement about sick person (choosing them, placing them, and composing them), and of manipulating concepts regarding the sick person (determining rules for their use and constituting the conceptual architecture of modern medical discourse related to the sick person). In other words, the strategic choices made above are regulated ways of "practicing the possibilities of discourse" (Foucault, 1972, p. 70). For example, we know that doctors and other healthcare professionals are among the most important authorities of delimitation for the sick person as an object of medical discourse. Doing so, they draw from the authority of medical school, hospital, and the institution of medicine in general. People are most likely to follow their statements and deem them as credible because they are based on these magnificent authorities. Now, if a student chooses to develop a personal code of morality which he/she will use when confronted by touch clinical scenarios involving the sick person, this choice will definitely affect his/her professional identity as a doctor in the future. The way she sees the sick person as an authority of delimitation, the way she chooses to use the authority of medicine in relation to the sick person, the way she chooses to talk about the sick person, and finally the way she chooses to manipulate the concepts related to the sick person will all be affected by her this early choice of developing a code of morality and use it as a doctor while still in medical school. For instance, this student is more likely to become a doctor who sees the patient as a whole person and choose to build a human-to-human relationship with the patient rather than entering into a business-like relationship with them. This doctor is also less

likely to use paternalistic statements when talking about the sick person–whether in a surgical specialty or not–she is more likely to refer to the patient as a whole person and not just as an object of her medical practice. All this will create a unique way of producing commentary about the sick person in medical discourse and it is likely to affect other junior doctors around this one doctor who might see her as a role model in the clinic and try to learn from her the appropriate ways of dealing with the sick people.

This entire scenario is also true about the opposite case, where a student chooses not to adopt a strong code of morality and use it to guide their decisions when practicing medicine on sick people. This decision too will affect the student's future professional identity as a doctor and will give rise to unique commentary and statements coming from her regarding how to sort out and handle the sick people in the clinic. It is how medical discourse is constantly being produced by people who are involved in it at the hospitals, to take an example. The reason one can often see different and sometimes opposing behaviors toward the sick people coming from different doctors is that they each are using a systematically different way of handling a certain object of medical discourse: the sick person.

Moreover, it is important to show how different strategic choices are linked to the function carried out by modern medical discourse in the practice of current capitalistic culture; and the role medicine plays in the realization of interests and desires of the upper class in society. Modern medical discourse is defined by "a certain constant way of relating possibilities of systematization interior to a discourse, other discourses that are exterior to it, and a whole nondiscursive field of practices, appropriation, interests, and desires" (Foucault, 1972, p. 69). With gigantic companies running the health insurance,

pharmaceuticals and money coming from for-profit hospitals and other healthcare organizations, one can see that certain choices are made by the upper class in society, which determine the way medical discourse is shaped. It is these business-owners collectively who establish the system that doctors are expected to fit in if they want to have a job as a doctor at a certain hospital. On the other hand, doctors who are getting trained in objectivity of medical sciences and have the options of not developing and using a personal moral code, opting for practices that create disparity in healthcare delivery, and treating their patients as though they were customer in the healthcare business that are actually more beneficial to the overall capitalistic, business-oriented culture of the modern US society. With medicine being dependent upon enormous business industries such health insurance and pharmaceutical companies to name a couple, doctors being trained in medical humanities, developing traits such as humanistic moral codes and traits like empathy and compassion, and developing humane relationships with their patients will not be best suited to serve the interests and desires of the capitalistic society where the goal is to serve the rich and ignore the poor.

Archaeological Analysis at the Level of the Discursive Relations

In the previous section I described several discursive elements including various objects, modalities of statement, concepts and theoretical strategies as part of the modern discourse of medicine. However, the task of an archaeological analysis is to not only locate and describe the elements but also establish the framework of the discursive formation that one is analyzing. As Foucault says, “how can one speak of a ‘system of formation’ if one knows only a series of different, heterogeneous determinations, lacking attributable links and relations?” (Foucault, 1972, p. 43). It is by establishing these

relations among discursive elements and between the rules for the formation of these elements that one can describe a discursive formation.

It is worth emphasizing here that most of what goes under rules of formation, the relations among the rules of formation and, hence, the conditions of existence for a discursive element in an archaeological study does not and cannot come directly from the data. In this study, I have used data mainly to identify and support the elements of discourse in modern medicine, and wherever possible, for supporting the rules, relations, and conditions of existence that are the results of *my analysis* of the data. In other words, in an archaeological analysis data is used to point out the dots for the analyst, but it is the job of the analyst to connect those dots through providing commentary on the data. It is this commentary that establishes many of the rules, relations and conditions in discourse. In his own archaeological studies, Foucault never used a lot of directly obtained data to come up even with the elements of discourse. While he uses some data to back up his elements, he does not use almost any data to support his own commentary that, at times, contains his personal and moral judgments in relation to the discursive elements and rules[9]. In this study, I follow the same course of action as Foucault. As mentioned above, I have used data mainly to come up with the dots as the basic discursive elements. However, in order to establish the rules, relation, and conditions of existence for those elements, I have provided my own commentaries on the data, which, of course, reflect from my personal lens through which I see the world.

[9] See MC (Foucault, 1988) and BC (Foucault, 1975) for examples of how Foucault did his own archaeologies. However, it must be noted that Foucault's archaeologies before he wrote AK (1972) are only preliminary works that paved the way for the development of a full-blown methodology presented for the first time in AK. In AK, Foucault clearly puts the burden of analysis on the shoulders of the archaeologist to establish the rules, relations, and conditions without making any suggestions on the use of primary data.

In this final section of the current chapter, I would like to discuss some of the discursive relations that have not be addressed yet. Many of the relation have already been looked at in this chapter (e.g., relations among different types of a single object, relations among rules for the formation of the same discursive element including objects, statement modalities and concepts. What we have not yet covered are the relations among different discursive elements, for example: relations between the four objects of medical discourse (i.e., disease and treatment, human body, the doctor and the sick person), relations between various modalities of statements regardless of what object they refer to, relations between the three rules for formation of discursive concepts (i.e., forms of succession, forms of coexistence, and procedures of intervention) related to all four objects of medical discourse. Some of these relations will be addressed in this section.

It is worth reiterating here that an archaeological analysis is never a complete project that can describe a discursive formation once and for all. The field of statements is fluid and is constantly changing. Any archeological analysis is at best a cross-sectional examination of the local and regional discursive formation at a certain point in time. Having said that, it is not possible to locate and report every single discursive element in the discursive formation that is being analyzed by archaeology; for example, I was not able to locate any strategic choices about the disease and its treatment in this study. Also, it is not possible to locate and report all possible relations between discursive elements. A single archaeological analysis can capture at best some of them but not all. Therefore, I will be reporting the groups of relations that have emerged on the surface of the modern medical discourse through the data that was collected in this study. It is possible that there are other discursive elements and other discursive relations that were not captured by the

analysis done in the present study. I would like to quote Foucault here to support the reasoning above:

> What are described as 'systems of formation' do not constitute the terminal stage of discourse, if by that term one means the texts (or words) as they appear, with their vocabulary, syntax, logical structure, or rhetorical organization. Analysis remains anterior to this manifest level, which is that of the completed construction: in defining the principle of distributing objects in a discourse, it does not take into account all their connections, their delicate structure, or their internal sub-divisions; in seeking the law of the dispersion of concepts, it does not take into account all the processes of elaboration, or all the deductive series in which they may figure; if analysis studies the modalities of enunciation, it questions neither the style nor the succession of the sentences; in short, it leaves the final placing of the text in dotted outline (Foucault, 1972, p. 75).

On this note, let us now begin examining some of the remaining relations that link the elements of discourse in the discursive formation of modern medicine.

Objects

The basic relations related to discursive objects were discussed where I described the conditions of existence for the objects in the previous section. Here, I will go over the relations among the four objects of discourse that were noted in this study: disease and treatment, human body, the doctor, and the sick person. First, it is interesting to see the same field of modern medical discourse gives rise to different types of objects that are coming from different surfaces of emergence, dealt by different authorities of delimitation, and therefore, have different grids of specification. Among the four objects of medical discourse, the one that is spoken about the most is by far disease and treatment. It requires the most concrete type of knowledge to talk about this object (medical scientific knowledge) and for some reason many doctors feel most comfortable talking about this object rather than any of the other ones. Talking about disease and treatment involves the highest level of objectivity and value-neutrality, which many

doctors actually feel comfortable with. The second most spoken object, which also incorporates mostly medical scientific knowledge, is the human body. Doctors talking about the body often use scientific information to describe the structure and function of the body. The remaining two objectives, the doctor (as a function) and the sick person are the least spoken about. There are only certain types of discussions (e.g., professionalism, medical ethics, medical humanities, etc.) that would require the doctor or the medical community in general to talk about these two objects. As for credibility too, the talk about body and disease and treatment are the kind of talk that is going to be deemed as most credible when spoken by the doctors.

Different objects also have different surfaces of emergence, as was described in the previous section. Disease, human body, and the sick person share some common surfaces of emergence, namely the individual, families and communities. Doctor is the only object of discourse that does not share these surfaces of emergence; rather, it rises from the institutions such as medical school and hospital. As for the authorities of delimitation, the most credible and significant authorities that can speak about the all four objects of medical discourse authoritatively are the doctors themselves. They pretty much run the discourse by creating enormous amounts of commentary that shapes the society's understanding of disease and treatment, the human body, the function carried out by the doctor and the sick person. Lastly, the grids of specification for each object (e.g., different kinds of bodies, different kinds of doctors, etc.) are based on various rules depending on the surface of emergence and the authorities of limitation for each object.

Enunciative Modalities

One can also locate and examine various relations between different modalities of statement that are commonly used in modern medical discourse. For example, statistical statements are the statements that bear most credibility in medical discourse. Whether it is statistical statements about disease and treatment or about some attribute of the sick person, people tend to trust it as long as it is coming from a research project. This kind of ties back to the culture of objectivity that is so prominent throughout medical education. There are other types of statements, such as qualitative descriptions, deductive clinical reasoning and analogy that can be enunciated by the doctors that are also deemed credible, though not as credible as statistical value statements.

Many of the relations between the various rules for the formation of statements about a single discursive object were examined and documented as I tried to establish conditions of existence for these modalities of statements, in the previous section. One may go further ahead and explore the relationship between the conditions of existence for each category of modalities. This can definitely add further depth to the archaeological analysis but I am not going to do that here since it would require an extensive discussion beyond the scope of this dissertation. Future research may be interested in digging up more relationships between each rule of formation among all four categories of statements. For example, one may compare and contrast the authorities who are enunciating statistical statements about the doctor with those that enunciate statistical statements about the sick person, the body, and the disease. One may also examine which authority each of the above authorities draw from when generating statistical statements regarding their respective objects, and what relations exist between those authorities (e.g.,

which is more credible, more commonly used, or deemed as less valid, etc.). Lastly, one may compare and contrast the positions of those who enunciate the statistical statements regarding their respective objects, and what relations may exist between such positions. For instance, one may examine the relations between the possible positions the doctor can assume as a perceiving, observing, describing, teaching, or questioning subject with regard to a certain object of discourse, such as the human body.

Concepts

Perhaps, concepts are the discursive elements with the most diversity and disparity of nature when compared to other discursive elements (i.e., objects, modalities of statement, and strategic choices). Some of those that we have called discursive *concepts* constitute rules of formal construction, some rhetorical practices, others determine the internal configuration of a text (e.g., rules for history taking and physical exam) or the modes of relation and interference between different texts. Some concepts in medical discourse are characteristic of a particular period (e.g., rules on how to report the lab tests and circulate among clinicians) others have a distant origin and far-reaching chronological significance (e.g., concepts defining the procedure of a breast or abdominal exam). It is neither possible nor required that one should establish some sort of connecting thread in order to link what seems to be a very disconcerted pile of discursive concepts. Unlike other common analytical techniques, archaeology embraces disparity and acknowledges it as a reality in discourse. Having said that, there are still those discursive relations that are already present which might connect some of these concepts to one another. As Foucault points out, “what properly belongs to a discursive formation and what makes it possible to delimit the group of concepts, disparate as they may be,

that are specific to it, is the way in which these different elements are related to one another" (Foucault, 1972, pp. 59-60).

Again, I am not going to work through all discursive relations that might be established by archaeology in this study as it requires extensive examination and lots of space to document. Some of the relations among concepts were documented in the previous section as part of the discussion for determining condition of existence for various groups of concepts. Future research may establish relations between the way in which, for example, the ordering of descriptions provided in patient's history is linked to the techniques of rewriting it using medical terminology; or the way in which the field of memory is linked to the forms of hierarchy and subordination that govern the statements of a text; the way in which the modes of approximation and development of the statements are linked to the modes of criticism, commentary and interpretation of previously formulated statements, etc. As Foucault affirms, "it is this group of relations that constitutes a system of conceptual formation" (Foucault, 1972, p. 60). Furthermore, the relations between the three groups of rules for the formation of concepts can be established thorough examining the links between forms of succession, forms of coexistence, and the procedures of intervention for different categories of concepts that are about a specific object of medical discourse (i.e., the sick person).

Theoretical Strategies

Again, most of the relations concerning theoretical strategies have already been established in the previous section as part of the discussion covering the points of diffraction for each strategy. The relations among various strategies relating to the same object (e.g., personal code of morality, judging the worthiness of the patients, and

indicating the ultimate goal of medical practice–all of which are strategies relating to the same object that is the sick person) have been discussed in detail as part of the discussion establishing the points of systematization among those strategies. What I am not going to do here but future research is welcome to determine is to establish relations between points of systematization for different groups of strategies relating to all four discursive objects (i.e., relations between points of systematization of strategies related to disease, points of systematization of strategies related to human body, and points of systematization of strategies to each of the other two remaining objects). This will result in a deeper understanding of the conditions of existence for all strategic choices that coexist in the discursive formation of modern medicine.

Additionally, the relations between all four groups of discursive elements (i.e., objects, modalities of statement, concepts and theoretical choices) can also be established by future research. One can try to perhaps establish these relations in a "reverse direction'. As Foucault points out, "the lower levels are not independent of those above them. Theoretical choices exclude or imply, in the statements in which they are made, the formation of certain concepts, that is, certain forms of coexistence between statements" (Foucault, 1972, p. 73). Furthermore, "it is not the theoretical choice that governs the formation of the concept; but the choice has produced the concept by the mediation of specific rules for the formation of concepts, and by the set of relations that it holds with this level." (Foucault, 1972, p. 73). In the next chapter, which is also the final chapter of this document, I am going to discuss general significance of the analytical procedures that were presented throughout this chapter. Also, we will begin drawing the final conclusions

from the complicated network of discursive formation as they relate to the future of medical education and practice.

Chapter 5: Discussion and Conclusions

Using Foucault's archaeological methodology, this study aimed at defining the system of formation for modern medical discourse, and the role this discourse plays in formation of medical professional identity in medical students. Results of the archaeological analysis were presented in the previous chapter. This chapter begin with a brief discussion of general archaeological descriptions as undertaken by this study. Here, I explain how I got the results that were presented in Chapter 4, why I presented my results the way I did, and how my work fits in with the general archaeological model of analysis and the chief principles of archaeology described in Chapter 2. Next in this chapter, I will discuss the results of this study at three different levels (the level of statements, the level of elements, and the level of discursive relations and conditions), which corresponds with the way I presented the structure of modern medical discourse in the previous chapter. I will also discuss what my results mean, how they should be interpreted, and what some implications of these findings are. Future directions to be pursued by medical education research and the final conclusions of this study will be presented at the end of this chapter.

Before moving on to more specific discussions, I would like to add a few remarks here. It is important to understand that this research is not pinpointing some specific discovery, nor does it provide a new brick to contribute to the construction of the good-old body of medicine. Instead, it is looking at the entire construction from the outside; zooms into its building blocks and, opens new ways of looking at things. In a nutshell, this research is broad. Archaeological analysis does not aim to provide specific findings or answer specific questions. It is inherently broad because it provides new spaces to

think, opportunities for seeing things in a different light, and to carry on out-of-the-box scholarship. This research is a preliminary archaeological work in medical education. Perhaps the biggest value of an archaeological study is that it provides an alternative way to think. As Gutting puts it,

> one reason that established systems of thought and practice often maintain their authority despite basic flaws is that, precisely because they are so entrenched, it is difficult to think of any serious alternatives to their conceptions and procedures. Another reason is that they have, over years of dominance, developed subtle ways of masking their flaws. Historical analyses such as Foucault's can be used to overcome both these sorts of defense mechanisms. By unearthing alternative ways of thinking and acting, they end the de facto monopoly of the dominant systems. This is particularly so since the alternatives such historical analysis uncovers are not mere logical possibilities but have themselves been entrenched in the reality of our past (1989, p. 106).

The above excerpt sums up the value of an archaeological research well. There are various definitions for what counts as good research in the social spheres. I believe good research is not always about solving a problem. It is also about identifying the right (and sometimes new) problems and being able to show why they are important. It is about opening new research avenues and creating future directions for researchers so the issue can be addressed in a systematic manner. Let us now turn to see how results of this study fit in with the chief principles of archaeology presented in Chapter 2.

Discussion of General Archaeological Descriptions

The present research is based on the assumption that to know the reasons behind things that are said in medicine, one should look into the system of their formation and the enunciative possibilities and impossibilities that this system lays down for medical discourse. Such reasons cannot be found through analyses of the thoughts or experiences of people who are involved in medicine (e.g., doctors, medical students, or patients).

Analysis of thoughts (and feelings) is most likely to lead one toward the transcendental characterization of medicine; whereas analysis of experiences would lead to empirical results about the already existing medical discourse. In archaeology, one is looking neither for transcendental nor for the empirical facts to emerge from the data (Webb, 2013). In archaeology,

> one is not seeking, therefore, to pass from the text to thought, from talk to silence, from the exterior to the interior, from spatial dispersion to the pure recollection of the moment, from superficial multiplicity to profound unity. One remains within the dimension of discourse (Foucault, 1972, p. 76).

By employing an archaeological methodology, this study describes the system of formation for modern medical discourse. It is this system of formation - also known as the discursive formation - that sets up the law of what can be said, done, or thought about modern medicine. In other words, it is this system that governs the appearance of all statements made in medical discourse. The goal here was to define the archaeological model of modern medical discourse at Indiana University School of Medicine, as observed and documented in 2019. In the previous chapter, I tried to show "the play of analogies and differences" as they appear at the level of formation, and I undertook at least four major tasks to do that:

(a) Showing how different (and sometimes radically heterogeneous) discursive elements are formed on the bases of similar rules of formation, which is called archaeological isomorphism (e.g., different objects, or different concepts, or strategies forming on the basis of the same rules of formation).

(b) Showing the extent to which rules of formation and the relations between them apply to, and are arranged in accordance with, the main model of the

discursive formation of modern medicine. This involved defining the archaeological model of each discursive element including its types, rules of formation, relations between those rules, and establishing the conditions of existence for that element and its related rules.

(c) Showing how elements that are radically different from each other could occupy a similar status in the system of formation of modern medicine. This is called archaeological isotopia. Let us take the example of securing financial benefits and helping people as two different strategic choices that are common reasons for becoming a doctor. These are two *incompatible* elements because "their domain of application, their degree of formalization, and their historical genesis make them quite alien to one another" (Foucault, 1972, p. 161). Yet, both elements are *equivalent* in their status as alternative, yet possible, strategic choices that can emerge in modern medical discourse.

(d) Showing how different discursive formations (which reside in the same discursive constellation) can relate to one another, have relations of subordination or complementarity with one another, and thus contribute in formation of one another in various ways. This is known as archaeological correlations.

It is worth reiterating here that the main task of the present analysis was not to merely locate the discursive elements (i.e., objects, modalities of enunciation, concepts and theoretical strategies) in modern medical discourse. Rather, the main task was "to reveal what made them possible… to show the proximities, symmetries, or analogies that have made generalizations possible" (Foucault, 1972, p. 161). In sum, in archaeology, the task

is to outline the field of modern medical discourse including conditions that define possibilities and impossibilities within this field.

Interpretation of data

Since archaeology is not an interpretive method of analysis, all statements collected as data in this study were treated as facts of language. It was not assumed at any point that a statement implied something other than what was being said on the surface. Even if such a duplication were to exist, it does not affect the fact of language enunciated by the statement so it would be irrelevant to the archaeological level of analysis. According to Foucault,

> to interpret is a way of reacting to enunciative poverty, and to compensate for it by multiplication of meaning; a way of speaking based on that poverty, and yet despite it. But to analyze a discursive formation is to seek the law of that poverty, it is to weigh it up, and to determine its specific form (Foucault, 1972, p. 120).

As described in Chapter 2, archaeology is opposed to customary qualitative analytical methods in many ways. Yet, it is but one "possible line of attack for the analysis of verbal performances" (Foucault, 1972, p. 206). The findings of an archaeological analysis do not hold "a definitive place in an unmoving constellation", but with its description of the discursive formation, its positivity, the statements, and their conditions of formation, it draws up a very specific domain (Foucault, 1972, p. 207). A domain that is irreducible to interpretation and formalization, and one that has not been the object of any other form of analysis before.

Furthermore, unlike a great many conventional research reports, the data in this study are presented in extensive amounts. Since archaeology analyzes discourse and discourse is made of statements, the statements need to be reported in their integrity if the

goal is to support a point the researcher is trying to make. In most other qualitative methods of data analysis (e.g., thematic analysis, simple coding methods and so on), the researcher is mainly looking to summarize experiences or perceptions of the research participants in order to come up with common themes. Archaeological analysis, on the other hand, is not interested in the experiences or perceptions of individual subjects. It is against the chief principles of the method to regard for the psychological state of individuals (intentions, motivation, meaning behind their statements, etc.). In this study, I did not seek to find hidden meanings that might have existed deeper than the statements themselves. Instead, I went with the notion that, with no internal dimension, "the enunciative domain is identical with its own surface." (Foucault, 1972, p. 119).

Research participants in this study took anonymous subjective positions that were analyzed by archaeology. The data collected through interviews and focus groups were transcribed verbatim so that the reader can be exposed to the actual statements as they were enunciated by discursive subjects participating in this project. Even so, due to limitations of the space, I have presented only the exemplar data (and not all statements that were collected as data) to support the results outlined in Chapter 4. Again, I did not make any attempts to discover the meaning of statements, identify what was implied by them, or interpret them in a way that would add more language than was enunciated in their original version. In archaeology, one rather goes by the notion that "the statement is not haunted by the secret presence of the unsaid, of hidden meanings, of suppressions" (Foucault, 1972, p. 110).

Transcendentality, Origin, Originality, and Truth

The problem with most critical research studies on topics such as medical professionalism, medical humanities and, professional identity formation is their basic assumption about medicine having a transcendental humanistic core that is somehow lost in the mud and needs to be recovered. Archaeology, on the other hand, does not search for the origin and foundations of medicine to recover them. The humanity of medicine is not like a crystal of purity that is lost in the mud; rather, it needs to be constructed through teaching people about humanities such as ethics and morality as part of a medical training. It has to be constructed in real-time, not discovered or recovered. Hence, archaeology refuses to create "some form of patched-up unity" amidst the chaos of dispersed discursive elements in a search for the original and transcendental core of medicine (Webb, 2013, p. 154). Throughout this project, I did not assume such a core existed in the first place. It is not a realistic expectation to wait for medicine as a social discipline to somehow move away from the tangled mass of its present (and historical) discontinuities and become the ideal, the great and uninterrupted unity that we wish for (Foucault, 1972, p. 6). Medical practice has never been nor will ever be ideal and unbound from its conditions of existence.

Thus, in this study, I have not trailed the origin and the promise of its return for medicine. I did not presume that medicine as a social practice has a sacred humanistic core; one with the transcendental power to traverse time and space and travel across the hundreds of centuries of human history. This study does not elude an analysis of the actual practice of medicine in the present time based on such presumptions. Rather, one fundamental assumption here is that all social actions are *constructed*. Therefore,

medicine as a social discourse at any point in time is only as good as its conditions of existence allow it to be. Being a constructed social discourse, medicine has never been nor will it ever be free of discontinuity and dispersion. Findings of the present analysis as outlined in the previous chapter are evidence on the constructedness of medical practice and the nature of this dispersion.

The statements collected as data in this study were also not quarried in search of their origin (e.g., where they came from). If a statement referenced a current practice, for instance, I did not ask or look to find when that practice was first initiated and by whom, or how did it evolve in order to reach our time. It is important to note that archaeology is not history. Hence, for the purpose of analyzing a discursive formation, it is enough that a certain practice exists in discourse and is being referenced in a discursive statement. In archaeological analysis, "one no longer has to seek that point of absolute origin or total revolution based on which everything is organized, everything becomes possible and necessary, everything is effaced to begin again. [Rather,] one is dealing with events of different types and levels, caught up in distinct historical webs" (Foucault, 1972, p. 146).

Furthermore, during the data analysis, I did not make a distinction between original/true/innovative statements and those that I thought were repeated/false/trivial ones. First, determining the *truth* of the statements is not relevant to the level of analysis in this study. Archaeological findings presented in the previous chapter are not meant to

> define the state of knowledge at a given moment in time: they do not draw up a list of what, from that moment, had been demonstrated to be true and had assumed the status of definitively acquired knowledge, and a list of what, on the other hand, had been accepted without either proof or adequate demonstration, or of what had been accepted as a common belief or a belief demanded by the power of the imagination (Foucault, 1972, p. 181).

Thus, no attempts were made to determine what parts of the statements collected as data in this study were true and what parts were merely born from the imagination of the speaking subject. Second, in archaeological analysis, one does not care about locating the originator of a given idea as opposed to those who merely repeat or modify that idea. Thus, during data analysis in this study, no attempts were made to trace the precursors of a thought since the question of *who thought it first* is considered to be irrelevant to the analysis of discursive formation. For this reason, the question of originality/banality of the statements collected as data is also not relevant to the analysis of discursive formation (Foucault, 1972, p. 144). Instead, archaeology is concerned with defining the *field* where all statements - from most original to most banal - can emerge based on a defined set of rules and conditions. In this study, I have been interested in all statements which I thought had the potential to reveal something about the discursive rules and conditions in medical discourse. It turns out that the most innovative statements embody the rules of discourse no more and no less than the most repetitive ones and thus "the question of innovation is of no interest to archaeology" (Gutting, 1989, p. 245). Plus, even the most trivial statement puts a whole set of rules into effect regarding the object that it references, the modality of statement that it uses to refer to that object, the concept that it draws from to talk about that object, and the strategic choice, of which this statement is a part of and which is made in relation to that object.

The above discussion takes us to the argument that all discursive elements are derived from groups of statements that may as well be called the *governing statements*. However, this derivation is not the same as a deduction, nor does it represent the development of some general idea at the base whose consequences and possibilities

gradually develop to unfold (Foucault, 1972, pp. 147-148). The archaeological derivation is different than both of those and therefore it must be described in its own particular way. It is important to understand the proper order of archaeological derivation and

> not to seek in an 'initial' discovery or in the originality of a formulation the principle from which everything can be deduced and derived; not to seek in a general principle the law of enunciative regularities or individual inventions; not to demand of archaeological derivation that it reproduce the order of time or reveal a deductive schema (Foucault, 1972, p. 148).

In this study, I have attempted to follow the rules defined in the above excerpt. Therefore, none of the findings presented in Chapter 4 should be read as though implying either a logic of deduction or a transcendental origin at the base of the governing statements that give rise to the discursive regularities.

Agency of the Human Subject

It is worth restating here that no particular groups were designated as "a study group" in the present research. What is studied here is rather the discourse, which includes all talk and behavior related to medicine. The data analyzed in this study includes the interview and focus group transcripts (containing the talk coming from medical students) as well as direct observation fieldnotes (containing the talk and behavior coming from doctors, residents, interns, patients, patient families, etc.). As discussed in Chapter 2, it is one of the chief principles of archaeology to decentralize the subjects (people who are *subjected* to medical discourse, that is, those who are involved in medicine, e.g., medical students, physicians, etc.) from playing the main role in discourse. Therefore, people by whom the "talk" and "actions" were enunciated are not playing the central role in the analysis of medical discourse in this study. Statements that were collected as data were not analyzed with the intention to seek their speakers'

opinions, intentions, motivations, feelings, etc. Rather, in this study the attention has shifted from the subjects to the discourse itself. Regardless of who enunciated them, the statements (data) have been organized in a system with the intention to discover the rules, regularities, and conditions that facilitate their existence. The reason I interviewed only medical students in this study (and not the doctors or patients, for example) was that this study is focusing on the function of discourse in constituting professional identity in medical students. Students' professional identity is best reflected in students' statements, and that is why they were collected as data.

Furthermore, this study refrains from analyzing relations between the speaker of a statement and what they say. For example, I have not attempted to determine my interviewees' intentions or motivation behind the statements they made in their interview with me. What I have attempted to analyze, instead, is the position of these speakers, which needs to be occupied by anyone who would attempt to make that statement (Foucault, 1972, pp. 95-96). While it is possible to explain why such and such a person should think in a certain manner rather than another, archaeological analysis is more interested in defining the conditions of existence for the statement they make regarding the objects of discourse. In other words, archaeological analysis does not scrutinize the psychological state of the speaking subjects and discuss things such as an individual's thoughts, feelings, intentions, motivations, etc. Foucault also adds "faculties, aptitudes, degrees of development or involution, different ways of reacting to the environment, [and] character types, whether acquired, innate, or hereditary" to the list of things he counts as "planes of psychological characterization" (Foucault, 1972, p. 44). Hence, this study does not concern itself with these or any other psychological characterization of the

speaking subject in discourse. That is because "archaeology is not… concerned with the average phenomena of opinion" on the part of the subject at all (Foucault, 1972, p. 144).

An archaeological analysis should not be confused with psychoanalysis either. The quest for the present study was not to explain the precise form that medical culture gives to the norms, rules, and systems, which, by organizing functions, rules, and meanings, would produce unconscious representations. This would be a task for a psychoanalytical study, which in doing so would describe a culture's distinctive form of historicity (Gutting, 1989, p. 215). Unlike psychoanalysis that claims to reveal the general conditions for unconscious representations of things such as life, labor, and language (Gutting, 1989, p. 215), archaeology does not define conditions of possibility for all possible forms of thought that humans are capable of, under the effect of a particular culture. It is important to note that the

> analysis of statements operates… without reference to a cogito. It does not pose the question of the speaking subject, who reveals or who conceals himself in what he says, who, in speaking, exercises his sovereign freedom, or who, without realizing it, subjects himself to constraints of which he is only dimly aware. It is situated at the level of the 'it is said' - and we must not understand by this a sort of communal opinion, a collective representation that is imposed on every individual; we must not understand by it a great, anonymous voice that must, of necessity, speak through the discourses of everyone (Foucault, 1972, p. 122).

Thus, the present archaeological study explains not the conditions of *possibility* for medical discourse at some point in the future, but the conditions of actual *existence* for a series of enunciations making up the architecture of discursive formation for modern medicine at IUSM, in 2019 (Gutting, 1989, p. 214).

Another significant point to note is the relation between human freedom and discourse. One needs to understand that archaeology challenges the basic premise about subject and freedom in the first place. For Foucault, human freedom is not spontaneous and unregulated, and people do not come with their innate freedom only to be constrained by discourses (Webb, 2013, p. 156). It is also true that discourse is like a spider-less web in which the only positions that are offered (to be taken by the subject) are those in relation to others. One may change one's position in the web, but there is no jumping off of it (Thiele, 1990). For example, those involved in medicine only earn their status of being *involved* by virtue of assuming a position in the web of medical discourse. There is no social space related to medical education or practice that is not governed by discursive rules and conditions. Moreover, people who are involved in medicine are shaped by this discourse: their language, their actions, and their thoughts about medicine are defined by the system of relations in modern medical discourse. It is this discourse that determines what positions are possible to be assumed by the subject and therefore it opens a limited number of opportunities without suppressing others. Consequently, it is really the rules and conditions of the discursive formation that are "constituting the field in which the freedom of the subject is articulated" (Webb, 2013, p. 156).

Given the above discussion, it is important to understand that the initiative of the subject (medical students, physicians, patients, etc.) are neither the origin nor the focus of discursive rules and conditions, even though they participate in reproducing and maintaining the discourse of modern medicine. Understanding the limited role of the subject in discourse might be difficult to accept for those who are too used to modernist, structuralist frames when thinking about human freedom. In Foucault's words:

> I understand the unease of all such people. They have probably found it difficult enough to recognize that their history, their economics, their social practices, the language that they speak, the mythology of their ancestors, even the stories that they were told in their childhood, are governed by rules that are not all given to their consciousness; they can hardly agree to being dispossessed in addition of that discourse in which they wish to be able to say immediately and directly what they think, believe, or imagine; they prefer to deny that discourse is a complex, differentiated practice, governed by analyzable rules and transformations, rather than be deprived of that tender, consoling certainty of being able to change, if not the world, if not life, at least their 'meaning', simply with a fresh word that can come only from themselves (Foucault, 1972, pp. 210-211).

Indeed, it is not easy to treat the discourse that we once thought was a place for the expressions of intimate consciousness, genius, and freedom like an unintelligible set of anonymous rules, bound by limitations and necessities. Nonetheless, according to the discourse theory, truth is that our talk, our actions, and even our imaginations as human beings are not determined by our individual free will, but by the rules and conditions of the discourses to which each of us are subjected.

Like any other discourse, medicine is strictly rule-governed, and Chapter 4 was an attempt to illustrate this point. After all, there are limited things that one can talk about in medicine, limited ways to talk about them, and limited ways to order and organize your talk around them. Most importantly, there are very few positions the subject can take regarding these things (objects). Moreover, the talk about these things mainly goes from mouth-to-mouth without actually engaging people's minds on a deeper level. Is it even possible, one may ask, to come up with your own ideas, things to talk about, and ways to talk about them? The answer is no, because the space of discourse is limited, and an individual in the discourse has only the place of a node within a network. One cannot talk or think outside of this network, the whole of which one cannot see. All one may ever see

is the small corner where one is positioned. The entire network obeys the same rules and exists under the same conditions. In Foucault's words:

> Different oeuvres, dispersed books, that whole mass of texts that belong to a single discursive formation - and so many authors who know or do not know one another… meet without knowing it and obstinately intersect their unique discourses in a web of which they are not the masters, of which they cannot see the whole, and of whose breadth they have a very inadequate idea… (Foucault, 1972, p. 126)

Archaeological analysis conducted in this study focuses on the system of formation for statements, and the conditions defining the space in which all statements are formed. Hence, the people who enunciate the statements (e.g., speak or act the statement) are not under the spotlight in this study. It is rather the *space* in which taking a particular position was made possible for this speaker that is being analyzed in archeology (Gutting, 1989, p. 244). It is this characteristic of decentralizing the speaking subject from playing the main role in actualizing the discourse that makes new forms of inquiry such as archaeology possible (Webb, 2013, p. 151). Foucault's statement below sums up the archaeological stance regarding the subject of discourse:

> I shall abandon any attempt… to see discourse as a phenomenon of expression - the verbal translation of a previously established synthesis; instead, I shall look for a field of regularity for various positions of subjectivity. Thus conceived, discourse is not the majestically unfolding manifestation of a thinking, knowing, speaking subject, but, on the contrary, a totality, in which the dispersion of the subject and his discontinuity with himself may be determined. It is a space of exteriority in which a network of distinct sites is deployed… It is neither by recourse to a transcendental subject nor by recourse to a psychological subjectivity that the regulation of its enunciations should be defined (Foucault, 1972, p. 55).

Thus, it is true that every statement presented as data in this study has a subject, but that subject is not the same as the person who spoke it. The subject of an archaeological statement is considered to be "a position that may be filled in certain conditions by

various individuals" (Foucault, 1972, p. 115). Archaeology maintains that the various positions adopted by the speaking subject are "effects of discourse" (Webb, 2013, p. 108). As a result, the position is not defined by the enunciating consciousness, but by the rules of modern medical discourse which are in place quite apart from any individual's mental activity (Gutting, 1989, pp. 241-242). The following quote from sums up the essence of the present study the way I see it. This study attempts

> to reveal discursive practices in their complexity and density; to show that to speak is to do something - something other than to express what one thinks; to translate what one knows, and something other than to play with the structures of a language; to show that to add a statement to a pre-existing series of statements is to perform a complicated and costly gesture, which involves conditions (and not only a situation, a context, and motives), and rules (not the logical and linguistic rules of construction); to show that a change in the order of discourse does not presuppose 'new ideas', a little invention and creativity, a different mentality, but transformations in a practice, perhaps also in neighboring practices, and in their common articulation. I have not denied - far from it - the possibility of changing discourse: I have deprived the sovereignty of the subject of the exclusive and instantaneous right to it (Foucault, 1972, p. 209).

Hence, the altered position of the human subject is one of the major themes in this study and it is important to bear that in mind when reading the results that are presented in Chapter 4.

Historicity of Findings

This section will serve as a reminder that discursive elements, their rules of formation, and their conditions of existence that are defined in Chapter 4 are all historically constructed. For example, the definitions for the doctor, medical science, medical knowledge, medicine itself, as well as the language, signs, and the order to describe them are all time and space-bound and historical. One of the tasks of an archaeological study is to illustrate the *historicity* of the discourse it analyzes, in various

ages, and that is what I am aiming to do in this section. It is important to understand that the discourse of medicine in each historical period has possessed its own unique and relative positivity. Therefore, the relations of medicine to history have not been the same at all times. My task in the present study is to show the relationship of discursive elements of medicine with the history, and to show that objects, modalities of statement, concepts, and theoretical strategies outlined and analyzed in the previous chapter are all relative to space and time, with each item possessing its own historicity. Let's take the example of *the doctor* as an object of medical discourse and an element in the discursive formation of modern medicine. As argued above, the function of the doctor possesses its own historicity. That is, the doctor has developed as an object of medical discourse through history and its definition has been modified in different historical periods per the specificities of that particular period.

It is easy to spot many alternatives to our modern conception of medicine and that of a physician along the history. At several points in time, there have been sharp changes in the way people experienced medicine and the way they treated the medical men. For example, being a surgeon was considered to be a highly respectable profession at one period, and next to that of a barber at another (Bagwell, 2005). There was a time when

> …the medical personage… had to act not as the result of an objective diagnosis, but by relying upon that prestige which envelops the secrets of the Family, of Authority, of Punishment, and of Love; it is by bringing such powers into play, by wearing the mask of Father and of Judge, that the physician ... became the almost magic perpetrator of the cure (Gutting, 1989, p. 94).

However, following the "positivist ideal of purely objective, value-free knowledge" as part of the new developments emerging in the nineteenth century medical practice, doctors stopped invoking moral considerations to explain their power over the patient.

This was followed by a period when society as well as the physicians themselves thought they were working solely on the bases of the objective medical knowledge, which corresponded with the inception of the modern concept of scientific medicine. For Foucault, however, a purely objective medical practice has never been more than a myth and "a disguise for the doctor's moral domination… in the name of bourgeois society and its values" (Gutting, 1989, p. 95).

In short, it is also important to note that the function of the doctor has been conceptualized differently in different points in the history of medicine. What actually determines this function at any given period is the specific group of relations between medicine and other discursive - as well as nondiscursive - practices.

> If, in clinical discourse, the doctor is, in turn, the sovereign, direct questioner, the observing eye, the touching finger, the organ that deciphers signs, the point at which previously formulated descriptions are integrated, the laboratory technician, it is because a whole group of relations is involved (Foucault, 1972, p. 53).

Also,

> because the doctor has gradually ceased to be himself the locus of the registering and interpretation of information, and because, beside him, outside him, there have appeared masses of documentation, instruments of correlation, and techniques of analysis, which, of course, he makes use of, but which modify his position as an observing subject in relation to the patient (Foucault, 1972, p. 34).

This reminds us that what we know as "the doctor" in the U.S., in 2019, has not been a universally accepted, natural, and essential part of medical discourse across the history of medicine. Rather, the function of the doctor has been defined in different ways, doctors have assumed different roles, and their function has had different effects at different points in the history. It is these characteristics that give the doctor, as an object of medical discourse, its particular historicity. The same is true for all other discursive elements (i.e.,

discursive objects, modalities of the statement, concepts, and theoretical strategies) that were described in Chapter 4. However, it is important to understand that in archaeology one acts according to a different sense of the history (see Chief principles of Archaeology, Chapter 2, for more) that is based on discontinuity and dispersion of elements rather than describing the continuity of their progression across history. Therefore, the results described in Chapter 4 are also based on discontinuity and dispersion of discursive elements and their relations across the field of discourse. I have made no attempts to discover the *patterns* or establish *linearity* of medical progress through time in this study.

Having discussed the historicity of the doctor as a discursive element, let us now return to "medicine" and say a few more things about its historicity, which needs to be acknowledged by archaeological analysis. As argued before, "medicine" has transformed several times along the history, with new concepts, relations, and rules substituting the old ones every time (Foucault, 1972, p. 173). Medicine in 2019 is based on different relations and rules compared to medicine in the fifteenth century, for example. The business administration model of healthcare delivery had not yet been adopted in fifteenth century. Moreover, what is known as the modern medical discourse today incorporates a series of alterations that gradually appeared in medical discourse throughout the nineteenth century. Let us take the example of the transformation that happened with the advent of cell pathology. Microscopic inspection and biological tests began to augment gross visual inspection, auscultation, and palpitation in clinical practice. Under the effects of this transformation, not only scientific medical knowledge but also the mode of descriptions related to the pathology/illness, scales and guidelines,

information systems, as well as the "lexicon of signs and their decipherment" were either displaced, modified, or entirely reconstituted (Foucault, 1972, p. 33).

One can tell that every time a transformation, such as the one in the nineteenth century, has happened, the entire discourse of medicine has been affected as a consequence of that transformation. Hence, with so many changes in the substance of medicine as a discursive formation throughout history, it is evident that the unity of medicine is not due to some specific type of statements or mode of action. Rather, if there is a unity, it must be sought in the group of rules that has made the coexistence of dispersed and heterogeneous statements under the unifying banner of medicine possible throughout the history. Indeed, the discourse of medicine is inclusive of sometimes radically heterogeneous items, such as pure perceptual descriptions, instruments-mediated observations, laboratory and experiment procedures, statistical calculations, epidemiological or demographic observations, institutional regulations, therapeutic practices, and so on. Yet, an archaeological analysis of medical discourse such as the one conducted in the present project can explain "the system that governs their division, the degree to which they depend upon one another, the way in which they interlock or exclude one another, the transformation that they undergo, and the play of their location, arrangement, and replacement." (Foucault, 1972, p. 34). Undoubtedly, medicine has had a heterogeneous unity throughout history because what we know as medical discourse is really a historical construction. The discursive elements, rules, and conditions of medicine have varied at different times and different places. Thus, it is important to note that medicine does not embody some universal transcendental unity that has traveled

through time and space to reach us. Rather, it is a historical concept that has been accorded varying definitions and structures at various points in time.

It is worth reminding ourselves here that archaeological analysis is concerned with the savoir and not the connaissance (e.g., empirical knowledge of medicine achieved by science). In this study, savoir represents the social knowledge of modern medicine including science, fiction, reflection, narratives, institutional regulations, and political decisions involving medicine. Furthermore, the phrase *knowledge of medicine* has born different meanings across the human history. What counted as medical knowledge in the Classical Age (from the mid-seventeenth century to the end of the eighteenth century) was different than what counted as medical knowledge in the Modern Age (from the beginning of the nineteenth century to at least the middle of the twentieth), and yet again, from what counts as medical knowledge today, in the U.S., in 2019.

People in different historical periods have also had a different conception of what counts as *science* at a more fundamental level of its conception. To understand the cognitive status of human sciences in any given period, one needs to first understand that period's conceptions of order, signs, and language. First, the conception of knowledge is grounded in the way people experience the order; that is, "the fundamental way in which it sees things connected to one another" (Gutting, 1989, p. 140). Some of this has already been discussed in Chapter 4 as part of the discussions concerned with the relations and conditions of existence for the discursive elements. Medicine being positioned alongside the discourse of business and its overwhelming relations with the capitalistic market are good examples of the way people experience the order when they come into contact with the medicine in U.S., in 2019. Next, "since knowledge is always a matter of somehow

formulating truths about things, its nature in a given period will depend on the period's construal of the nature of the signs used to formulate truths" (Gutting, 1989, p. 140). In our age, science and objectivity are the foremost tools for constructing what counts as "knowledge" in medicine. Finally, since all knowledge claims are formulated through linguistic signs, the nature of knowledge in an era also depends on that era's specific conception of language. In Chapter 4, I have tried to include a sizeable amount of linguistic data, hoping that they could provide useful hints about the nature of language that is currently being employed to produce the modern discourse of medicine.

In summary, given the fact that discursive formations are not invariant absolutes fixed in some solid constellation, the full set of discursive elements in medical discourse cannot be defined once and for all–at any given point in the history. In Foucault's words:

> A discursive formation does not occupy therefore all the possible volume that is opened up to it of right by the systems of formation of its objects, its enunciations, and its concepts; it is essentially incomplete, owing to the system of formation of its strategic choices. Hence the fact that, taken up again, placed and interpreted in a new constellation, a given discursive formation may reveal new possibilities (Foucault, 1972, p. 67).

Thus, the definitions and conditions of existence for the discursive elements are rather bound to the constellation in which the discursive formation of medicine is situated, and with each element possessing their own historicity. The objects and concepts, for instance, will be different if the constellation in which modern medicine is situated changes for another. If there comes a time when medicine is no longer positioned alongside business administration, and humanities such as sociology and anthropology of medicine are inserted into the same constellation as modern medicine, surely these changes will have major effects on several of the objects, modalities of the statement, concepts, and theories in medical discourse.

Universality, Totality, and Temporalization of Results

This study was conducted at the local and regional level in Indiana University School of Medicine and the findings presented in Chapter 4 do not imply a universal discourse that is common to all people involved in modern medicine across the globe. Thus, this study has no claims on having discovered *universality* in the discourse of modern medicine. Rather, my goal has been to illustrate examples of "positions and functions that the subject could occupy in the diversity of discourse" in the modern discourse of medicine (Foucault, 1972, p. 200). Archaeological statements collected as data in this study were not assumed to be natural, essential, or belonging to some universal unities. Instead, statements were treated as nodes in the network of the associated field to which they belonged. Nonetheless, one necessary step that was taken during data analysis was freeing the statements from all synthetic unities that might otherwise claim them (e.g., professionalism, individual opinion, etc.). Only after this was done, I was able to locate and describe links between those statements that would have otherwise been invisible or obscured by the previous synthetic unities.

Also, I have tried to take precautions so that this analysis does not hint at *totalization* with regards to any of the discursive practices described in Chapter 4. Archaeology does not aim to suggest cultural totalities of any kind since discursive formations are always constructed, local, and historical. Therefore, in this study I have not made any attempts "to describe cultural totalities, to homogenize the most obvious differences, and to rediscover the universality of constrictive forms". Instead, this study aims to "define the unique specificity of discursive practices" in modern medicine (Foucault, 1972, p. 204).

Lastly, in archaeological analysis, one does not document and present the discursive events per their *linear temporality*. Archaeology rejects any uniform model of temporalization in discourse with regards to discursive elements, rules, and conditions (see Chief Principles of Archaeology, Temporal Pluralism: A different Sense of Time, in Chapter 2, for more). Hence, I have presented both data and results here not following their chronological existence but depending on the type of regularity to which they belong (e.g., objects, strategies, rules of formation for concepts, etc.).

Dispersion, Contradiction, and Coherence of Results

As stressed throughout this study and explained in detail in Chapter 2, the concept of *dispersion* has a central place in archaeology. It is evident from Chapter 4 that results of this study are dispersed in a way that they do not seem to follow any rules of *coherence* in a conventional sense of the term. There are variations in statements, in positions, in concepts, and in strategic choices even though they all coexist in the same field of discourse. I hope that Chapter 4 has succeeded to show how it is possible for people involved in medicine to speak of different objects and make contradictory choices while abiding by the same rules of the same discursive practices. I have made no attempts to look for an underlying coherence beneath such *contradictions*. That is because in archaeology, "contradictions are neither appearances to be overcome, nor secret principles to be uncovered. They are objects to be described for themselves" (Foucault, 1972, p. 151). Instead of explaining away the contradictions, I have tried to describe discursive structures that make the existence of these conflicting positions possible in medical discourse.

All in all, discursive formation is a conceptual framework that is comfortable with dispersion and contradictions that are inherent in the discourse. Archaeology refuses to admit a fundamental dichotomy of values and paint events in either black or white colors only (Gutting, 1989, p. 211). For example, the present study describes a space of dispersion where more than two positions are possible to be assumed in relation to any object of medical discourse. This study does not facilitate a discussion of the dichotomy between normal and abnormal, good and bad, or, right and wrong talks and practices; rather, what I have tried to illustrate in Chapter 4 of this study is a space where multiple other positions between each of those extreme poles are possible to be assumed by the subjects. Archaeological analysis is one that "is continually making differentiations, it is a diagnosis" (Foucault, 1972, p. 206). It is important to note, however, that archaeology does not invent these differences. Rather,

> archaeology is simply trying to take such differences seriously: to throw some light on the matter, to determine how they are divided up, how they are entangled with one another, how they govern or are governed by one another, to which distinct categories they belong; in short, to describe these differences, not to establish a system of differences between them. If there is a paradox in archaeology, it is not that it increases differences, but that it refuses to reduce them - thus inverting the usual values. For the history of ideas, the appearance of difference indicates an error, or a trap; instead of examining it, the clever historian must try to reduce it: to find beneath it a smaller difference, and beneath that an even smaller one, and so on until he reaches the ideal limit, the non-difference of perfect continuity. Archaeology, on the other hand, takes as the object of its description what is usually regarded as an obstacle: its aim is not to overcome differences, but to analyze them, to say what exactly they consist of, to differentiate them. How does this differentiation operate? (Foucault, 1972, pp. 170-171).

Traditional research inquires not only tend to attribute to the discourses they analyze a basic coherence, they also tend to maintain that coherence by explaining away any contradictions as background noise. Contradiction is commonly seen as something that

needs to be resolved in order for the consumer of research to see the underlying coherence of events. Hence, at least three major assumptions are typically held regarding contradiction: 1) contradictions come from outside and as foreign agents to interrupt the ideality of a discourse, 2) contradictory texts or speeches are rather unintentional or accidental expressions that cannot/should not challenge the underlying, fundamental coherence of the discourse, and 3) any discontinuities should be adding up toward an end goal of cohesion and progress in the discourse. Put in another way, discontinuities are seen as "a series of incremental changes, all contributing toward a finally achieved enlightenment" (Webb, 2013, p. 129).

Thus, in traditional research methodologies it is common to assume that individual events cannot lie outside a historical continuity without sharing a common principle or some hidden meaning connecting them to one another. Having to establish coherence among your research findings is almost considered to be a moral constraint in conventional research methodologies. A traditional researcher feels duty-bound not to be taken in by small contradictions and to see them as surface reflections of some profound underlying coherence. To this end, traditional analyses feel compelled to suppress contradiction in research findings as accidents, defects, or mistakes. The hope is to finally reveal an organizing principle that could account for all minor contradictions that are encountered during data analysis. (Foucault, 1972, pp. 150-151). In archaeology, on the other hand, one acknowledges that discourses are born on the bases of contradictions. The archaeologist understands that "men's discourse is perpetually undermined from within by the contradiction of their desires, the influences that they have been subjected to, or the conditions in which they live" (Foucault, 1972, p. 149). There is no use escaping

them or translating them into some linear coherence because “contradiction is ceaselessly reborn through discourse” and therefore it can never be entirely escaped. (Foucault, 1972, p. 151). Rather than trying to find a point of conciliation and resolve them, archaeology takes contradictions as objects which need to be described for themselves (Foucault, 1972, p. 151). In short, contradictions are not seen as distractors, confounders, or the mud around the crystal of pure medicine in this study. I would rather regard contradictions as forming factors and therefore intrinsic characteristics of modern medical discourse. In Foucault’s words,

> a discursive formation is not, therefore, an ideal, continuous, smooth text that runs beneath the multiplicity of contradictions, and resolves them in the calm unity of coherent thought; nor is it the surface in which, in a thousand different aspects, a contradiction is reflected that is always in retreat, but everywhere dominant. It is rather a space of multiple dissensions; a set of different oppositions whose levels and roles must be described (Foucault, 1972, p. 155).

Contradiction could also carry different functions in a discursive formation. Some may be merely obstacles needing to be overcome, some may provide a starting point or an opportunity for growth. Some contradictory stances make it possible for the new objects or concepts to arise, they may open new directions for experimentation and verification of inferences, or define new fields of application for discursive concepts - all without actually changing the system of positivity (which is defined by discursive relations and conditions). Thus, a contradictory statement is always in its particular functional stages.

Again, this study does not aim to discover original themes or hidden laws underneath the statements that could connect all dots together. I did not aim to produce an archaeological model to show the coherence of discursive practices in modern medicine in this study. I did not aim to present a cohesive image of the discourse in the first place.

Rather, my task in Chapter 4 was to reveal the dispersion in the discursive practice of medicine and acknowledge it so it can be addressed in real-time, without the illusion of medicine's purity shading over its analysis. In that sense, Foucault's statement below sums up the goal of my analysis in the present study:

> [Archaeological analysis] is a discourse about discourses but it is not trying to find in them a hidden law, a concealed origin that it only remains to free; nor is it trying to establish by itself, taking itself as a starting point, the general theory of which they would be the concrete models. It is trying to deploy a dispersion that can never be reduced to a single system of differences, a scattering that is not related to absolute axes of reference; it is trying to operate a decentering that leaves no privilege to any center. The role of such a discourse is not to dissipate oblivion, to rediscover, in the depths of things said, at the very place in which they are silent, the moment of their birth (whether this is seen as their empirical creation, or the transcendental act that gives them origin); it does not set out to be a recollection of the original or a memory of the truth. On the contrary, its task is to make differences: to constitute them as objects, to analyze them, and to define their concepts (Foucault, 1972, p. 205).

In the present study, I have tried to show how two or more contradicting concepts or theoretical strategies can share a common locus of description and the same enunciative status. I have shown how multiple contradictory statements can coexist within the same "space of dissension" (Foucault, 1972, p. 152), while following the same rules of formation and sharing the same conditions of existence in the discourse of modern medicine. I have also established the points of divergence for various groups of statements opposing one another by describing the structure and extent of the difference between them. Moreover, I have broken down the larger chunks of contradiction into different types, levels and functions following the archaeological model of analysis. In short, this study has taken contradictions as objects needing to be described in their own terms. During the data analysis phase of this project I was specifically drawn to contradictions wherever they arose and tried to document them accordingly. Mapping the

system of contradictions revealed divisions in the discourse that would have not been possible to reveal otherwise.

Locality and Limitation of Findings

In this section, I want to emphasize the locality and relativity of the results presented in Chapter 4. It is important to recognize that all results of this study are local, historical, and relative to Indiana University School of Medicine, Indianapolis Campus, which is a Midwestern medical school in the U.S., 2019. The structure of discursive formation of medicine is expected to be different in other countries as well as other schools in the U.S. For example, concepts, strategies, and even objects of medicine will be different in another school where more curricular space and time is devoted to talking about emotional intelligence, holistic medicine (seeing and treating the whole person), patient-centeredness, diversity and privilege, and other topics related to medical humanities. This difference would feed into the way students in that school understand medical professionalism and, in turn, the way they form their professional identities.

Also, I would like to emphasize that the structure of medical discourse is not exclusively defined by discursive elements themselves, but the relations between those elements as well as relations among several discourses that reside in the same discursive constellation as medical discourse, and relations between discursive and nondiscursive practices in the society in which the medical discourse is based. Let us take the example of Afghanistan as a different country to illustrate this point. Being born and raised in Afghanistan, I have the privilege of seeing a different healthcare system in real life. The experience of studying medicine in Afghanistan provided me with the ability to think outside the box in this matter. In a nutshell, discursive rules and relations related to

medicine are dramatically different from those in the United States. Afghanistan is not a capitalistic country so business administration and economic relations do not have that big of a say in the way medicine is taught and practiced there. While a number of private medical schools and hospitals are available, the largest and best-equipped institutions across the country are those that are fully-funded by the government. All government-funded institutions are free to the public. Patients receive all medical services including complicated surgeries free of charge at government-funded large teaching hospitals. On the other hand, getting a medical education is free at government-funded schools so, doctors are not in debt because they did not pay fees going through their medical training. Doctors are paid by the government and they are not being paid a whole lot either. Being a physician is not at all among the highest paid jobs in Afghanistan. Furthermore, the health insurance system does not exist in Afghanistan and therefore everybody pays out of pocket to receive medical services in private hospitals.

The situation described above drastically changes the structure of medicine as a social practice in Afghanistan. As one can imagine, people involved in medicine do not talk about the same things, nor in the same ways, as their counterparts in the U.S. do. They do not draw from the same notions, and do not assume similar positions regarding the doctor's function, his position related to the patient, or his position related to money and social power. Discursive elements such as the doctor, the human body, disease and treatment, and the sick person are surely part of the medical discourse there too. However, the relations these elements have with other discourses (e.g., business and religion) and with nondiscursive structures (e.g., political economy and the market) are what change the face of their medical discourse to what might be unrecognizable as

"medicine" to people in the U.S. This example emphasizes the fact that findings of an archaeological study can only hold true about the field of discourse that it analyzes.

It should be noted that the findings presented in this study do not embody the terminal state of modern medical discourse even at its own specific domain (IUSM, Indianapolis). Regularities outlined in this study are simply those that my analysis has found so far. I have not exhausted the field of all possible forms of regularities or contradictions that have the capacity to appear on the surface of medical discourse at this site. Any discursive regularities that are not described here have simply remained out of sight during the present inquiry, not that they do not/cannot exist. It is worth reiterating here that in archaeology, one does not assume any ideal or pure elements in medicine that are being disrupted or concealed, those that we should seek after their image in order to reclaim the purity of medicine. Rather, one knows that the objects of medicine do not pre-exist, so they cannot be held back by some obstacle. (Foucault, 1972, p. 45). It is important to note that modern medicine is not like a big puzzle that we can complete simply by finding all missing pieces and putting them together. Medicine is rather constructed, locally and historically, as we go about our daily life in medical schools and hospitals. One may find pieces that one thinks are good fits and put them together to create *one's own* image of medicine. However, it will be a mistake to think of any such images as universal and equally plausible by all definition of medicine. No templates are given. Moreover, medicine (or its image) can never be perfect, because no one knows what "perfect medicine" looks like. Yet, it can become better or worse than it is, relative to its local discursive relations and societal context. Thus, exploring local solutions for the problems related to medical discourse would be a far better investment than

attempting to chase after universally acceptable definitions for any discursive regularities in modern medical discourse.

It important to understand that archaeological analysis is essentially limited, and Foucault affirms that he has made it deliberately so (Foucault, 1972). It does not attempt to characterize the "spirit" of a period, and its possibility remains higher than its actual form at any given moment (Webb, 2013, p. 133-134). Having that said, the archaeological analysis conducted in this study is open to further analyses and refinement. Indeed, I began this project with no expectation of arriving at a final *correct* version of discursive structure given the fact that archaeology is a method of analysis "whose limits and points of intersection cannot be fixed in a single operation" (Foucault, 1972, p. 159). In particular, then, the analysis of statements does not claim to be a total, exhaustive description of "language" or of "what was said". In the whole density implied by verbal performances, it is situated at a particular level that must be distinguished from the others, characterized in relation to them, and in abstract (Foucault, 1972a, p. 108).

Furthermore, in archaeological analysis, depending on the discourse that is being analyzed, one or more discursive elements will be more significant, compared to others, to be described. For example, in his archaeological study of madness (MC, 1988), Foucault focused on the *objects* more than the other three elements of discourse. Similarly, in the archaeological study of the clinical practice (BC, 1975), he focused on explaining discursive *concepts* and dedicated more time and space to outlining and explaining them. In none of his archaeological studies (MC, BC, OT), Foucault has actually covered, with an equal attention, all four elements of the discursive formation he analyzed (Gutting, 1989, p. 233). The same can be said about the present study. There are

some discursive elements that have been described in much more detail (e.g., doctor as an object) compared to some others (e.g., disease and treatment as an object). The decision of which elements to cover more extensively was dictated by the data collected in this study and was not the result of a deliberate choice I made by myself. For example, there happened to be a large amount data describing surfaces of emergence for *the doctor* as an object of modern medical discourse, whereas, it was difficult to find any data pieces describing the surfaces of emergence for *disease and treatment*. Even though unintentional, the focus of the analysis being put on one element rather than the others shows that the former element has more complicated rules of formation, more complicated relations with its discursive constellation and nondiscursive practices, and consequently, more complicated conditions of existence–all of which require more time and effort on the part of the archaeologist in order to describe that particular element and its conditions of existence.

Lastly, it must be noted that archaeological description of a discourse is an undertaking that can never be "completed" or "wholly achieved" (Foucault, 1972a, p. 131). It will always have room for revision and modification. The reason for this is the fact that discourse, as Foucault describes it, is a dynamic phenomenon. That means the discursive elements and relations between them are not fixed and static. Discursive regularities can never reach a stage of completion, calcification or termination because they are constantly changing and transforming, even "without appeal to an external cause" (Webb, 2013, p. 109). Consequently, discursive regularities (e.g., elements, relations, rules and conditions) established by archaeological analysis are "only ever partial, provisional, and already, if imperceptibly, in transformation" (Webb, 2013, p.

127). Other limitations of this study include having less time for conducting direct observation in the clinical settings (only two weeks), and having the opportunity to observe only two clerkships (family medicine and surgery) at only two teaching hospitals. These were the limitations which could not have been overcome given the technical issues of allowing PhD students to conduct research and directly observe the clinicians onsite, at Indiana University School of Medicine. Nonetheless, they were less than actual limitations for the archaeological analysis of modern medical discourse that I have carried out in this study. As mentioned above, there was no expectations to document every word that is uttered in medical school and its related teaching hospitals in order to be able to effectively analyze the discourse of medicine at this specific medical school. One can collect only a certain amount of data in a single study while acknowledging that archaeology is a never-ending-analysis. Collecting more data–whether through multiple sites' observation, interviews, or focus groups–might have added few additional objects, modalities of statements and theoretical strategies; but it would not have affected the elements that have already been established and discussed in Chapter 4. Furthermore, savoir is not the sum total of everything that is said in a discourse; it's rather a set of rules and sites into which new statements can always be added (Foucault, 1972).

As for generalizability of findings presented in this study, the data were collected and analyzed as relevant to the specific discursive field at IUSM, Indianapolis, and as such, they do not have indefinite possibilities for extension. As Foucault suggests, "the most one can do is to make a systematic comparison, from one region to another, of the rules for the formation of concepts" (Foucault, 1972a, p. 63). I have attempted to

elucidate the identities and differences in the groups of rules described in this study in a way that they are specific enough to characterize the individualized discursive formation of medicine at IUSM. In the meantime, it is my hope to have offered enough analogies that could make it possible for another archaeologist to compare and contrast different discursive domains–based on their own local identities and differences–in relation to the set of rules that have been outlined in this study.

Transformation and Possibility of Change in the Discursive Structure of Medicine

It is important to bear in mind that the system of formation of modern medicine (as described in Chapter 4) is not a static structure that is imposed on medicine from the outside, one that defines all characteristics and possibilities for medicine once and for all. Rather, discourse is like a web in which each position is either taken or can be taken. The web is not a continuous space but rather "a distribution of gaps, voids, absences, limits, divisions" (Foucault, 1972, p. 119). This is not to say that any statements not yet part of medical discourse or any positions not yet taken are being *suppressed*. The potential for their appearance is still there, though they cannot appear simply as a floating island in the space. Any new statement must find a place for itself to fit within the web of medical discourse; it must find an associated field to attach to. That means, new statements can only appear when discursive conditions allow them to appear in a discourse. This is not the same as being suppressed. It is also not the same as denying new statements the possibility to exist and appear on the surface of discourse (Webb, 2013, p. 105). It is must be noted that the conditions described by this archaeological study (in Chapter 4) are not the conditions of possibility for discursive elements; they are rather the conditions of their actual existence. Furthermore, as archaeological conditions, they are not preexisting

or predetermined, but are brought to existence by those same discursive elements that they apply to.

With the discourse of modern medicine not being static or complete at any given point in time, the possibility of both big and small changes in its discursive structure is always there. There are two ways in which the discursive formation of modern medicine can change. First, it is possible for the new discursive elements to arise in addition to - or as replacement of - the elements that are already there. New objects, new modalities of statements, new concepts, or new strategies can appear on the surface of medical discourse at any time. It should to be noted, however, that changes such as these would not cause a *transformation* in the discursive structure of medicine because the elements may be new, but their rules of formation will not. Those new elements will still be based on the same rules of formation that were described in the previous chapter. Even if they occupy a different position and do not presume the same sequence created by the rest of the elements, the appearance of new elements based on the same rules of formation will not be considered a transformation in the discourse of modern medicine. Yet, any new elements will add a new positivity in the system of formation of modern medicine (Foucault, 1972, p. 176).

Second, wholesale transformations in the discursive formation of medicine is also possible to take place at some point in the future. Several transformations have already taken place in medicine along the history. In general, a shift in the position of the discursive formations that work closely together within the same discursive constellation can bring about a change in that specific constellation and therefore cause a transformation in each of the neighboring discourses. Let's take the example of business

administration and modern medicine, which have a great many relations by working closely together as two discourses located in the same discursive constellation. It is remarkable to think that a *transformation* took place in the discursive formation of modern medicine with the advent of employer-sponsored health insurance plans in the 1920s, in United States (Jost, 2014). As a result of this transformation, the system of interpositivity in which medicine was involved (with business) was so profoundly affected that it gave rise to the appearance of a great many new elements such as concepts and theoretical strategies in modern medical discourse. As a consequence of developing close relations with business administration, medicine gradually became less attached to things such as its commonly held humanistic values. According to Althusser (1969), "the most radical discontinuities are the breaks effected by a work of theoretical transformation which establishes a science by detaching it from the ideology of its past and by revealing this past as ideological" (p. 168.).

Although medicine has seen several wholesale transformations before reaching our age, for a discursive formation to undergo transformation does not necessarily mean to let go of all its elements so that it can be substituted by an entirely new discursive formation. Instead, for a discourse to undergo a transformation means that its "statements are governed by new rules of formation" (Foucault, 1972, p. 173). For example, not all objects, concepts, statements, and their modes of enunciation that belonged to the seventeenth century medical discourse simply disappeared in the next few centuries. Several of them have remained the same until now (e.g., the doctor, the human body, disease etc.) though they belong to a "different systems of dispersion" and are "governed by distinct laws of formation" now (Foucault, 1972, p. 173). Let us take the example of

changes that began to appear in medicine during the late eighteenth century. Foucault uses this event as the example of a profound transformation in medicine. He believes that events that occurred during only a quarter of a century (from 1790 to 1815) changed the discourse of medicine more than it had changed since the Middle Ages, and perhaps even since Greek Medicine. As a result of these changes, an entire group of new objects (e.g., organic lesions, anatomoclinical sings and correlations), modalities of the statement (e.g., new techniques of observation, detection of pathologies, and recording them), concepts (systematic naming and classification of disease), and whole new sets of theoretical strategies related to each of the above elements were added to the discourse of medicine (Foucault, 1972, pp. 170-171). Many of these resulting elements are still part of the modern discourse of medicine today.

Relations between Discursive and Nondiscursive Practices

As discussed in Chapter 2, discursive practices often reside within nondiscursive structures, and as such, they are surrounded by nondiscursive practice. Nondiscursive domains relevant to medicine include institutions, political events, and economic processes particular to a time period. As one can imagine, the connection between discursive and nondiscursive practice is inevitable to the point that the nondiscursive may form part of the discourse itself. For example, the interrelations of modern medical discourse and nondiscursive practices can easily be spotted in the rules for formation of specific objects, modalities of the statement, concepts, and theoretical options as outlined in Chapter 4. It should be noted that some of the regularities outlined in Chapter 4 extend well beyond the boundaries of medical discourse itself. Take the example of medical students assuming particular positions about nuances of their future practice based on

how much debt they will be in during their early years of practice. Those particular positions mark an example of discursive regularities that are based on interrelations of medical discourse with the nondiscursive structures of the society in which it is based. According to Foucault,

> this whole group of relations forms a principle of determination that permits or excludes, within a given discourse, a certain number of statements: these are conceptual systematizations, enunciative series, groups, and organizations of objects that might have been possible (and of which nothing can justify the absence at the level of their own rules of formation), but which are excluded by a discursive constellation at a higher level and in a broader space (Foucault, 1972, p. 67).

It is also important to bear in mind that some discursive regularities tie medical discourse partially, and often in latent ways, to other discourses (e.g., business, natural sciences, etc.). Description of such relations too falls under the domain of archaeological analysis. I have tried to discuss some of these relations in the section outlining theoretical strategies in Chapter 4.

Thus, the question of relations between discourse of modern medicine and the nondiscursive practices in which it is embedded is the question of "how medical discourse as a practice concerned with a particular field of objects, finding itself in the hands of a certain number of statutorily designated individuals, and having certain functions to exercise in society, is articulated on practices that are external to it, and which are not themselves of a discursive order" (Foucault, 1972, p. 164). This question falls under the domain of archaeology. An archaeological analysis, should it be appropriately expanded, can seek to map out "the whole domain of institutions, economic processes, and social relations on which a discursive formation can be articulated" (Foucault, 1972, p. 164).

Among various other forms that the relations between discursive and nondiscursive practices (as they relate to medicine) can assume, this study does not deny the existence of *causal relations* between them. Indeed, the field of relations that characterizes a discursive formation is the locus in which effects of the context and the situation on the speaking subject may be perceived, situated, and determined (Foucault, 1972, pp. 163-165). Archaeological analysis conducted in the present study establishes more direct relations than those of a causality communicated by a speaking subject. For example, rather than showing how political practice determines the meaning and form of medical discourse, in this study I wish to show how political capitalism takes part in forming the conditions of emergence for several theoretical strategies and other discursive elements, as a consequence of those strategies. Furthermore, this study tries to show how politics takes part in shaping the function that is expected of medicine in modern society. Despite the difference in time and place and numerous other factors, my results in this study were pretty similar to what Foucault found in his archaeological analysis of the clinical medicine, in The Birth of the Clinic (1975). The following excerpt contains points that should sound particularly familiar to my reader:

> One can also see the appearance of this relation of political practice to medical discourse in the status accorded to the doctor, who becomes not only the privileged, but also virtually the exclusive, enunciator of this discourse, in the form of institutional relation that the doctor may have with the hospitalized patient or with his private practice, in the modalities of teaching and diffusion that are prescribed or authorized for this knowledge. Lastly, one can grasp this relation in the function that is attributed to medical discourse or in the role that is required of it, when it is a question of judging individuals, making administrative decisions, laying down the norms of a society, translating - in order to 'resolve' or to conceal them - conflicts of another order, giving models of a natural type to analyses of society and to the practices that concern it (Foucault, 1972, p. 164).

Foucault's primary concern from mid-1970s onwards had been the interconnection of power and knowledge that explains the relations between discourse and the nondiscursive structures in its due detail. That type of analysis, which would require a genealogical methodology, is beyond the scope of the present study. This study focuses on archaeology of discursive formation only. Perhaps in the future, I will pick up the second volume of the present project and carry out a detailed analysis of interrelations between nondiscursive structures, such as medical school and hospital, and the modern medical discourse. Such analysis will need to be based on the theme of power/knowledge–as is the way of a Foucauldian genealogical methodology.

Relations between Medicine and Ideology

Here, I would like to say a few words about relations of modern medicine to ideology, which is a particular form of nondiscursive practice, as observed in this study. More often than not, modern medicine as a discipline claims to be based on modern biomedical science. Even so, it is evident from the findings of this study that there are important practical connections between medicine and the political, economic, and religious ideologies of our time. Several statements in this study referred to religious beliefs on the part of medical students, which they said will guide them through their future medical practice. That does not mean their practice can no longer be trusted to be objective or science-based, because "ideology is not exclusive of scientificity" (Foucault, 1972, p. 186). Rather, it should be seen as an example of how sometimes "the ideological function of a science requires it to meet certain standards of objectivity" (Gutting, 1989, p. 258). The following conclusions that Foucault draws from his analysis of clinical medicine in BC are similar to findings of the present study. He notes,

> few discourses have given so much place to ideology as clinical discourse or that of political economy: [however] this is not a sufficiently good reason to treat the totality of their statements as being undermined by error, contradiction, and a lack of objectivity (Foucault, 1972, p. 186).

Obviously, ideology has the capacity to cause defects of objectivity in the practice of a science, but, at least at a theoretical level, both ideology and science share a common presubjective origin and thus they are not exclusive of each other. Archaeology, therefore, "moves away from the standard view that there is a deep gap between valid science and ideologically influenced inquiry and leads us to see scientific objectivity and ideological bias as two intertwined aspects of a discipline's rootedness in a discursive formation" (Gutting, 1989, p. 259).

Morality and Non-objectivity in Medicine

Results of this study as presented in Chapter 4 can provide the basis for a critique of the moral values that often remain hidden under the purported objectivity and value-neutrality of modern medicine, and its alleged claims of humanity and compassion. Archaeology does not deny the fact that medicine is based on an objective body of scientific knowledge. However, unlike pure natural sciences such as physics and chemistry, clinical practice is not objective at all times. Plus, analytical works such as that of Bachelard (see Gutting, 1987, for more) have exposed the controlling role of human reason even in the experiments of physics and chemistry. This study displays the powerful role of the human discourses in practicing the so-called objectivity of medicine. As argued before, the fact that clinical practice is value-laden, and at times driven by ideology (as shown in Chapter 4), does not undercut the scientific status of medical science itself (Gutting, 1989, p. 136). Foucault makes a similar case by stating "it would

be a mistake to deny that pathological anatomy is a science because of the connections of clinical medicine to institutional norms" (Gutting, 1989, p. 137).

It is important to clarify that archaeological critique of modern medicine carried out in this study does not lead to a global rejection of the way modern medicine works as a practice. It rather suggests specific ways of calling into question important aspects of medical education and practice that directly affect professional identity formation in medical students that, in turn, affects the quality of medical care delivery. Not to forget that archaeological critique of reason and morality presented in this study is limited and local; yet, these results are contributing to the extensive evidence in support of the argument that medical practice is not based on modern medical science alone. In other words, the *science* of medicine is not the only component of medical discourse as things that are said and done daily in the clinical settings are not all scientific, objective, and value-neutral. Thus, the analysis conducted in this study seeks to map out an archaeological territory that includes all scientific and non-scientific practices that are conditioned by savoir–the knowledge that is not only found in science but also "in fiction, reflection, narrative accounts, institutional regulations, and political decisions" as they relate to medical practice (Gutting, 1989, p. 252).

Medical Professional Identity Formation

As discussed in Chapter 2, medical professional identity is expressed by ways in which medical professionals execute medical professionalism. Professional identity is not something that one can have or not have; it is not a job title or a skill set that one may possess. Professional identity is rather what one *does* as a professional (Jenkins, 2008). Furthermore, professional identity is not something one can achieve once and for all. It is

not a static entity; rather, it is constantly being developed, formed, and transformed through discourse. On the other hand, "discourse and system produce each other" and the cycle keeps going on and on (Foucault, 1972, p. 76). This study aimed to show the structure of medical discourse so one can see how it constitutes the identity of medical students (that is, the future doctors) that are involved with this discourse. Data collected by interviews and focus groups with medical students were analyzed to show the objects, modalities of statements, concepts, and theoretical strategies adopted by medical students in relation to medicine. This analysis not only establishes the system of discursive formation but also the gradations of medical students' professional identities. Archaeology reveals "how ways of speaking are invested in systems of prohibitions and values" (Foucault, 1972, p. 193). Students' professional identities are formed by discourse and it is these students who partake to produce and reproduce the discourse again. The fact that it is a two-way process makes it only more fascinating from an archaeological standpoint.

As medical educators, we should care about the discursive structure of medicine. We should care about what people talk about in clinical settings, how they talk about them, what notions they draw from when talking about those things, and what positions they assume concerning those things. These talks and actions produce and reproduce the discourse of medicine in both educational and clinical settings. It is this discourse that defines the field in which professional identities of all who are involved in medicine are deployed. Furthermore, it is this discourse that dictates what people say, do, and even imagine about medicine–more often than not–subconsciously.

Discursive Statements, Elements, and Relations

Statements

A relatively large number of statements were collected as data through conducting twenty one-on-one interviews, four focus groups, and over sixty hours of field observation. A small portion of these statements are reported as exemplary data in Chapter 4. The unit of analysis in this study, however, was not the individual statement, but the associated field to which the statement belonged. It is the function that an individual statement plays within its associated field that makes that statement a unique and rare event, regardless of how many times it has been enunciated in a discourse. As Foucault puts it:

> However banal it may be, however unimportant its consequences may appear to be, however quickly it may be forgotten after its appearance, however little heard or however badly deciphered we may suppose it to be, a statement is always an event that neither the language nor the meaning can quite exhaust (Foucault, 1972, p. 28).

Each statement is bound, first of all by a series of other formulations within which the statement appears in its associated field. Thus, the associated field is composed of

> all the formulations to which the statement refers (implicitly or not), either by repeating them, modifying them, or adapting them, or by opposing them, or by commenting on them; there can be no statement that in one way or another does not re-actualize others… [also] the associated field is made up of all the formulations whose status the statement in question shares, among which it takes its place without regard to linear order, with which it will fade away, or with which, on the contrary, it will be valued, preserved, sacralized, and offered, as a possible object, to a future discourse (Foucault, 1972, pp. 98-99).

Thus, the enunciative field is "the domain of coexistence in which the enunciative function operates" (Foucault, 1972, p. 100). The enunciative field allows the statements "to follow one another, order one another, coexist with one another, and play roles in

relation to one another" (Foucault, 1972, p. 100). It should be noted that an archaeological statement is not free and it cannot take anything that it likes as its theme unless that thing has already emerged as an object of discourse and is supported by an entire network of relations. Hence, "a statement occurs [only] following a regularity established by other antecedent statements." (Webb, 2013, p. 110).

Each statement recorded and presented as data in this study has been treated as belonging to an enunciated field. Therefore, statements reported in Chapter 4 should be seen as *nodes in a network* of other statements referencing the same object of discourse in one way or another. Individual statements collected in this study were not (and should not be) analyzed or thematized as independent units of analysis with the assumption that they might have just sprung out of some creative mind. It is worth reiterating here that all statements that have been reported in relation to a particular associated field in this study share the same status. The reader may wish to give them the status of research literature, or some trivial comment, or a universally valid scientific fact, depending on the associated field that they belong to. None of the statements can be separated from its status or its associated field that, in a sense, functions as a natural habitat where the statement is born, raised, and ultimately forgotten. The rule of thumb is that, if it does not belong to an associated field in the discourse, it is not considered an archaeological statement. Such statements were simply not included in the analytical process (e.g., some doctors talking about Jimmy Johns' sandwiches in the hospital setting, with those statements not belonging to any associated field within the territory of the modern medical discourse). According to Foucault,

> there is no statement in general, no free, neutral, independent statement; but a statement always belongs to a series or a whole, always

> plays a role among other statements, deriving support from them and distinguishing itself from them: it is always part of a network of statements, in which it has a role, however minimal it may be, to play… There is no statement that does not presuppose others; there is no statement that is not surrounded by a field of coexistence, effects of series and succession, a distribution of functions and roles (Foucault, 1972, p. 99).

In conclusion, statements in this study ought not to be seen as the smallest units of the discursive formation of medicine, the units based on which discerning an individualized meaning is possible. Rather, it is important to note that "the statement is that which situates these meaningful units in a space in which they breed and multiply" (Foucault, 1972, p. 100).

> This rarity of statements, the incomplete, fragmented form of the enunciative field, the fact that few things, in all, can be said, explain that statements are not, like the air we breathe, an infinite transparency; but things that are transmitted and preserved, that have value, and which one tries to appropriate; that are repeated, reproduced, and transformed; to which pre-established networks are adapted, and to which a status is given in the institution; things that are duplicated not only by copy or translation, but by exegesis, commentary, and the internal proliferation of meaning. Because statements are rare, they are collected in unifying totalities, and the meanings to be found in them are multiplied (Foucault, 1972, pp. 119-120).

Having expanded on the analysis of statements, I will now turn to elaborate on the elements of discourse and the ways in which they were observed and analyzed in the present study.

Elements

Objects. Two major discursive objects of medical discourse, namely disease and treatment, and the human body, are the most common topics of discussion throughout the medical school training. Let's say, vast majority of the talk in any classroom or lab settings in medical school is about one or both of those two objects. Moreover, in places

such as the dissection lab and simulation lab, "[it is] the sole truth of man that can be objectified and perceived scientifically" (Foucault, 1988, p. 622). In both school and hospital settings, the most likely occasions where some talk about the doctor happens are seminars on medical professionalism. For a lot of students especially in the school settings, the discussions on professionalism count as one of the "wishy-washy" topics that are there just to fill a spot on the schedule (see Chapter 4, theoretical strategies about medical professionalism, for more).

The fourth object of medical discourse, which is the sick person, rarely comes up anywhere in doctor-doctor or teacher-student conversations either in medical school or hospital. In medical school, the talk about the sick person rarely comes up during didactic teaching sessions such as lectures–such sessions are often meant to teach students about *scientific* medical knowledge. The same goes with the hospital. It is possible to spot some talk about the sick person when doctors are talking informally among themselves; yet, it rarely comes up during a formal session of education or anything that involves the presence of several doctors talking about medical knowledge or practice. The sick person is still an object of medical discourse because it is always present in doctor-patient conversations, though mainly spoken about by patients, and patient families themselves. Patients talk about it either with their doctor and other healthcare staff or with their own families as part of the medical discourse that takes place at the hospital. Thus, the sick person as an object occupies a sizeable space in the overall medical talk that happens in the clinical settings. Doctors may avoid talking about this object when they are among themselves from fear of seeming unprofessional to others, or, because they really do not care about the person of the patient beyond their health condition. Given the focus on

scientific medical information about human body and disease for about ninety-nine percent of the time during their medical training, it is probably unreasonable to expect the doctors to act differently. In fact, it will be interesting to find out why/how those doctors who do talk and care about the human being beyond their medical records do so. Who teaches them to do so? Culture, faith, tradition? Whatever it might be, it is not something that we currently focus on in medical education.

As discussed in Chapter 2, it is not enough to simply identify the objects of discourse in archaeology. One has to discuss the rules for their formation as well as the overall conditions that facilitate their existence. The following were my guiding questions while writing the section on discursive objects in Chapter 4:

> Is it possible to lay down the rule to which their appearance was subject? Is it possible to discover according to which non-deductive system these objects could be juxtaposed and placed in succession to form the fragmented field - showing at certain points great gaps, at others a plethora of information…? What has ruled their existence as objects of discourse? (Foucault, 1972, p. 41)

As Foucault suggests here, the system according to which the objects alternately appear on the surface of discourse is non-deductive, and not based on logic at all. During the analysis of rules and relations, it was found that there were a plethora of branching information related to some objects (i.e., the doctor) whereas it was difficult to find much at all about some other objects (i.e., disease and treatment)–leaving gaps in the overall picture of rules and relations that are governing the appearance of discursive objects.

Establishing relations among the rules of formation for the objects also is important because it is these relations that bring about the conditions that could then facilitate the appearance of an object in a discourse. If disease and treatment, human body, the doctor and the sick person have emerged on the surface of modern medical

discourse as its objects, it is because a group of particular relations exists among the surfaces of emergence, authorities of delimitation, and grids of specification for each respective object. Furthermore, relations between discursive and nondiscursive practices must be maintained in a certain way to keep these four objects on the surface of medical discourse in the future. If any of the above relations changes in a profound manner, it will give rise to new object(s) that would be more fitting with the updated set of relations (conditions of existence) in medical discourse and thus they will replace one or more of the above four objects that exist at present. However, it is important to note that

> these relations are not present in the object; it is not they that are deployed when the object is being analyzed; they do not indicate the web, the immanent rationality, that ideal nervure that reappears totally or in part when one conceives of the object in the truth of its concept. They do not define its internal constitution, but what enables it to appear, to juxtapose itself with other objects, to situate itself in relation to them (Foucault, 1972, p. 45).

In Chapter 4, I have tried to seek the unity of modern medical discourse first of all in its objects: in their dissemination, in the interplay of their variations, and, in short, in "what is given to the speaking subject" (Foucault, 1972, p. 46). From there, I started seeking other elements and relations that characterize discursive practices related to each of the objects (modalities of statements, concepts, and theories related to each specific object). The picture that is drawn of the discursive formation of medicine in Chapter 4 is neither a configuration nor a form, it is a system of distribution for these four objects that is organized in a non-deductive manner.

After describing objects, rules, relations, and conditions of existence for each object, and the modalities of statement, concepts, and strategies related to them, there are brief but important discussions of relations between medical discourse and other

discourses in its discursive constellation as well as relations between medical discourse and some nondiscursive structures that are presented in the last section of Chapter 4, concerning strategies related to each object. According to Foucault, relations between several discourses can be "relations of mutual delimitation [with] each of them giving the other the distinctive marks of its singularity the differentiation of its domain of application" (Foucault, 1972, p. 67). One such group of relations that has been established was between the discursive formation of modern medicine and that of business administration with the latter giving the former some "distinctive marks of its singularity". I have attempted to show how business administration differentiates the domain of application for modern medical discourse by setting out specific outlines for what is possible to do in modern medicine at various steps in both medical education and practice. Business administration specifically sets out criteria of possibility for modern physicians and defines the domain within which they are allowed to navigate, and of course, the domain within which they are not allowed to navigate (e.g., seeing poor patients, who cannot afford to pay the fee, out of compassion). There are many things that physicians (and other healthcare professionals) can simply not say or do because it will be against the rules and regulations set out by business administration within their workplace (e.g., hospital or private practice), not because there are any rules in medicine itself that would prevent them from taking those actions.

The discussion of objects in medical discourse can have numerous implications for medical education and practice. Let's take an example of how this knowledge can be applied to the day-to-day practice of doctor-patient interviews. Admittedly, the conversation between a doctor and a patient is always uncoordinated–to some extent.

During these interviews, the doctor is thinking in terms of the disease that has possessed the patient's body like a ghost, and the scientific facts about that ghost (signs and symptoms, prognosis, drugs, etc.). The patients often know that they stand outside of the paradigm where the doctor's mind is. That's one reason why the patients, no matter how educated and civilized, always feel in a way "less" than the doctor during a medical interview. Moreover, the patient is thinking in terms of her *person*; the person that she is, not her body that is sick, and not the disease which has taken over her body. The patient is thinking of her own person as the center of this entire conversation and practice. The problem is that, thinking in terms of two different objects creates a disconnect between patient and the doctor (to complicate the doctor-patient relationship further, modalities of statements and concepts used are also drastically different between the two parties). Of course, the patients cannot be thinking of what the doctor is thinking because they were not trained in medicine, but it should not be too difficult to teach the doctors to think in terms of the patient's person more often. To acknowledge the existence of a person who lives behind a broken body and beyond the disease that has possessed her body; to see that person and be mindful of her. Individual doctors cannot take this initiative since it is often not something that is facilitated by the rules and conditions under which clinical medicine takes place. It is these rules and conditions that need to change and provide the sick person with a stronger stance in medical discourse to allow her to appear more often and carry more weight in medical talk, and to break the taboo of seeming odd/weak for the doctors who do talk about the person as well as her body and her disease. The question is, can we do anything different in medical education to address these issues–

such as devoting more time and space for discussing the *sick person* besides the body and disease during medical training?

Modalities of Statement. As described in Chapter 4, people use various types of statements to talk about the same object, which are referred to as modalities of enunciation, or simply, modalities of statement in archaeology. Depending on who is speaking the statement, which type of authority this speaker has, and what is his/her specific position regarding the object being talked about, different modalities of statements are accorded different types of status in medical discourse. Plus, not all of these modalities are privileged with the same authority and credibility, even when spoken by the same person. For example, statistical information is often deemed more credible than qualitative descriptions or biographical accounts, even when they are spoken by the same speaker (e.g., doctor). Thus, modalities of statement in medical discourse are distinct elements of medical discourse that are concerned with the status of doctors, the institutional and technical site form which they speak, and their position as subjects perceiving, observing, describing, teaching, etc. (Foucault, 1972, p. 53)

Modalities of enunciation that were spotted and discussed in this study as the most common types of statements include qualitative descriptions; biographical accounts; the location, interpretation, and cross-checking of signs; reasoning by analogy and deduction, and statistical calculations. The initial categories were borrowed from Foucault's archaeology of clinical discourse (BC, 1975), but they still hold true as is evident by the present study. Examples of each category referencing different discursive objects are presented in Chapter 4. To establish the rules for the formation of modalities in Chapter 4, I have attempted to provide answers to the following three questions: 1)

Who is speaking? 2) What institutional sites does this speaker draw his/her authority from? 3) What is the position of the subject about the object of medical discourse? Concerning the first question, I have tried to discuss the following:

> Who, among the totality of speaking individuals, is accorded the right to use this sort of language? Who is qualified to do so? Who derives from it his own special quality, his prestige, and from whom, in return, does he receive if not the assurance, at least the presumption that what he says is true? What is the status of the individuals who - alone - have the right, sanctioned by law or tradition, juridically defined or spontaneously accepted, to proffer such a discourse? … Medical statements cannot come from anybody; their value, efficacy, even their therapeutic powers, and, generally speaking, their existence as medical statements cannot be dissociated from the statutorily defined person who has the right to make them, and to claim for them the power to overcome suffering and death (Foucault, 1972, pp. 50-51).

Signifying the authority of the speaker who is allowed to make medical statements is important, partly because it involves the rules and processes of appropriation of medical discourse at large. In modern societies with the progressive specialization of discourses, the property of a single discourse is often confined to only a particular group of individuals who are considered to be qualified to produce or even get involved with it. For example, to be qualified to contribute to medical discourse one needs to be trained in medicine, and to merely get involved with it one needs to be a patient or patient family. The doctors are the only group of individuals who are considered to have the right to speak medical statements and the only ones that can understand them, have licit and immediate access to the body of previously formulated medical statements, and finally, have the capacity to make use of medical statements for decision making, and investments in institutions and practices. Medicine is not the only social discourse with this kind of specialization, however. Others, such as the economic and literary discourses,

are no more available to the layperson than medicine when it comes to the discussion of who has the right to produce or get involved with them.

The point to be noted is that, neither the processes of appropriation nor the role that the doctor plays in relation to the discursive/nondiscursive structures are extrinsic to the unity of the function of the doctor (as an object of medical discourse). Rather than looking at the processes that are less than ideal as some sort of distortion of the *real* function of the doctor, one must admit that they are formative elements of that very function. The function of the doctor does not possess some pure, neutral, atemporal core that needs to be rescued from the harm of such superposing factors. Rather, one needs to recognize that the doctor can only function as well as its formative elements allow him/her to. This same doctor would function differently if the formative elements in the conditions of its existence were to change or get replaced. Nonetheless, there exists no central *purity* that can ever be freed from the external factors and function in a so-called ideal way (Foucault, 1972, pp. 68-69). Lastly, one needs to recognize and appreciate the specific position of the speaker (e.g., doctor, patient, etc.) in relation to the discursive object that they are speaking about (e.g., disease and treatment, the doctor, the body, and the sick person). For instance, Foucault describes the position of the doctor (as the subject of medical discourse) in relation to the discursive objects as follows:

> The positions of the subject are also defined by the situation that it is possible for him [the doctor] to occupy in relation to the various domains or groups of objects… he is situated at an optimal perceptual distance whose boundaries delimit the wheat of relevant information…To these perceptual situations should be added the positions that the subject can occupy in the information networks (in theoretical teaching or in hospital training; in the system of oral communication or of written document: as emitter and receiver of observations, case-histories, statistical data, general theoretical propositions, projects, and decisions) (Foucault, 1972, p. 52).

In this study, no attempts were made to reduce the disparity of modalities of statement that was found in the data. I did not seek to establish any form of coherence between them based on their logical succession, types of reasoning, formal structure, etc. Instead, the main questions I have attempted to answer or at least discuss regarding the various modalities of enunciation in this study were as follows: "What is it that links them together? What necessity binds them together? Why these and not others?" (Foucault, 1972, p. 50). My hope is that the section on enunciative modalities in Chapter 4 is addressing and discussing these questions, at least in part.

Concepts. The conceptual framework of modern medicine sets out the boundaries of what is possible to speak about in medical discourse. Relations between rules for the formation of objects and modalities of statements bring about the concepts, and concepts give rise to strategic choices that are possible to make within the modern medical discourse. The point is, both theoretically and practically, it is not possible to speak of something in medical discourse unless that thing has already been established as an object of medicine, and its existence has been facilitated by a whole set of rules and conditions. In Webb's words:

> Discourses are governed by rules understood as regularities. Given the complexity of the conditions required for the appearance of a discursive object, the constraints on what it is possible to speak of at any given time are quite tight: it is not even in principle possible to speak of anything whatsoever at any time. For it to be possible to speak of a thing, it must first emerge, and this means that the group of relations between its surface of emergence, its delimitation and its grid of specification must have achieved at least a threshold degree of clarity (2013, p. 66).

Furthermore, the objects, types of statements, and concepts are laid down in medicine with their appearance being bound to entire sets of rules and relations that are not easy to break through. Anybody who speaks in medicine is basing their statements on the ground

of these same rules and regulations and therefore it is not possible for people to get out of this framework and draw from something else, from other notions and principles that are not supported by the rules and regulations (described in Chapter 4) that are in place, in modern medical discourse. Therefore, ideas emerging on the surface of the discourse are always finite and limited.

In a discursive formation, individual possibilities are restricted to the point that differentiation of ideas cannot occur. Individuals involved in medicine can express themselves and their positions only by following the rules and regulations drawn for them by the larger discourse of medicine, and have the option of actualizing their personality only to the extent that would fit within the boundaries marked by conditions of existence set up by medical discourse itself. As discussed in Chapters 2 and 3, conditions of existence for a discourse do not precede the discourse itself, rather, they are drawn from the discourse and they set out boundaries for what is possible to say, to do, and to think within a particular discursive formation such as that of modern medicine. Discursive rules are at work "not only in the mind or consciousness of individuals, but in discourse itself; they operate therefore, according to a sort of uniform anonymity, on all individuals who undertake to speak in this discursive field" (Foucault, 1972, p. 63).

Concepts of medical discourse may be modified, renewed or replaced over time; however, the new/modified concepts will still follow the same rules and conditions marked out by the modern medical discourse. In that sense, they are not the result of new and creative thinking on the part of people who come up with new concepts, rather, they are merely the result of practicing the possibilities that have already been set out by the discourse. It is only in the event that a transformation occurs in a discourse, such as that

of medicine in the late eighteenth century that conceptual frameworks can expand and give room for entirely new concepts due to the emergence of new objects and new modalities of statements that are emerging on the surface of discourse, after going through transformation. A transformation can change the way statements are being arranged in discourse through changing the relations of discourse with other discourses in its discursive constellation and its relations with the nondiscursive practices of its time. Again, unless those rules and relations are changed first, it is not possible to simply add a new discursive element in modern medicine (e.g., an object or a concept) and start talking about it. Although formation of concepts in discourse does not follow a logical architecture (Foucault, 1972, p. 61), it is not based on an absolute chaos either. Concepts follow a set of rules for arranging statements in series, such as those governing the formation of conceptual schemata of dependence, order, and succession among certain types of statements. For example, the *field of presence* demonstrates what might seem like an absolute chaos due to an extreme dispersion of statements. Yet, all statements - even when contradicting one anther - coexist under the same conditions and have an equal chance to emerge on the surface of modern medical discourse.

However, I would like to draw attention to a couple of important points here. First, it must be noted that there are no standards to control for dispersion. The chaos is real and it cannot be scientifically controlled for. Dispersion is a central theme in discursive formations, and archaeological analysis does not make any attempts to create an artificial coherence among dispersed items appearing in discourse. Thus, archaeology challenges the assumption of everything needing to be coherent at all times (see Chapter 2 for more). If one wishes to theorize medicine, the only way to map out its structure is

through defining dispersion of its statements, which I have attempted to conduct in this study. Second, it must also be noted that all contradicting concepts have an equal chance to emerge in discourse, because all of them are formed based on the same rules and conditions that are provided by discourse. For example, statements that approve of alternative medical practices, those that justify it, those that require verification of its validity, those statements that are against practicing alternative medicine, those that reject it, deny its validity and exclude it from the discourse of modern medicine–all of them have an equal chance to emerge as statements in the discourse of modern medicine.

In the light of the above discussion, a few important questions that arise here are: First, do doctors' beliefs about this or that object (e.g., accepting, criticizing, or rejecting some idea related to a discursive object) in medical discourse affect their professional identity and clinical practice? The answer is: Yes. As argued several times already, the object of discourse is "what is given to the speaking subject" and discourses "systematically form the objects of which they speak" (Foucault, 1972, pp. 46, 49). The next question is: Do we do anything to address this issue in medical education? The answer to this is, perhaps: No. Do we even acknowledge the non-scientificity of dispersion among statements in modern medical discourse so we may be able to discuss it? Again, the answer is: No. My hope for the present study is to at least open the doors for discussion of these and other similar questions in medical education research.

It must be recognized that the locus of emergence for concepts is the discourse itself, not any external factors that might affect discourse to shape it in a certain way. To think external factors can affect medical discourse is to assume there is a central piece to medicine that can exist independent of all external factors, which is against the chief

principles of archaeology. When someone utters the word “medicine”, perhaps it makes many people think of an ideal group of concepts that are good and pure, and that have been so across all human history. Archaeology, on the other hand, does not believe in the transcendentality of medicine leaning against the horizon of idealism. Therefore, in archaeological analysis one describes the conceptual framework of a discourse merely based on the intrinsic regularities of discourse and its relations, which is what I have attempted to do here. In this study, I have not tried to reduce the multiplicity of statements to a handful of concepts in order to establish coherence. Also, I have not assumed some origin that gives rise to a central core of purity to the idea of medicine across the history of mankind, counting any illusions, prejudices, errors, and traditions merely as external factors that are distorting the purity of medicine. Further, I have not tried to resolve contradictions in the complex network of concepts as they were recorded. Instead, I have tried to relate the complexity of the conceptual framework of modern medicine to the rules that characterized its discursive practice; the rules that emerge from intrinsic regularities of discourse. In Foucault’s words:

> My intention is not to carry out an exhaustive observation of them [discursive concepts], to establish the characteristics that they may have in common, to undertake a classification of them, to measure their internal coherence, or to test their mutual compatibility… One stands back in relation to this manifest set of concepts, and one tries to determine according to what schemata (of series, simultaneous groupings, linear or reciprocal modification) the statements may be linked to one another in a type of discourse… These schemata make it possible to describe - not the laws of the internal construction of concepts, not their progressive and individual genesis in the mind of man - but their anonymous dispersion through texts, books, and oeuvres. A dispersion that characterizes a type of discourse, and which defines, between concepts, forms of deduction, derivation, and coherence, but also of incompatibility, intersection, substitution, exclusion, mutual alteration, displacement, etc. (Foucault, 1972, p. 60).

In sum, the archaeological analysis of modern medical discourse conducted in this study does not look beyond the statements of its data to draw concepts from some transcendental field of ideal and pure medicine in the past, nor does it appeal to the inexhaustible field of possibility for the medicine to become pure and ideal in the future. This archaeological study rather looks "at the most superficial level", at the level of discourse, and the "group of rules that operate within it" (Foucault, 1972, p. 62). In the present study, I have only undertaken an example of alternative medicine to illustrate the structure and rules governing the statements in the field of presence.

Theoretical Strategies. Theoretical strategies arising in discourse are "the spontaneous philosophy of those who did not philosophize" (Foucault, 1972, p. 136). Put in another way, we know that the questions of what to talk about, how to talk about it, which concepts to draw from, and what positions to take regarding all of those are already mapped out in the discursive formation of modern medicine. In Foucault's words,

> strategic choices do not emerge directly from a world-view or from a predominance of interests peculiar to this or that speaking subject; but that their very possibility is determined by points of divergence in the group of concepts; I have also shown that concepts were not formed directly against the approximative, confused, and living background of ideas, but on the basis of forms of coexistence between statements; and, as we have seen, the modalities of enunciation were described on the basis of the position occupied by the subject in relation to the domain of objects of which he is speaking. In this way, there exists a vertical system of dependences: not all the positions of the subject, all the types of coexistence between statements, all the discursive strategies, are equally possible, but only those authorized by anterior levels [the systems of formation] (Foucault, 1972, pp. 72-73).

Thus, what people say and the way they say it, as well as positions they assume in relation to the objects of their talk are not the result of any novel, individual choices that they make in modern medicine. For example, almost every single medical student

interviewed in this study stated that they came to medicine to help other people. It is not that each one of them philosophized their position regarding medicine and dissected out their decision for coming to medicine to come up with that very same answer. Rather, they are choosing this ready-made philosophical position since it was one of the choices that are made available to them by the discourse of medicine.

In Chapter 4, I have tried to individualize the discursive formation of modern medicine by defining the system for the formation of different theoretical strategies. My goal has been to show how various strategic choices, despite their extreme diversity at times, can derive from the same set of relations. These relations include the rules of formation for all strategic choices related to the same discursive object. I have not made any attempts to describe the system of ramification for strategic choices, as these strategies are "not organized as a progressively deductive structure" (Foucault, 1972, p. 37). In archaeology, one does not try to isolate "small islands of coherence" and describe their internal structure; nor attempts to locate and explain the hidden conflicts among statements in a strategy (Foucault, 1972, p. 37). What one does, instead, is to examine the forms of division and describe the systems of their dispersion. Archaeology does not establish chains of inference in this system of dispersion. In this study, attempts were made to discern a regularity among theoretical strategies in the form of an order in the sequence of their appearance, correlations in their simultaneity, positions that are assignable to others in the common space of modern medical discourse, and reciprocal functioning of strategies with nondiscursive practices.

Description of the system of dispersion for theoretical strategies in the previous chapter includes determining points of diffraction for groups of strategies referencing the

same medical discursive object. As deliberated in Chapter 4, points of diffraction include points of incompatibility, points of equivalence, and link points of systematization. Points of equivalence, in turn, includes establishing the rules for the formation of theoretical choices about the same object. The rules of formation consist of describing the economy of the discursive constellation and the relations between theoretical choices and relevant nondiscursive practices. Points of equivalence show how two or more incompatible strategies are formed based on the same rules of formation while their conditions of existence are identical and they are located at the same level in the system of dispersion. Therefore, the diversity of strategies does not correspond to a defect in coherence. The incompatible strategies are equally possible alternatives that can appear on the surface of medical discourse in the form of either/or. Even if they do not have the same significance accorded to them by authorities of delimitation, or, they are not equally represented in the population of emerging statements, they still have an equal chance of emerging as possible strategic choices in medical discourse at any given point in time.

Strategic choices that people make in discourse are important for several reasons. First, someone who takes a position regarding a particular object of discourse will produce statements supporting his/her position, and thus actively produce and reproduce the discourse of medicine in the field. Let us take an example here. A doctor who believes "competence is the most important characteristic of a physician and compassion is not important if the doctor is good at what he does" is making a strategic choice. Every time this doctor acts in accordance with his positionality, or talks about it, he creates new statements to circulate on the surface of medical discourse, which further reinforce his position. The discourse will be produced and reproduced by this doctor who is an

authority of delimitation and therefore will be taken seriously by people in the clinic as well as the society at large. This is where the link points of systematization become vital. This example shows how an entire series of objects, modalities of the statement, and concepts can be derived to become part of medical discourse–as a consequence of a single strategic choice. Moreover, as Foucault suggests,

> the dispersions studied at previous levels do not simply constitute gaps, non-identities, discontinuous series; they come to form discursive subgroups - those very subgroups that are usually regarded as being of major importance, as if they were the immediate unity and raw material out of which larger discursive groups ('theories', 'conceptions', 'themes') are formed (Foucault, 1972, p. 66).

While it is possible to discuss each set of related strategies (as outlined in Chapter 4), I am not going to do that in this chapter for three major reasons. First, most of what should have been part of a traditional "discussion" chapter is already discussed under points of equivalence and points of systematization in Chapter 4. These sections include the discussion of rules of formation for specific strategies concerning the economy of the discursive constellation as well as nondiscursive practices. They were discussed in Chapter 4 due to the unique structure of archaeological analysis that required to include that information as part of the analysis itself. Second, most of the literature already there in the medical education research is not compatible with chief principles of archaeology and the Foucauldian notions of the subject, transcendentality of medicine, and keeping the analysis at the level of the statements (without searching for hidden meanings and intentions of the speaker). Therefore, not all findings of this study can be discussed in the context of the non-Foucauldian literature due to major paradigmatic differences. It will be like comparing apples to oranges if one tries to situate findings of an archaeological analysis in the context of post-positivist, interpretivist, and even critical research findings

recorded in the literature. Third, it will require a whole lot of space with less merit to discuss each set of related strategic choices separately here. However, I am planning to turn each strategic theme into a publishable manuscript in the future where it will be more appropriate to link it to literature and follow up with further analysis. Nonetheless, for the sake of completeness here, I would like to pick up one example from theoretical strategies referencing the doctor: *Competence or Compassion: What is the Most Significant Characteristic a Doctor Should Possess?* Let us discuss this theme in the context of literature denoting some similar notions.

Traditionally, there have been two somewhat conflicting themes regarding the fundamental goal of modern medical practice, which are the theories of cure versus care (Bleakly, Bligh & Browne, 2011). Radical followers of the *cure* theory emphasize the bio-scientific role of medicine in elimination of diseases that are housed in the human body. The human body is seen as an object of medicine that can be manipulated in order to be cured, similar to a machine that needs fixing, by an expert. All is considered to be well as long as the expert possesses the necessary knowledge about various parts of the machine as well as necessary skills to fix them. In the opposite camp, radical followers of the *care* theory argue that the human body is not a machine and, as such, it should not be seen as an object by medical professionals. They believe that disease is not initiated in the body, rather, it is initiated in the physical and social environment that affect the human body. Thus, to alleviate their suffering, people do not just need a mechanic to fix them. They need a healer, who not only cares for them but also cares about them. This is an exemplar description of the basics of each theory in its most general terms. Of course, there is a range of middle-ground positions between these two radical positions.

Moreover, the concepts of cure and care themselves can be interpreted in different ways by different people.

Foucault takes a somewhat similar position to describe the modern experience of madness in his archaeological study of Madness and Civilization (Foucault, 1988). He describes the experience of madness in terms of two general types of consciousness, evaluative and cognitive. *Cognitive consciousness* of madness in modern psychology and psychiatry (which is comparable to the cure theory) tends to be "value-free, [and] treating madness simply as an object of disinterested scientific inquiry" (Gutting, 1989, p. 88). On the other hand, an *evaluative consciousness* of madness (comparable to the care theory) tends to be that of "a compassionate scientist, eager to use his knowledge to improve the lot of his less fortunate fellows" (Gutting, 1989, p. 88). According to Foucault, the evaluative consciousness of madness in the modern time is "much less straight forward and innocent and, moreover, is inextricably tied to the cognitive methods and content of scientific psychology and psychiatry" (Gutting, 1989, p. 88).

The cure theory (in various forms) is being powerfully promoted across the biomedical curriculum by stressing the significance of content knowledge and skills necessary for successful medical practice. On the other hand, several values of the care theory are addressed in formal documents related to medical professionalism and medical ethics. Below is an excerpt pulled from the American Medical Association issued Principles of Medical Ethics as an example of a formal document promoting several concepts of the care theory:

> The practice of medicine, and its embodiment in the clinical encounter between a patient and a physician, is fundamentally a moral activity that arises from the imperative to care for patients and to alleviate suffering. The relationship between a patient and a physician is based on trust, which

> gives rise to physicians' ethical responsibility to place patients' welfare above the physician's self-interest or obligations to others, to use sound medical judgment on patients' behalf, and to advocate for their patients' welfare (AMA Code of Medical Ethics, 2016)

It must be noted that the discussion of physician's *morality* in the present study is not confined to the exemplar strategic theme of competence versus compassion noted here. The indications for taking morality into account arise in multiple places throughout the analysis in Chapter 4 in general, and most sections on the analysis of theoretical strategies, in particular. A few important questions that arise here are: How can one be sure about the physicians' moral integrity and have faith that they will always make humanistic, even altruistic, choices? When, where and how are physicians supposed to learn about morality? And morality on what grounds? Besides, one who has been a regular consumer in the medical industry can see that there are several discrepancies between what the above document is suggesting and what actual clinical practice usually looks like. This type of talk is not confined to documents on medical professionalism and medical ethics, they are to be found in various other places in medical discourse including symbolic documents such as the Physician's Oath that students take at Indiana University School of Medicine. They talk about morality and ethics as if they were ultimately obvious concepts and somehow everybody is expected to know how to work to work them out. Given the level of expectation versus the amount of time and dedication that are actually spent on teaching humanities, such as morality, to medical students, it is not difficult to see why students would think of medical professionalism as one of those "wishy-washy" topics which are just there to fill some spots on the schedule. Having discussed the major points concerning the presentation of discursive elements in Chapter 4, let us now turn to discuss their discursive relations and conditions.

Discursive Relations and Conditions

After all, discourse is a "set of rules for arranging statements in a series" (Foucault, 1972, p. 57). As shown in Chapter 4, the discursive formation of modern medicine is "a complex group of relations that function as a rule" and to define its system of formation one has to characterize a group of statements by "the regularity of a practice" (Foucault, 1972, p. 74). At the same time, it is the discursive formation itself that "determines a regularity" (Foucault, 1972, p. 98), which reveals the influence moving in two directions at the same time. Let me explain how this works. We know that the rules for the formation of elements move from strategy to concept to statement. This does not mean that each level directly determines the level beneath it, rather, all levels are in communication with one another and the influence can move in either direction. For example, rules for the formation of an object influence the rules for the formation of strategies about that object, and vice versa, the rules for the formation of strategies influence the rules for the formation of the object of interest as well. That is because discursive rules and conditions are not predetermining what is possible to happen in discourse, rather, they merely describe a regularity that has emerged from the discourse. Thus, discursive rules and conditions

> are not constraints whose origin is to be found in the thoughts of men, or in the play of their representations; but nor are they determinations which, formed at the level of institutions, or social or economic relations, transcribe themselves by force on the surface of discourses. These systems - I repeat - reside in discourse itself; or rather on its frontier, at that limit at which the specific rules that enable it to exist as such are defined (Foucault, 1972, p. 74).

Hence, it must be noted that all discursive rules and relations emerge from the discourse itself, precisely from the same regularities that they apply to. It is always a tight group of

relations that give rise to the elements of a discourse. I have tried to describe as many of such relations as possible for the modern medical discourse, in Chapter 4. However, to draw a full map of all relations for a discursive formation is neither expected nor even possible in a single archaeological study. In addition to internal discursive relations, I have also attempted to discuss common relations between discursive and nondiscursive practices as they relate to medicine (e.g., the way rules and regulations in medical school and hospital - or the capitalistic market in general - might form discursive practices of modern medicine). Furthermore, discussing the relations at the level of a single discourse cannot nearly explain the formation of all its elements and conditions of existence for those elements. To do the latter, I have attempted to discuss the relations of medical discourse with neighboring discourses that are placed in the same constellation as medicine (e.g., business, natural sciences, etc.). It is these inter-discursive relations, discursive-nondiscursive relations, and the discursive relations, together, that mark up the general conditions of possibility for all discursive elements and their rules of formation as outlined in Chapter 4

Future Directions

As is evident in the present study, analyzing the discursive structure of medicine can provide a great deal of information about social aspects of medical practice. Future studies can dig deeper into each of the objects, concepts, and theoretical strategies that are outlined in this study. Separate research manuscripts can be written to explore each rule of formation for the above elements. For example, further exploration of surfaces of emergence for the doctor, grids of specification for the sick person, forms of coexistence for statements about any concept of interest in medical education, and points of

diffraction between objectification and desensitization attitudes toward human body can each be a separate research topic. Each set of theoretical strategies related to a discursive object can also be taken up as a separate study and explored further. Most importantly, additional research is needed to examine conditions of existence for discursive elements in a focused and systematic manner. All of this has the potential to provide a world of insight about territories in medical education research that have not been explored before, or at least not in a systematic way.

Furthermore, this study has identified several forms of contradiction that are operating at various levels (statements, discursive elements, and discursive relations) and exercising different functions in the modern discourse of medicine. Closer attention to any of these contradictions will reveal further discontinuity as well as more insight into the discursive structure of modern medicine. With regards to moral principles in medicine, local research is needed to feed into the knowledge of what positions regarding medical morality is already possible to be assumed within the discourse of modern medicine, and what positions are missing from the discourse due to a certain combination of rules and relations that are not allowing their existence as part of the medical curricula at this time.

Conclusions

The present study describes the system of relations that govern the formation of local medical discourse at Indiana University School of Medicine. It is this local medical discourse that, 1) defines discursive ways of talking, doing, and thinking in and about medicine, and 2) constitutes the professional identity of those who are involved with medicine. This study focuses the lens on the professional identity of medical students

who will be tomorrow's doctors. In this section, I am providing a summary of the main points and major conclusions of the study. Medicine is a well-established institution possessing its own rules, and a group of individuals (the doctors) who are representing the medical profession in modern society. It is a body of knowledge and practice that is recognized as an authority by the public opinion, the law, and the government, in modern U.S. society. Medicine is also the main authority that delimits, designates, names, and establishes objects of its own discourse (Foucault, 1972, p. 42). Part of what this project is hoping to have achieved is to remind us all that medical practice is not *science* alone. It is a social practice that is both delivered and received by human beings, and is, therefore, governed by human discourses. It is the discourse of medicine that decides medicine's immediate practical uses and defines values related to those uses. Moreover, the critical role of the political economy in the capitalistic society of the modern U.S., which marks an array of concepts and the overall logical architecture of modern medical practice, is undeniable. To think how and why a practice, which is overlaid with human perceptions and subjective contents, is widely given the status and function of a scientific concept in our society is quite fascinating.

This study serves as a reminder that clinical medical practice is neither always objective nor scientific. The study shows that medicine is invested in a system of values formed by pieces and bits of various social relations, and it displays the conflicts of morality that arise as a result of those specific relations. The present analysis is carried out in the direction of what one might call *ethical*. As is evident from the findings presented in Chapter 4, there is a real discrepancy between what people wish to see in doctors and what we actually teach them in medical school. To take an example, the

description of the third rule for the formation of the doctor as an object of medical discourse, the grids of specification, indicates what people usually wish for their doctors to be like. Thinking of themselves as patients, medical students stated that they want their doctor to be a good listener and communicator, a humble person, one who does not use prejudice against their patient, one who acknowledges their own privilege, who attends to the person of the patient as well as their health condition, etc. In light of these findings, I would like to raise a few questions here: As medical educators, how do we make sure that students we train to become doctors will do all of the above? Do we teach them how to listen, how to be humble, not to use prejudice, and acknowledge their privilege as doctors? Do we teach them how to attend to the person of the patients? If no, then why not? If yes, what percentage of the curriculum is dedicated to teaching these topics? It must be noted that these questions are not addressed to any specific persons or institutions here, rather, my hope is for them to serve as reminders to anyone who is involved in medical education and carries the responsibility of training tomorrow's doctors.

As is evident from the results of this study, many medical students are well-aware of their own prestige and power in the system of the hierarchy in patient care. They know what their relationship with a patient can mean to that patient, and that this relationship is personal and high stakes for the patient. They understand that they have the choice to either see or not see a dying patient depending on their mood, and whether they have the time that day. They know where they stand in relation to other allied health professionals in the clinical settings, and how their position is observed and commended by the patient who comes to the hospital to seek medical help. Further, it is evident from the results of

this study that the defining elements in many students' decision to become a doctor are financial stability (money) and social prestige (power and authority) that come with the medical profession. These findings further reinforce the fact that knowing about medical students' professional identity is important. The way medical students position themselves in a healthcare team, and in relation to the patient, matters. The code of morality they draw their values from and whether they even have one, matters. These students are tomorrow's doctors and the way they produce and reproduce discursive practice of modern medicine will affect the lives of thousands of patients in the future.

Results of this study also indicate that those who believe doctors should care *about* their patients in addition to caring *for* them base this idea either on religion or on certain codes of morality (e.g., humanistic philosophy). However, many of the students interviewed in this study were not sure about their personal code of morality. The next set of questions I would like to raise here, are as follows: Do we encourage the development of moral values in medical education? Do we instill values to help students combat with racism, sexism, and other similar notions in medical care delivery? If we do not discuss these issues, how efficient it is to simply hope that they are not going to increase the present level of disparities in healthcare delivery based on the issues of racism, sexism, classism, etc.? We want students to care about the patient, but do we ask ourselves, why should they do so? What about those students who are not religious and also do not believe in humanistic values? What about those who have no moral values instilled in them before coming to medical school? Do we assess those values at any point during medical training? Do we provide them with any moral values in medical education? As medical educators, what is our own definition of medical morality anyway?

At the moment, medical professionalism counts as an umbrella term for addressing medical morality in medical education (Huddle, 2005). However, what medical schools teach and assess as medical professionalism is not standard. Professionalism is rather an empty pot that everyone gets to fill with what they think is appropriate to teach as professionalism. Various themes are crammed under the topic of professionalism and teaching is dispersed across only a few weeks throughout the four years of undergraduate medical education. Findings of this study show that some students think of professionalism as "wishy-washy stuff" that are just a waste of their time; some interpret it only in terms of business professional codes such as dressing up, being on-time, responding to emails, etc.; and many are quite confused about what professionalism might mean at all. One can safely argue that whatever we are teaching them as professionalism is not meeting the goal of depicting a clear picture of medical morality for medical students at this time.

Indeed, the ethical/moral codes are always local and historical, not universal. They do not conform to a single law or principle, and the "knowledge that may provide a basis for ethics is therefore a knowledge not of the natural world, but of the historical world" (Webb, 2013, p. 164). Furthermore, it has been known that our decision-making is determined, to a remarkable extent, by the origins of the ethical ideas that we employ and the history of their development (Macintyre, 2006). Based on the findings of the present study, I would like to make a call for the need for teaching medical humanities in medical schools. The subject of medical humanities should include (but not be limited to) discussions of philosophy, ethics, and history of medicine, as well as topics in psychology, sociology, and anthropology of medicine as a social practice operating in the

context of the modern North American society. These discussions will help medical students develop, execute, and maintain their own codes of morality that they will use as future doctors. The topics taught should be adjusted to match local and regional social issues. By including medical humanities as a required subject in the medical curriculum, we can provide the discussion of medical morality with a stronger foothold in medical education. Creating more room for morality-related statements in medical discourse can help make *morality* an object of medical discourse in the future. That is, teaching medical students about morality can make the topic important enough to talk about in medical decision-making without feeling unprofessional or non-objective as a doctor.

In medical school, we teach students the many details of scientific and biomechanical information. We teach them the names of specific genes responsible for a certain disease and the mechanisms by which they cause that disease. We teach them about things, such as the annular ligament of the radius in the hope that upon encountering a patient suffering from dislocation of the elbow in the future, they will be able to diagnose the problem and recognize its potential causes. The questions I would like to ask here are: Is there a guarantee that all students will remember this minutia information that they are being taught in the first year of medical school all the way until they become physicians? How many students will actually go to orthopedic surgery, which would be relevant to treating a dislocation of the elbow anyway? And, how often would one encounter a patient with a dislocated elbow as an orthopedic surgeon? I am raising these questions not because I am after specific answers for them; rather, I am asking these to trigger the thought process facilitating the discussion of what follows.

For some reason, we do not invest much time in medical curriculum to teach students about medical morality so they can develop the appropriate sense of medical professionalism, and develop an appropriate medical professional identity, to treat their patients in the future. This leads us to the following questions: Is it important to have compassion and other moral characteristics to treat patients? Is it important to be aware of the race and class disparities in medical care delivery? If yes, how much time do we take to teach students about these issues? Is there a guarantee that they will remember these lessons by the time they become physicians? Maybe not, but there is no guarantee that they will remember ligaments of the elbow joint either. How many students will actually go to a specialty which would be relevant to treating a patient of color with equal compassion and respect as a white patient? The answer is: every single one of them. How often would one encounter a patient who needs compassion and care, in whatever specialty one is? The answer is: every single day of one's career as a doctor. Why then, it is more important to teach about the genes and the ligaments but it is way less important to teach about morality in medicine? One might argue that it is not easy to teach people about morality and that not everyone can learn that easily. However, is that not so with teaching everything else in medicine? I believe it is not easy to teach or learn anything in a medical curriculum. However, we do it because we think they are important to teach and to learn. We create the means and facilitate the grounds for teaching about genes. A lot of time and other resources are invested in having individuals who can teach about genes and their mechanism of action. There is an entire system of political and economic relations to back them up (e.g., institutional focus and funding). When it comes to teaching morality, however, this entire system needs to change and give room for

humanities as well as they do for science. Is that going to be possible at the national level anytime soon? I do not know. Yet, it is always possible to start bringing changes at our own local and regional level.

Appendices

Appendix A

INDIANA UNIVERSITY STUDY INFORMATION SHEET

A Foucauldian Archaeology of the Modern Medical Discourse

You are invited to participate in a research study of how medical students perceive the essence of "medicine'. You were selected as a possible subject because your experiences as an actively enrolled medical student at Indiana University School of Medicine (IUSM) can provide relevant data for understanding the topic under the focus of the present study. An email invitation was sent to all actively enrolled medical students at IUSM, Indianapolis campus, regardless of the year of the study (MS1, MS2, MS3, and MS4). A maximum of 80 medical students (20 students from each year) will be selected from amongst the volunteers. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

The study is being conducted by Homaira Azim, a PhD student at the Department of Anatomy and Cell Biology, Indiana University School of Medicine. This study is not funded.

STUDY PURPOSE

The purpose of this study is to explore how medical students perceive the role of modern medicine in the society and how their day-to-day experiences in medical school contribute to the development of those perceptions. The study aims to understand what meanings are attached to the modern medical practice by medical students and how those meanings are developed, maintained, and circulated in the context of medical education. The goal is to examine the perception(s) of medicine that are most dominant among medical students and understand the power dynamics of medical education that support those perceptions.

PROCEDURES FOR THE STUDY

This study will employ a total of 40 one-on-one interviews involving 10 students from each year of medical school, a total of 4 focus groups involving 10 students from each year of medical school, and several hours of direct observation of the educational settings including lecture rooms, labs, small group study sessions, hospital rounds and other similar contexts where formal medical training is delivered.

If you agree to be in the study, you will do the following things:

You can choose whether you want to participate in 1 interview, participate in 1 focus group, or participate in both an interview and a focus group. One-on-one interviews will take ~45-60 minutes, whereas focus groups will be held for 1hour. All meetings will be

on campus either in the MS building or medical library. Focus groups will be scheduled on a mutually agreed date/time to make sure it works with your schedule. A doodle poll with be sent to you where you can sign up for a date and time which suits you best for an interview within the spring, summer, or fall 2019. All interviews and focus groups will be audio-recorded and transcribed at a later time. This study is expected to be completed by early 2020.

RISKS AND BENEFITS

The risks of participating in this research include being uncomfortable answering questions during the interview or discussing a topic in the focus group. The researcher is not planning to ask any personal or otherwise questions that is likely to make students uncomfortable, but it is possible for someone to feel so due to their personal or cultural beliefs. Your preferences will be respected at all times. You do not have to answer a question if you feel it makes you uncomfortable. The researcher will simply move on to the next question. There is also a risk of loss of confidentiality in the case of extremely unforeseen circumstances. For instance, if the researcher's personal laptop gets lost and someone cracks all the passwords to get to the protected data.
You are not expected to benefit from participating in this research directly, unless you count contributing to understanding of a problem related to medical education as a benefit to yourself.

CONFIDENTIALITY

Efforts will be made to keep your personal information confidential. You will have an identification number and a pseudonym to protect your identity. We cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. Your identity will be held in confidence in reports in which the study may be published and databases in which results may be stored. Only the researcher will have access to the data. The audio-recording files from the interviews and focus groups will be stored in a password-protected personal OneDrive account. The data will be accessed only by the researcher on her personal laptop computer which is also password protected. The audio-recordings will not be used for any educational purposes by anyone in the future. All data will be destroyed within five years from the date of the completion of this study.

Organizations that may inspect and/or copy your research records for quality assurance and data analysis include groups such as the study investigator and her research associates, the Indiana University Institutional Review Board or its designees, and (as allowed by law) state or federal agencies, specifically the Office for Human Research Protections (OHRP).

PAYMENT

You will not receive payment for taking part in this study. However, a free lunch will be provided when you participate in any given meeting.

CONTACTS FOR QUESTIONS OR PROBLEMS

For questions about the study, please contact the researcher Homaira Azim at hmohamma@indiana.edu.

For questions about your rights as a research participant or to discuss problems, complaints or concerns about a research study, or to obtain information, or offer input, contact the IU Human Subjects Office at (317) 278-3458 or [for Indianapolis] or (800) 696-2949.

VOLUNTARY NATURE OF STUDY

Taking part in this study is voluntary. You may choose not to take part or may leave the study at any time. Leaving the study will not result in any penalty or loss of benefits to which you are entitled. Your decision whether or not to participate in this study will not affect your current or future relations with IU School of Medicine.

Appendix B

Recruitment Email for: A Foucauldian Archaeology of the Modern Medical Discourse

Dear (Medical Student),
My name is Homaira Azim and I am a PhD student in the Anatomy and Cell Biology department, Education Track program at Indiana University School of Medicine, IUPUI. As part of my dissertation research, I am conducting a qualitative study exploring student perceptions and experiences regarding topics of medical professionalism, medical ethics, and students' view of what it means to become a medical professional, and students' understanding of the medical profession in general. This information will be used to identify factors that influence various perceptions regarding medicine as one of the most prestigious professions in the modern society. This study entails one-on-one interviews with students, focus group meetings with students, and direct observation of medical educational settings.
You are invited to participate in this research as a medical student at IUSM. This email will be sent to all actively enrolled medical students (MS1, MS2, MS3, MS4) at IUSM, Indianapolis campus, to recruit maximum 80 volunteers (20 students from each year) for participating in the interviews and/or focus groups.
If you agree to participate, you can choose whether you would like to be interviewed, participate in a students' focus group, or participate in both an interview and a focus group. One-on-one interviews will take ~45-60 minutes, whereas focus groups will be held for ~1hour. All meetings will be on campus either in the MS building or medical library. Meetings will be scheduled on a mutually agreed date/time to make sure it works with your schedule. This study is not funded by any organizations, so you will not receive any compensation for participating. Nevertheless, free lunch will be provided to all participants at any given meeting.
Please understand that your participation in this research will be completely voluntary, and you will have the choice to terminate your cooperation at any time during the study. I value your social knowledge and experiences as an IUSM medical student and you can be a great asset in my research study. No specific technical knowledge about any subjects are required for participation. Questions will be asked about your day-to-day experiences and perceptions only.
Please let me know **by replying to this email by --/ --/ 2019** indicating whether you **decline** or **agree** to participate in this research study. Should you have any questions or would like more information regarding the focus of the study, please do not hesitate to contact me. Thank you for your time and consideration.

Homaira Azim, M.D.
PhD Graduate Student
Department of Anatomy and Cell Biology
Indiana University School of Medicine
hmohamma@indiana.edu

Appendix C

Interview Protocol

1. Students' name, year of school
2. Students' race, gender, social class (as perceived by themselves)
3. Student's educational background
4. World experiences: Number of countries/states lived in? Colleges attended? Jobs held responsible for? Studied or lived close/far from home?
5. Family background: Parents' education?
6. Moral/religious beliefs–if any?
7. Why did you choose medical school? How is this preferred? By whom? Why?
8. What if–for whatever reason–you fail in medical school and had to go back home?
9. How different do you find medical school from previous other colleges that you have attended? In what ways? What new challenges were you faced with? How did you adapt?
10. How do you get along with faculty/staff? Any problems? How did you deal with them?
11. What were your general opinions about medicine/medical profession/medical education before you became a medical student?
12. What does it mean to be a good [medical] student?
13. Have you had any contacts with practicing physicians on a personal level? Family members, friends, relatives? Did you learn anything from those conversations about what medical profession is really like?

14. Describe your emotional experience with the anatomy dissection lab. Did you face any moral/ethical dilemmas? Did you find it easy to talk about your experiences with your family and friends? Why/why not?
15. Would you like to donate your body or a see a loved one's body being donated to anatomical dissection? Why/why not?
16. What are your experiences as a patient? How would you describe your level(s) of satisfaction, inspiration, anxiety, disappointment, anger, etc. toward medical profession in general?
17. What does it mean to be a "successful physician"?
18. What is your ideal practice that you want to live up to?
19. What specialty are you planning to go in to? Any particular reasons?
20. How do you see yourself in 10 years from now? Draw a detailed mental picture of the setting, your role, responsibilities, and how you feel about them.
21. Have you noticed any changes in your character/personality since you have entered medical school? Have you become stronger, or tougher, for instance? Do you still socialize with friends who are not in medical school?
22. What is your idea of medical professionalism? Is it useful the way it is being taught?
23. What do you think 'patient-centeredness' means in medical practice?

Appendix D

Focus Group Protocol

1. What is your opinion about the following excerpt?

"Doctors are no more your friends than are butchers and plumbers. As a matter of fact, I had trouble with my plumber last week" *~A Series of Unfortunate Events, 2018 (Netflix TV-show)*

2. What is your opinion about the following excerpt?

"Although some doctors are said to be more interested in fees than they should be, most physicians are idealistic benefactors of humanity, both hardworking and selfless in their efforts to help the sick." *~From an interview with a medical student, Boys in White, 1965*

3. You are a resident and have 10 min before participating in a surgery you have been looking forward to. There are 3 patients who need your urgent attention:
    a. An 80-year-old who is very talkative and has been mean to junior doctors, but she is the wife of an important attending physician at your hospital.
    b. A 25-year-old educated patient who is nice and engaging and takes good care of himself. His mother sued the hospital last year.
    c. A 55-year-old homeless patient who has been admitted 3 times over the last month with no improvement because he keeps discharging himself.

You have enough time to visit only 1 of these patients and leave the other two to your interns. Which one would you choose, and why?

4. If a patient cannot afford the fees, or is undocumented, would you still treat them? How does patient-centrism play out in this?

5. What are your thoughts about alternative medicine?
6. “Scariness is the true measure of a monster, if you are not scary, what kind of a monster are you?”*~2013 Film: Monster University*.

   What if you had to fill-in-the-blanks for the following: _____ is the true measure of a physician, if you are not _____, what kind of a physician are you?
7. What are your thoughts about the following documentary movie trailer: To Err is Human (https://www.toerrishumanfilm.com/)?
8. There is a healthcare team of more than 10 people caring for a patient. Who, in your opinion, is going to make the patient well? Provide your answer in maximum 2 sentences.
9. Alex is 12, he wants to become a doctor when he grows up. What do you think is one major motivation behind his decision?
10. What is the ultimate goal of medical practice?
    a. To fix/mend/recover the human body
    b. To eliminate the disease
    c. To alleviate human suffering
    d. Other?

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Van Ryn, M., Burgess, D., Malat, J., & Griffin, J. (2006). Physicians' perceptions of patients' social and behavioral characteristics and race disparities in treatment

recommendations for men with coronary artery disease. *American Journal of Public Health, 96*(2), 351-357. Doi:10.2105/ajph.2004.041806

Wagner, P., Hendrich, J., Moseley, G., & Hudson, V. (2007). Defining medical professionalism: A qualitative study. *Medical Education, 41*(3), 288-294. Doi:10.1111/j.1365-2929.2006.02695.x

Walker, A. G. (1986). The verbatim record: The myth and the reality. In S. Fisher & A. D. Todd (Eds.), *Discourse and institutional authority: Medicine, education, and law* (pp. 205-222). Norwood, NJ: Ablex Publishing.

Wear, D., & Nixon, L. L. (2002). Literary inquiry and professional development in medicine: Against abstractions. *Perspectives in Biology and Medicine, 45*(1), 104-124. Doi:10.1353/pbm.2002.0019

Webb, D. A. (2013). *Foucault's Archaeology: Science and Transformation*. Edinburgh University Press.

Wetherell, M., Yates, S., & Taylor, S. (2001). *Discourse theory and practice: A reader*. London: SAGE.

Wong, R., Kitto, S., & Whitehead, C. (2016). *Canadian Family Physician, 62*(9), 701-703.

Curriculum Vitae

Homaira M. Azim

Education

Doctor of Philosophy (Ph.D.) 2020

Anatomy and Cell Biology with a minor in Education
Indiana University, IUPUI, Indianapolis, IN

Doctor of Medicine (M.D.) 2008

Kabul University of Medical Sciences (KUMS), Kabul, Afghanistan

Present Academic Appointments

Instructor of Anatomy (Primary Appointment) Jan 2020 – Present

Director, Surgical Anatomy Elective Course for 4th year medical students
Co-director, Advanced Anatomy Elective Course for 4th year medical students
Co-director, Distinction in Anatomy Program
Department of Medical Education
Paul L. Foster School of Medicine (PLFSOM)
Texas Tech University Health Sciences Center – El Paso

Responsibilities.

- Preparing and teaching anatomy and embryology sessions including TBL and clinical case study sessions, cadaver-based gross anatomy labs, and online self-study modules
- Participating in curriculum development and student assessment activities related to the pre-clerkship medical education

Clinical Instructor of Anatomy (Secondary Appointment) Jun 2020 – Present

Woody L. Hunt School of Dental Medicine (WLHSDM)
Texas Tech University Health Sciences Center – El Paso

Responsibilities.

- Preparing and teaching anatomy and embryology sessions including TBL and clinical case study sessions, cadaver-based gross anatomy labs, and online self-study modules
- Participating in curriculum development and student assessment activities related to the dental medical education

Previous Academic Appointments

Independent Teaching Experience

Visiting Professor of Anatomy and Physiology. Summer 2016 – Fall 2019

Instructor of Record
BIOS 255N (A&P III) and BIOS 256N (A&P IV)
Undergraduate courses, 2 credit hours each
Chamberlain University, College of Nursing
Indianapolis Campus

Responsibilities.

- Conducting all lectures and labs
- Preparing lecture and lab presentations and other class material as appropriate
- Teaching fetal pig dissection as a requirement in the lab
- Preparing, proctoring, and grading all assessments

Adjunct Instructor of Anatomy and Physiology. Spring 2016 – Fall 2019

Instructor of Record, APHYS 101 and APHYS 102
Undergraduate courses, 3 credit hours each
Department of Science, College of Arts, Sciences, and Education
Ivy Tech Community College, Central Indiana Region
Franklin and Shelbyville Campuses

Responsibilities.

- Conducting all lectures and labs
- Preparing lecture and lab PowerPoint presentations and other class material including but not limited to study guides, class projects, and formative assessments
- Designing various homework assignments
- Preparing, proctoring, and grading all assessments

Summer Faculty. Summers 2017 & 2018

Instructor of Record for PHTH 601 Advanced Human Anatomy
Graduate level course, 8 credit hours
Master's in Occupational Therapy (MSOT) Professional Program
Department of Applied Medicine and Rehabilitation
Indiana State University

Responsibilities.

- Conducting 4-hour lectures, twice a week
- Conducting 4-hour cadaver-based gross anatomy labs, twice a week

- Developing course syllabus, grading scales for assignments as well as course calendar and class schedule
- Preparing all course material including but not limited to lecture PowerPoints, class projects, formative assessments, lab presentations and dissection guides
- Preparing, proctoring, and grading all quizzes and exams

Adjunct Lecturer of Human Anatomy. Fall 2012

Instructor of Record
BIOL N261, Human Anatomy
Undergraduate course, 5 credit hours
Division of Science
Indiana University Purdue University Columbus (IUPUC)

Responsibilities.
- Conducting lectures and labs for 3 hours, twice a week
- Preparing all lecture and lab PowerPoint presentations, study guides, and other course material
- Preparing, proctoring, and grading all assessments

Assistant Professor of Gross Anatomy. 2008 – 2011

Kabul University of Medical Sciences, Kabul, Afghanistan

Responsibilities.
- Conducting lectures in graduate and undergraduate courses at Medicine, Dentistry, Nursing, and Public Health schools
- Conducting non-cadaver-based laboratory sessions in all of the above courses
- Designing and preparing course materials including lecture notes and PowerPoint presentations
- Preparing, proctoring and grading assessments
- Participating in professional development conferences and seminars in the department

Teaching Experience as Associate Instructor (TA)

Course Instructor. Spring 2019

BIOL-N461: Cadaveric Human Anatomy
Undergraduate course, 5 credit hours
Indiana University School of Medicine
IUPUI Campus, Indianapolis

Responsibilities.

- Cadaver-based teaching in gross anatomy lab for 3 hours, twice a week
- Participating in setup, proctoring, and grading lab practical exams

Associate Instructor. Fall 2018

MED-X620, Human Structure and Development
Medical course, 8 credit hours
Indiana University School of Medicine
IUPUI Campus, Indianapolis

Responsibilities.

- Cadaver-based teaching in gross anatomy lab for 2 hours, 2 times a week
- Performing prosections as necessary
- Participating in setup, proctoring, and grading lab practical exams

Associate Instructor. Spring 2018

ANAT D501, Functionally Oriented Human Gross Anatomy
Graduate level course, 5 credit hours
Indiana University School of Medicine
IUPUI Campus, Indianapolis

Responsibilities.

- Cadaver-based teaching in gross anatomy lab for 2 hours, 2 times a week
- Performing prosections as necessary
- Participating in setup, proctoring, and grading lab practical exams

Associate Instructor. Fall 2017 & Fall 2019

ANAT D502, Basic Histology
Graduate level course, 4 credit hours
Indiana University School of Medicine
IUPUI Campus, Indianapolis

Responsibilities.

- Teaching light microscope-based histology wet-labs for 4 hours, once a week
- Facilitating TBL sessions for 3 hours, once a week
- Preparing, conducting, assessing, and grading 1 TBL session in the course
- Participating in setup, proctoring, and grading lab practical exams

Associate Instructor. Spring 2017

MED-X660, Neuroscience and Behavior
Medical course, 6 credit hours
Indiana University School of Medicine
IUPUI Campus, Indianapolis

Responsibilities.

- Facilitating small group discussions in TBL and Case Study sessions
- Teaching neuroanatomy in wet-labs

Associate Instructor. Spring 2017

ANAT-D853, Human Developmental Anatomy (Embryology)
Graduate level course, 3 credit hours
Indiana University School of Medicine
IUPUI Campus, Indianapolis

Responsibilities.

- Facilitating small groups in student-led study sessions every two weeks
- Going over the previous week's quiz, answering any questions/clarifying confusions

Associate Instructor. Fall 2016

MED 612 A, Essential Clinical Anatomy and Development
Medical course, 8 credit hours
Marian University Indianapolis
College of Osteopathic Medicine (MU-COM)
Doctor of Osteopathic Medicine (DO) Professional program

Responsibilities.

- Cadaver-based teaching in gross anatomy lab for 2 ½ hours, 3 times a week
- Holding 2-hour review sessions before each block exam

Associate Instructor. Summer 2016

ANAT D528, Gross Anatomy for Physician Assistants
Graduate level course, 5 credit hours
School of Health and Rehabilitation
Master's in Physician Assistant Studies (PA) Professional Program
IUPUI Campus, Indianapolis

Responsibilities.

- Cadaver-based teaching in gross anatomy lab for 3 hours, 3 times a week
- Preparing and delivering 3 lectures in the course
- Participating in setup, proctoring, and grading lab practical exams

Associate Instructor. Fall 2015

ANAT D503/D850, Gross Anatomy for Medical, DPT and Graduate Students
Medical course, 8 credit hours
Indiana University School of Medicine, (IUSM)
IUPUI Campus, Indianapolis

Responsibilities.

- Cadaver-based teaching in gross anatomy lab for 3 hours, 3 times a week
- Performing prosections for 3 hours, 2 times a week
- Participating in setup, proctoring, and grading lab practical exams

Associate Instructor. Fall 2014 & Spring 2015

ANAT A550-551, Gross Anatomy for Medical and Graduate Students
Medical courses, 4 credit hours each
Medical Sciences Program
Indiana University Bloomington

Responsibilities.

- Cadaver-based teaching for 3 hours, twice a week
- Performing prosections for 1 hour, twice a week
- Holding independent lab reviews and Q&A sessions on weekends

Other Academic Appointments

Visiting Scholar. Fall 2014 – Spring 2016

Medical Sciences Program
Indiana University Bloomington

Anatomy and Physiology Tutor. Spring 2014 – Fall 2015

ANAT A215, Basic Human Anatomy
Undergraduate course, 5 credit hours
Indiana University Bloomington

Anatomy and Physiology Tutor. Fall 2012

Academic Resources Center (ARC)
Indiana University Purdue University Columbus (IUPUC)

Responsibilities. Tutoring A&P students from both IUPUC and Ivy Tech, Columbus

Research Visiting Scholar. Fall 2011 – Fall 2013

College of Arts and Sciences
School of Global and International Studies
Center for the Study of the Middle East (CSME)
Indiana University Bloomington

Responsibilities.

- Conducting a research project on legal bases of dissecting human cadavers from a socio-religious Islamic perspective. The practice of human dissection has been banned by the government in Afghanistan since 1992 due to religious reasons. This research project was part of an initiative to start advocacy for restoring the practice in medical education.
- Writing a manuscript to be published as a book.

Professional Talks and Conference Presentations

Using Facebook as a Learning Medium in Undergraduate Anatomy and Physiology (A&P) Courses: Conference Presentation. Apr 2019

Oral presentation of the original research as first author
Educational Research Platform
American Association of Anatomists (AAA) Society
Experimental Biology (EB) Annual Meeting – 2019
Orlando, Florida

Student Perceptions and Experiences with Team-Based Learning (TBL) in a Graduate Histology Course: Conference Presentation. Apr 2018

Oral presentation of the original research as First Author
Educational Research Platform
American Association of Anatomists (AAA) Society
Experimental Biology (EB) Annual Meeting – 2018
San Diego, California

Healthcare system in the Muslim World: Lecture and Discussion. Apr 2016

SPEA-H 527 International Healthcare Systems
School of Public and Environmental Affairs (SPEA)
Indiana University, Bloomington

Legal Bases of Human Dissection from a Wider Islamic Perspective. Nov 2012

Lunch and Lecture event
Center for the Study of the Middle East (CSME)
Indiana University, Bloomington

Permissibility of Human Dissection: Conference Presentation. Oct 2012

Mapping the Landscapes of Islamic Studies at IU, 22nd annual conference
School of Global and International Studies
Indiana University, Bloomington

Professional Service and Membership

Manuscript Reviewer. Journal of Biomedical Education. 2016 – 2019
Member. American Association of Anatomists (AAA). 2017 – Present

Major Professional Development Activities

Transcript of Completion: Train the Trainer, Point of Care Ultrasound Course. June 2019

4.00 credits.
Continuing Medical Education (CME)
Indiana University School of Medicine- Indianapolis, IN

This course provided lectures as well as hands-on experience in performing gall bladder, renal, and heart ultrasonography. Anatomy faculty at the Department of Anatomy and Cell Biology (IUSM) were encouraged to attend this course. The course goal was to enable participants to use ultrasound as a teaching tool in their gross anatomy courses.

Certificate of Completion: Two-Day Professional Grant Development Workshop. Aug 2019

Grant Training Center
Indiana University Bloomington- Bloomington, IN

This workshop was geared towards beginners seeking to acquire the techniques to research and draft grant-winning proposals for various funders; as well as experienced grant writers looking to polish existing skills and receive updates about funding trends. The training addressed the overall strategic plan for writing grants, including needs statement, mission, goals, objectives, activities, evaluation, key personnel, and budgets.

In general, the workshop focused on teaching participants how to:

- Comprehend the diversity of the funding community
- Research and identify potential donors
- Create the right fit with the selected funding agency
- Address the guidelines of proposals
- Identify and effectively write the key elements of a proposal
- Integrate each component of the grant into the final product
- Develop focused and realistic budgets
- Package a professional grant submission
- Write winning grants that stand out among competition

Honors and Awards

Graduate Student Travel Fellowship Award. 2019

University Graduate School
Indiana University Purdue University Indianapolis (IUPUI)

Student and Young Faculty Travel Award. 2019

American Association of Anatomists (AAA)
For submitting an original research abstract and presenting it at the Experimental Biology annual meeting as First Author

Student and Young Faculty Travel Award. 2018

American Association of Anatomists (AAA)
For submitting an original research abstract and presenting it at the Experimental Biology annual meeting as First Author

Excellence in Teaching Award. 2011

Department of anatomy, Kabul Medical University, Kabul, Afghanistan

Outstanding Medical Student Award. 2005

For averaging a 95.7% in a total of 10 courses over a single semester Kabul Medical University, Kabul, Afghanistan

Volunteer Engagements

Associate Instructor. Fall 2014 & Spring 2015

(Non-pay Volunteering Visiting Faculty)
ANAT A550-551, Gross Anatomy for Medical and Graduate Students
Medical courses, 4 credit hours each
Medical Sciences Program
Indiana University Bloomington

Responsibilities.

- Cadaver-based teaching for 3 hours, twice a week
- Performing prosections for 1 hour, twice a week
- Holding independent lab reviews and Q&A sessions on weekends

Publications

Azim, H. M., & Yousufzai, H. R. (2010). *Human Anatomy for Dentistry Students* (1st ed., Vol. 1). Kabul, Afghanistan: Kabul Medical University Press.

Azim, H. M., & Yousufzai, H. R. (2010). *Human Anatomy for Dentistry Students* (1st ed., Vol. 2). Kabul, Afghanistan: Kabul Medical University Press.

Azim, H. M., & Mohaqqeq, N. M. (2010). *Gross Human Anatomy for Nursing Students* (1st ed., Vol. 1). Kabul, Afghanistan: Kabul Medical University Press.

Azim, H. M., & Mohaqqeq, N. M. (2010). *Gross Human Anatomy for Nursing Students* (1st ed., Vol. 2). Kabul, Afghanistan: Kabul Medical University Press.

Azim, H. M. (2010). *Human Anatomy for Public Health Students* (1st ed., Vol. 1). Kabul, Afghanistan: Kabul Medical University Press.

Azim, H. M. (2011). *Human Osteology* (1st ed.). Kabul, Afghanistan: Ministry of Higher Education Press.

Azim, H. M., Yousufzai, H. R., & Mohaqqeq, N. M. (2011). *Gross Human Anatomy for Medical Students: Back and Limbs* (1st ed., Vol. 1). Kabul, Afghanistan: Ministry of Higher Education Press.

Azim, H. M., Condon, K. W., & Brokaw, J. J. (2018). Student Perceptions and Experiences with Team Based Learning (TBL) in a Graduate Histology Course. *FASEB J., 32*(1). Doi:10.1096/fasebj.2018.32.1_supplement.366.3

Azim, H. M. (2010). *Human Anatomy for Public Health Students* (1st ed., Vol. 2). Kabul, Afghanistan: Kabul Medical University Press.

Schaefer, A. F., Wilson, A. B., Barger, J. B., **Azim, H. M**., Brokaw, J. J., & Brooks, W. S. (2018). What Does a Modern Anatomist Look like? Current Trends in the Training of Anatomy Educators. *Anatomical Sciences Education, 11*(6). Doi:10.1002/ase.1806

Yousufzai, H. M., **Azim, H. M**., & Danesh, H. U. (2011). *Gross Anatomy for Medical Students: Thorax, Abdomen and Pelvis* (1st ed., Vol. 2). Kabul, Afghanistan: Ministry of Higher Education Press.

Yousufzai, H. R., Sahaar, H. M., **Azim, H. M**., Danesh, H. U., & Mohaqqeq, N. M. (2011). *Gross Anatomy for Medical Students: Head, Neck, and Neuroanatomy* (1st ed., Vol. 3). Kabul, Afghanistan: Ministry of Higher Education Press.

To Be Published

Azim, H. M. Cultural Diversity Curriculum in Medical Education. Journal of Medical Education and Curricular Development. Perspective article [accepted for publication- in press].

Azim, H. M., Using Facebook Group Page as a Learning Medium in Undergraduate Anatomy and Physiology Courses. Original research report [manuscript ready for submission].

Azim, H. M., Condon, K, Brokaw, J. Does TBL work? Student perceptions of team-based learning in a graduate histology course. Original research report [manuscript ready for submission].

Azim, H. M. How learning occurs? Student perceptions on conceptual learning in a graduate histology course. Original research report [manuscript ready for submission].

Azim, H. M., What type of students are more likely to succeed in Anatomy and Physiology (A&P) courses? Original research report [manuscript ready for submission].

Azim, H. M. Frame analysis of qualitative data. Qualitative methods review [manuscript in preparation].

Azim, H. M. Taxonomies analysis of qualitative data. Qualitative methods review [manuscript in preparation].

Azim, H. M. An archaeology of the modern medical discourse. Doctoral dissertation [manuscript submitted].