

**The Ambivalent Promise of Integrative Medicine:
Reforming Integration Discourse & Practices**

by

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Submitted to the Graduate Faculty of the
Dietrich School of Arts and Sciences in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy

University of Pittsburgh

2021

UNIVERSITY OF PITTSBURGH

DIETRICH SCHOOL OF ARTS AND SCIENCES

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2021

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“The Ambivalent Promise of Integrative Medicine: Reforming Integration Discourse & Practices” aligns with feminist, anti-colonial aims by interrogating the power that vested stakeholders have to influence national and global narratives about healing, and therefore, who gets to decide what is worth integrating into the US healthcare system(s). The National Institute of Health’s definition of Integrative Medicine (IM) implies that underlying beliefs about holistic health and illness, regardless of their cultural origin, can be compatible with Western medicine, but only if those “alternative” therapies pass the same scientific scrutiny of Biomedicine. I argue, however, for the need to reform common distinctions between “Western” and “alternative” medicine(s), to expose which dominant ways of knowing are reinforced through this naming, as well as whose practices and philosophies are elided or appropriated in the process.

As a practitioner and student of holistic medicine, I necessarily reflect on my subjectivity as a researcher, which I address through Constructivist Grounded Theory. I also deploy rhetorical analysis and theorization, which allows me to consider the systemic impact of IM discourse and practices, including the perspectives of local IM specialists I interviewed for this project. By analyzing local and inter/national IM discourse (e.g., World Health Organization and National Institute of Health) and respective material processes, I show that current IM models re-produce pre-existing constraints for healthcare consumers that IM often claims rhetorically to resolve. My

chapters investigate whether current IM processes can enact sites of intersectional, anti-colonial feminist resistance, and whether ontological integration of not just disparate practices but disparate healing ontologies is possible. Ultimately, I argue that IM encounters should be reformed through a conception of agential realist ritual, which would mitigate or resolve many of the limitations of Biomedicine that IM subtly reproduces.

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Dedication

For Gaia and all her children.

Acknowledgements

I'd like to thank Dr. Steve Carr for being the most human/e academic mentor I ever had the privilege to work closely with, and for also reminding me that the writing process can be truly enjoyable—that I do in fact love writing and reading as much as when I started this program. My blunt meeting with Dr. Carr during recruitment, where he conveyed the potential he saw in my (what I can only imagine were) wildly unbridled ideas, was the deciding factor for me to join this department. His support (and his bluntness) never stopped from there, and I am very lucky that he agreed to finish out this process with me, same as it began. I also have Dr. Elizabeth Pitts to thank for simply making me a better writer, and therefore, teacher of composition. Dr. Pitts also always supported me in protecting my labor as part of the balance of professional life, for which I am grateful. I'd also like to thank Dr. Olga Kuchinskaya, Dr. Jules Gill-Peterson, and Dr. Cory Holding for their generosity and enthusiasm for my work—it means the world to me.

I would not have completed my PhD this early in life if my father, William Hoover, hadn't prioritized my education since childhood. For his belief in me and my sisters that education was our means of being independent, agentive women in a man's world, I am grateful. My mother, Marion Hoover, was the only person who told me (and continues to tell me) to follow my heart when I applied to grad schools. I continue to be inspired by both of my sisters, Bianca Azartash-Namin and Angie Hoover, who are scientists, and hope that this project bridges our vastly different worlds a little closer. Behind my work is also a pack of fierce, loving, and supportive women, whom I am blessed to call best friends and whose emotional support I could not have finished this degree without. And finally, I'd like to thank my cats, Adobo and Daria, for being my constant

companions throughout this writing process and always offering snuggles when writing or thinking was just too much.

1 Introduction & Methods

1.1 Introduction

Integrative medicine (IM), sometimes referred to as Complementary and Alternative Medicine (CAM) or Traditional Medicine (TM), has, according to the World Health Organization, gained a global reputation for being the modern solution to some of the greatest challenges biomedical professionals face: successful treatment of chronic and relapsing diseases, lifestyle illnesses, and the ever-mystifying, incurable diseases of the mind. While definitions of IM differ, IM is commonly understood as a more recently established approach to healthcare that merges healing modalities from various cultural origins, placing emphasis on the patient as an agent of their own holistic healthcare, including their body, mind, and in some definitions, spirit or soul. IM, therefore, is also considered by many, to be the revolutionary, even feminist, alternative to biomedicine, which has been criticized historically for its reproduction of archaic power dynamics and its tendency to disembodiment patients from the holistic meaning of their illnesses. However, these optimistic views of IM tend to eschew looking at what lies just under the surface of this promising new face of healthcare.

Ideally, IM would combine what many in IM scholarship call “the best of both worlds” of medicine. These “worlds” are typically divided according to the designation of standard modern medicine, which tends to be synonymous with “biomedicine,” “Western,” “conventional,” and “allopathic” medicine in IM literature. The second “world,” then, subsumes anything non-Western into a single category; these forms of medicine are often referred to as “alternative,” “complementary,” “natural,” or “traditional” medicines. As the rigid, socially constructed

dichotomy of these designations implies, IM is characterized by myriad technical and practical incompatibilities, as well as deeper philosophical tensions that emerge upon closer inspection of IM in action.

Technical and epistemic incompatibilities range from the decisions of individual IM departments to include certain practices over others, to the questions of how IM practitioners can be afforded respectable forms of agency to diagnose and treat healthcare patients in hospital settings. It can also look like the difficulties implied by designing biomedical research for healing modalities that privilege the role of mind, emotion, and in some cases, something like a “spirit” or “energy,” when most biomedical research aims to describe the role of physical mechanisms in illness. This latter example also demonstrates how concerns about integration extend to a philosophical and ontological dimension, considering that the translation of languages is a persistent constraint in transnational medical discourse. Because language constitutes the realities we can conceive of, IM scholarship designed and published in English inherently has the effect of eliding distinct cultural understandings about healing philosophies. Furthermore, biomedical ontology tends to privilege the physical substrate of reality as causal to health and illness, while many other approaches consider the role of the mind/emotion to be primary, and others still insist on the primacy of energetic blockages or possessions of spirits.

For all of these reasons above and more, IM processes face the challenge of integrating these diverse practices and ontologies, without treading on non-dominant beliefs about healing. At least to date in the US, IM’s public facing rhetoric often claims to resolve rather than reproduce the forms of oppression feminists and others have historically criticized biomedicine for, including, in a formative period (late 19th and early 20th century) for the face of US healthcare: the systemic political and commercial annihilation of holistic or alternative medicine. Feminists have

also criticized biomedicine for the abuse of authority in doctor-patient relationships, the objectification of bodies, the condescension toward women and people of non-dominant races, and the overuse of aggressive technological and chemical invasion, to name a few. However, as the examples of incompatibilities above demonstrate, IM has its own ethical concerns to reckon with in addition to the charges against biomedicine: the appropriation or erasure of other ways of knowing and being, the lack of national and institutional recognition for the legitimacy of non-scientific IM modalities, as well as the role IM plays in reproducing a neoliberal economy of healthcare which privileges “developed” nations most.

In this dissertation, I therefore ask *how substantive integration of such disparate healing practices and philosophies is possible? And if so, how do current IM processes affect various interested groups, such as Indigenous healers, women, healthcare providers, patients, and policymakers?* Even more pointedly, from a critical, humanist perspective, the third and final question of this work asks *how IM can begin to resolve the cultural appropriation of non-dominant beliefs about healing?*

I define “substantive integration” as including both the consideration of which material practices to integrate in IM, but also the consideration of which underlying ontologies, philosophies, or spiritualities to integrate. I emphasize that integration needs to include more than material practices in my conception of “substantive integration” because this is not a current priority of most official IM discourse I will analyze, and the lack of this consideration generally results in cultural appropriation or assimilation. I therefore also consider a feature of “substantive integration” to be the utmost prioritization of mitigating or eliminating processes of cultural appropriation which are currently underway. One example of this lack of substantive integration is that especially American IM rhetoric often claims to be approaching healing holistically—as

treating a patient like a body, mind, and soul. However, references to *soul* or *spirit* in American IM policy tends to be performative, subtly reinscribing the primacy of physical interventions and mechanisms that biomedicine already privileges. For this reason, “substantive integration” must go beyond performativity; national IM policies and research design regarding IM implementation must substantively account for health and illness as *biopsychosocial*, even spiritual, phenomena. The final feature I consider an aspect of “substantive integration” here is accessibility; if IM rhetoric claims to resolve oppressive, even anti-feminist, dynamics of biomedicine, as I will demonstrate in multiple chapters, then IM processes need to follow through with these promises by actually being accessible to most healthcare patients, which they are currently not.

My research questions about substantive integration concern multiple audiences because these questions multiply at infinitely plural and local sites of integration. Just a few cases include (mis)translation of languages, the erasure of philosophical underpinnings for a practice, or the designation, by biomedical institutions, of what constitutes “legitimate” or “valid” modalities. Sociology of IM and CAM has largely focused on the appropriative and unethical dimensions of IM practices, while IM research designed and published by biomedically-trained scholars tends to validate and legitimize the same integration processes that sociologists heavily critique. IM journals like the *Journal of Integrative Medicine*, for example, provide clinicians with “accurate” and “peer-reviewed” scientific evidence for the legitimization of integrative modalities, but this discourse community does not focus on how reinscribing Indigenous forms of medicine through scientific discourse is already an act of colonization.

By asking the questions I do in this dissertation, I contribute to critical scholarship of IM, and I address IM practitioners themselves, as well as the biomedical community that has, at least for now, a non-reciprocal power and privilege to classify integrative practices. I ask these questions

to these communities specifically so that those participating in the institutions of IM can also reflect upon and revise the actions of their individual role within IM processes. A head of an IM department could recalibrate how they decide what practices are allowed within the department, whereas IM researchers could reconsider how to design research that substantively, not performatively, integrates tenets of IM philosophy, like the role of mind, emotions, and spirit in illness. And for IM practitioners, these individuals could reflect on how they rhetorically present IM to patients, being careful not to predicate their ethos purely upon their affiliation with biomedical or scientific authority.

There is no single way for all IM institutions and agents to suddenly become more substantively and less problematically integrated. This work needs to be local, plural, and consistently re-evaluated for the concerns that arise as IM continues to evolve. Decisions curate the architecture of IM institutions, and decisions are never neutral. So I prompt scholars and practitioners to ask, through which processes of decision making does integration occur? Who benefits from those decisions? And what does such a choice reveal about the underlying structures of power, discourse, and materiality that entangle to produce the apparition of a truly “integrated” medical system?

The word *integration* implies a leveling, an ontological flattening, of what *could* be considered valuable when it comes to healing, by subjecting diverse components to due consideration and just application. However, defining what is integrated in IM, and how it is decided what is worth integrating, is not amenable to static characterization, though it is certainly worth characterizing in the continuous sense of the verb. In this introductory chapter, I explain why the very naming and defining of IM is an act of symbolic violence, and, I argue, also at least in part the continuation of centuries of appropriative forces entangled with a Eurocentric scientific

legacy. I will then show that my theoretical framework, a feminist, anti-colonial lens, and my methodological approach of rhetorical analysis and constructivist grounded theory, are integral to approaching answers to the questions my dissertation opens. I close this introductory chapter with an overview of the subsequent chapters.

1.1.1 Defining IM

Integrative medicine institutions claim to solve a lot of issues, including being able to bring together “the best of both worlds” (“Western/alternative” medicine) in order to capitalize on various cultures’ approaches toward healing. Depending on who you ask, the definition of IM or CAM (complementary and alternative medicine) will vary—at times, significantly. According to the National Institute of Health’s National Center for Complementary and Integrative Medicine (NCCIM), IM usually refers to

a style of practice that places strong emphasis on a holistic approach to patient care while focusing on reduced use of technology. Physicians advocating this approach generally include selected complementary health practices in the care they offer patients, and many have established practice settings that include complementary health practitioners.

This definition emphasizes a hybrid approach of diagnosis that comes down to the doctor’s discretion and agency to choose modalities. The World Health Organization (WHO) breaks up their definitions into Traditional Medicine (TM) and Complementary Alternative Medicine (CAM):

TM) Traditional medicine has a long history. It is the sum total of the knowledge, skill, and practices based on the theories, beliefs, and experiences Indigenous to different cultures,

whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness.

CAM) The terms “complementary medicine” or “alternative medicine” refer to a broad set of health care practices that are not part of that country’s own tradition or conventional medicine and are not fully integrated into the dominant health-care system. They are used interchangeably with traditional medicine in some countries. (3)

It is quite notable, from these powerful institutions, that WHO specifically integrates cultural sensitivity into their definitions rather than emphasizing doctor’s choices, which I will explore in much greater detail in Chapter 3. The Consortium of Academic Health Centers for Integrative Medicine, which was born out of NIH’s National Center for Complementary and Integrative Medicine, defines IM as “the practice of medicine that reaffirms the importance of the relationship between practitioner and patient, focuses on the whole person, is informed by evidence, and makes use of all appropriate therapeutic approaches, healthcare professionals and disciplines to achieve optimal health and healing.” Here, we see more emphasis on the patient’s agency, as opposed to the definition from the NIH, though once again, attention to cultural sensitivity is lost. And on a more local level, various scholars emphasize these critical components of their definitions of integrative medicine: the body’s innate ability to heal and less technical/chemical/invasive solutions to health (Weil; Maizes), placing the patient at the center of care, focusing on prevention and wellness, and attending to the physical, mental, and spiritual needs of the person (Coulter et al.; Weil), and perhaps the most critical definition yet presented by prominent medical sociologist Deborah Lupton: “these therapies constitute a rejection of the dualisms of nature/culture, individual/society, mind/body and subject/object which have characterized orthodox medicine” (130). In these definitions, we see emphasis on the agency of the body, the spirit/soul, and even

IM's ability to subvert the dominant philosophical and epistemological frameworks of biomedicine. Definitions which challenge biomedicine's authority tend to originate outside of official institutional discourse.

What some of the more critical definitions of IM have in common is the presupposition that until now, "Western medicine" has fallen short in some way, otherwise there would be no exigence for the rise of IM/CAM. WHO, for example, claims that CAM is the best current solution to the ever increasing rates of chronic and lifestyle diseases, like cancer, which are not currently resolved by "Western" medicine. Others insist the reason for the rise of CAM is external to medicine itself, such as Coulter and Willis who explain in "The rise and rise of complementary and alternative medicine: a sociological perspective"

that as social change (also involving globalization) has accelerated, faith in the ability of science and technology (including medicine) to solve the problems of living has declined. Social "green" movements with a preference for organic and non-chemical solutions to problems have arisen. Societal trends toward individualism seem to us to have influenced healthcare trends, with individuals being less prepared to accept traditional authority, such as doctors, and seeking greater levels of control and empowerment over their lives (a trend fueled by the Internet). (588)

Regardless of the reason for IM's rise, IM is often positioned as the *latest* instantiation of CAM, precisely because the movement continues to respond to egalitarian concerns about power and authority through the ability to name itself. Maizes opens an article on CAM sociology stating, "Integrative medicine is a *new* term that sometimes is used interchangeably with complementary and alternative medicine, and at other times refers to treatments that combine conventional medicine and alternative modalities" (148 emphasis mine). Similarly, Coulter et al. also comment

that “Integrative Medicine represents a rather *recent* but *emerging* field” (691 emphasis mine). As Maizes signals, however, it’s not that integrating medicine is new, but the turn to terminology that performs more egalitarian values is novel.

Before IM slowly became more in vogue than CAM or TM over the last decade, most referred to the blending of Western and non-Western medical practices as Complementary and Alternative Medicine or Traditional Medicine. As I will detail thoroughly in the Methods section of this chapter, I was able to design my research to include interviews with IM practitioners at a local hospital, and they commented extensively on IM’s shifts in naming. The reason for the transition to “Integrative Medicine,” as the director of my fieldwork site told me, is that it became increasingly pejorative and culturally insensitive to refer to “complementary” medicines as “alternative,” and now, even “complementary” carries negative connotations in comparison to “integrative.” For example, sociologist Nicola Gale, explains in “The Sociology of CAM,” “In the UK, Cant and Sharma argue that the shift made by the British Medical Association (BMA) from using the term ‘alternative’ to ‘complementary’ in 1993 was motivated by widespread criticism that the BMA was being dogmatic by rejecting non-orthodox approaches completely, so they sought to redefine their role as an ‘arbiter’ of ‘good’ and ‘bad’ medicine” (806).

For institutions in America, however, the naming of medicine that is complementary or alternative still implied biomedicine was the baseline of all treatment, inherently marginalizing anything else. In the effort toward democratization, even the US’s National Institute of Health renamed their National Center for Complementary and Alternative Medicine (estb. 1998), to the National Center of Complementary and Integrative Medicine in 2014 to reflect a more equal and due consideration of evidence-based treatment modalities. This terminological shift can be seen as an effect of time but also place; in some parts of the world, such as Australia and the UK,

scholarship still uses the terms CAM and TM, and the World Health Organization referred to their latest global health care strategy (2013) with the terms CAM and TM, as well, while the NIH opted for IM in their national IM strategy (2016).

Whether this “novel” approach to health care is termed IM, TM, or CAM, the increasing popularity of the term *IM* has done little to alter the power disparity produced by biomedicine subsuming IM practices. Medical professionals, IM practitioners, and IM scholars still conceptualize, debate, and discuss its constituents through a culturally insensitive binary: anything medical that derives from a biomedical, “Western” origin, and, on the other hand, everything else. An example of this divide is that “alternative” healthcare approaches are not considered “safe” or “validated” by the NIH unless they can be explained through physical, biological mechanisms. Another case is that my interviewees insisted on explaining the value of acupuncture or mindfulness through their scientific research basis to clients. One interviewee shared with me she did this intentionally to not mystify American Midwest clients with “Eastern” concepts like Buddhism. Therefore, as Gale points out, “naming is an exercise in power that in this field tends to be reflective of ‘Western’ biomedical dominance internationally and, second, that the dualism evident in most terms and definitions used is a product of historical social construction” (806).

In this dissertation, I will name the constituents of IM, and therefore any reference to scientific authority, differently. In a move that resembles Sandra Harding’s contribution of distinguishing capital “S” Science from diverse, plural “sciences,” I will be referring to the constituent parts of IM as capital “B” Biomedicine and the otherwise local, plural instantiations of “global medicines,” including the local, plural, and lived practices of lower-case biomedicine(s). For Harding, in *Science and Social Inequality: Feminist and Postcolonial Issues* (2006), Science is the concept that holds a global mythic status of singular objectivity—the one capital T True

means of comprehending nature that is secured by the insular validation of Science itself. “A world of sciences,” on the other hand, refers to the limitless, yet bounded, set of knowledge projects that destabilize the mythic singularity of Science, connoting hybrid, non-determinable locations of inquiry that sciences can take up. By adopting Harding’s terminology for science(s) in this dissertation, I avoid the error of conflating the necessarily intractable diversity of scientific projects from the hegemonic force of Science. This includes the fact that, for example, even what I, and Harding, refer to as “Eurocentric” sciences are inherently multicultural; the term “a world of sciences” captures this level of insight on the explanatory ladder, even though at a different level of that same ladder, Eurocentric sciences are often construed historically as merely Euro-descendent Science.

In a similar fashion, by distinguishing Biomedicine from global medicines, I acknowledge there is an epistemically dominant conception of Biomedicine, like Science, that tends to self-designate its authority to standardize or verify other medicines. “Global medicines,” on the other hand, acknowledges that the local, plural practices of even lower-case biomedicine(s) are just various instantiations of globally-distributed healing approaches (and that they certainly haven’t been bound to the “West” since colonization began in the 1400’s). This naming also implies that no single medicine has the authority to objectively designate or verify the legitimacy of other approaches to healing. I therefore assume that local, plural practices of lower-case “biomedicine(s)” belong under the category of “global medicines,” and that they are theoretically distinct from the epistemic dominance of Biomedicine. “Global medicines” finally captures that today there are less and less geographically isolated medicines in existence, and therefore, any rigid dichotomy between Western/nonwestern, or even scientific/non-scientific medicine, is largely a social construct.

Any re-naming of terms will, unfortunately, still be constrained by the manifold associations and historical usages of any diction. Nonetheless, I argue it is necessary to take a step in the direction of acknowledging that, for example, traditional Chinese medicine is not just a complement or alternative to a pre-ordained standard of “Western” or even “Scientific” medicine. While my preference as a scholar of discourse and language would be to transcend the use of any dichotomous terms because of their ontological inaccuracy, I maintain that finding some way to name the constituent factions of IM will continue to be especially necessary to scholars, practitioners, and medical professionals within the IM discourse community. Those discourse communities will still require practical, discipline-specific ways to reference the constituent parts of integration processes, and the attention to ontological shortcomings of naming will fall lower on the priority level of scholars who aim, for instance, to explain how acupuncture works according to the epistemology of Biomedicine. Still, I acknowledge that “global medicines” loses many connotations of common IM constituents, such as the emphasis on mind-body-soul medicine or non-invasive procedures—though I’d maintain “alternative” and “complementary” are equally vague, yet inherently imply a binary of dominator/oppressed. There is no perfect way to capture the constituents of IM in terms that avoid all vaguery and generalization, but certainly IM scholarship needs to begin re-conceptualizing those constituents outside of a binary of standard and alternative care.

I also need to pause here to explain that equal consideration of global medicines in an integrative paradigm does not inherently equate with equal efficacy of every healing modality on the planet. Harding, for example, articulates this issue as such in *Science and Social Inequality*:

Of course, there are important differences between modern physics or biology and premodern knowledge systems about nature’s order. To regard all of these different

knowledge or practice systems as sciences is not to regard them as equally accurate, comprehensive, or useful with respect to any particular questions we might ask. Some cultures understand the dangers to health of smoking; others do not. Some understand how to manage chronic pain; modern biomedicine has not until recently. Some can navigate effectively by the stars from Samoa to Australia; others would be totally lost if their gps broke down. Some can get people to the moon; others cannot. Some can accurately and comprehensively grasp how cultural projects infuse their research practices; others cannot.

(10-11)

In this dissertation, I do not emphatically endorse any given healing modality, whether biomedical, holistic, or Indigenous in origin. Instead, I am epistemologically wary of all, and I argue that there is no single objective procedure through which the verification of any can proceed because of their vastly distinct ontological contexts. The processes of integration will always be implicated in layers of economic, social, and political concerns, as well as they will necessarily depend upon the collective subjective experiences of what efficaciously heals, which can shift by popular belief alone. I do not pretend to have the single answer about how Biomedicine can ethically assess and approve of global medicines because this question not only reinforces the primacy of Biomedicine's authority to define, but it is also only answerable at *local, plural* sites of intervention, research, and education. In other words, integration processes will only happen more ethically when local agents take responsibility for substantive integration at every rung of the IM ladder. Instead of offering a single solution to what this system would look like, what I offer is ways of thinking about IM processes that move us closer to egalitarian outcomes for the groups most negatively affected by these processes. It is up to scientists, policy makers, healthcare professionals, and so many others what they choose to do with the insights of critical IM

scholarship to make IM processes fairer. And yet this does not imply that equality will simply mean anything goes in the world of healing.

It is true that one risk of an unchecked acceptance of global medicines into Biomedicine is that unsafe or non-efficacious modalities could be offered to patients, legitimizing practices not based in empirical evidence *yet*. However, this risk is insignificant compared to the glaring consequences of proceeding with business as usual, considering that many holistic global medicines are, many times, safer and less invasive than biomedical procedures. Furthermore, IM is currently having the effect of colonizing and appropriating global medical approaches to health, and Indigenous healers, low-income sectors of the world's populations, and the Earth itself are bearing the brunt of these lived consequences daily. I argue our attention needs to turn most urgently toward the groups currently experiencing oppression as a result of IM processes. This does not mean that sciences cannot work to comprehend global medicines in terms of sciences; it just means that sciences will also need to remain open to and reverent of global medicines' philosophies of healing, instead of just the practices which can be appropriated from their unfamiliar spiritual or philosophical contexts into biomedical explanations.

Until biomedical agents overwhelmingly embrace and expand their conception of what constitutes "the real" as it regards factors in illness (soul, environment, mind, emotion), I argue that substantive integration of biomedical and other global medical modalities is impossible. I remain optimistic that work like this dissertation and others in the field of IM scholarship are aiming, not to devalue scientific or biomedical practices, but to assist biomedical processes in becoming fairer, more ethical and efficacious overall for the improved healing outcomes of all healthcare patients. Substantive integration is possible if biomedical agents are also interested in this same goal: collaboration with scholars that explore *every* dimension of IM's effects, including

their social, political, and ethical dimensions. Next, I will explain how this dissertation is informed by the theoretical framework of feminist philosophy of science and de/postcolonial studies.

1.2 A Feminist, Anti-colonial Theory

This project takes a feminist, anti-colonial perspective that the processes of integrative medicine are “modern/developed” extensions of the original European colonizing project. Euro-descendant medicine has been integrating culturally-hybrid approaches to healing since the mid-millennium, but actual attribution of multicultural medical origins has been the systemic failure of Biomedicine until the recent naming of an “integrative medicine” paradigm. Like Harding’s famous title finds its answer in paradox (*Is Science Multicultural?*), so too does the answer to the question: is integrative medicine truly multicultural? Yes, science and medicine, from the point of colonization forward, has always been multicultural. However, a lack of reverence for democratic and *substantive* integration of cultures and philosophies has resulted in what sociologists Hollenberg and Muzzin name the greatest appropriative force on the planet today: integrative medicine. Naming integrative medicine as such guarantees little about the sincere attempt to integrate non-Eurocentric ideals of science, medicine, and technology, even if some agents within this process genuinely attempt such egalitarian hybridity.

Furthermore, I argue from the caution of an anti-colonial, feminist perspective that one of the primary features integrative medicine appears on track to colonize out of existence is any theory or practice of healing with distinctly spiritual origins—or, origins that figure in the animacy of a spirit, soul, and even matter itself, in addition to a mind and body. Many spiritual systems of healing are consonant with a conception of nature that sees materiality as agentive. Because these

spiritual systems tend not to make distinct splits between nature/culture, mind/body, and subject/object, the agency of materiality matters in the conversation of integrative medicine as well. I therefore emphatically endorse an ontology of material agency, though I attribute my understanding of such agency to knowledge that long predated white, Western academic conversations of matter, which I detail momentarily. Without questioning which system of knowledge we allow to characterize nature in the first instance, we miss the crucial capacity to integrate all former insights of the feminist question in science¹ of the last several decades. For

¹ Interrogating implications of what is at stake, and for whom, in current models of IM would not be possible without the invaluable work of these philosophers whose core inquiries revolve around exposing the dominant ways of knowing that disadvantage, initially, women (Haraway, Smith, Hartsock, Bordo, Fox Keller, Harding), but with increasing contributions of theory based on intersectionality (Crenshaw, Hill-Collins, Fausto-Sterling, Preciado, Gill-Peterson), includes anyone denied access to the social and political mobility of the normative scientific or medical subject. Heavily influenced by the poststructuralist theory (Foucault, Derrida, Deleuze & Guatarri), which recognizes the socially constructed nature of discourse and therefore subject formation, feminist philosophers of the 70's, 80's, and 90's importantly shifted the focus of science and technology studies when they insisted upon the primacy of examining how knowledge is generated from socially-situated locations. Feminists and some others generated this constructivist lens—though many resisted a full abandonment of an “objective reality”—in contradistinction to the taken-for-granted assumptions of the majority of European-descendant medical professionals of previous centuries, who largely characterized the production of scientific knowledge as the standard of pure or neutral universal law (Harding, Haraway). Feminist science and technology studies, which split further into feminist empiricisms (those committed to an objective, yet feminist, science) and standpoint epistemologies (those emphasizing the socially-contingent nature of knowing), interrogated the implications of situated knowledge makers within medical and scientific settings, such as the “objective” abstractions of male knowledge, which tended to reify nature/culture, subject/object, mind/body dichotomies; the absence of a female medical subject and maker of knowledge; as well as the discursive and political barriers which further alienate women (and others) from medical processes.

Today, these initial sites of feminist intervention in the sciences have splintered into countless further-specified categories of critical and cultural theory, including local investigations of particularly gendered ways of approaching specific sciences or even methods themselves. Examples include neurofeminisms, which examine how discourse and experimentation on brain science is problematically gendered (Bluhm, Pitts-Taylor, Jordan-Young); queer feminist science studies, which question the stability and norms of scientific discourse regarding sex and gender (Gupta, Rubin, Willey); or de/postcolonial analyses of the impact of hegemonic medical models (Harding, Lupton, Mol); and new materialisms, which draw attention back to the matter of gender and sex (Grosz, Frost, Coole). For my purposes in this dissertation, I will largely focus in the intersections of feminist philosophy of science regarding de/postcolonial perspectives as well as new materialism, though the latter especially I remain analytically skeptical of. First, we will look closer at what the feminist question in science and philosophy was about, what some of the criticisms in this debate are, and how evolving sub-disciplines thereof intersect with my own work in analyzing the integrity of IM processes. Then, I will look closer at the postcolonial and new materialist perspectives which further specify what is at stake in my research. Gaining momentum in the '70s and 80s, feminists working in various scientific disciplines gathered in collective criticisms of the androcentric nature of science and medicine, which tended to elide self-reflexive accountability for the socio-political production of such knowledge. As more diverse voices emerged into that conversation, however, many feminists questioned one of the greatest drawbacks to having a “feminist” standpoint: by articulating “the” feminist standpoint, various intersections of women were inherently not included in such an articulation. Feminist standpoint theories would need to become even more situated, local, and intersectional

as time progressed. Aside from the difficulty of attempting to make sciences accountable for the ways in which such (political) knowledge production excluded many kinds of women, feminist philosophers were also looking closely at questions of the nature of scientific production itself, and whether or not some aspects of androcentric sciences were worth salvaging.

One instance of these debates on what feminist science should look like was that by identifying the problematic androcentric values of the sciences, feminists needed to decide whether they wanted to claim sciences should be altogether value-free (which would actually reinforce an androcentric value of science being inherently impartial), or whether values were inevitable and therefore should be replaced by feminist values which offered a more “real” or “objective” view from below (which would also create a similar but different problem of value-laden science). Others still argued that while value-laden science is inevitable and perhaps even productive, there is still a means by which to do science neutrally enough that such values do not interfere with more objective truths science tends to come into contact with; in this case, feminists would continue the search for empirically valid truths of reality, but would also need to subject such scientific process to intense reflexive scrutiny for the socio-political contingencies of its knowledge production, which would later be sealed into the concepts of “situated knowledge” (Haraway), “strong objectivity” (Harding), and “agential realism” (Barad). These various allegiances, some closer to the end of the spectrum that privileges the socially constructed nature of reality, and some closer to the end of preserving a dedication to empiricism itself, constituted what Sandra Harding named “The Question of Science in Feminism” in her pivotal ‘86 book. In this text, Harding characterized the major trends of feminist perspectives on science into three groups: postmodern feminism, feminist empiricism, and standpoint epistemology, all of which continued to blur boundaries with the others over time, which Harding advocated for.

Scholars especially notable for sparking the debate of what a feminist standpoint even looks and sounds like include Dorothy Smith, Nancy Hartsock, Hillary Rose, Donna Haraway, Sandra Harding, Susan Hekman, and Patricia-Hill Collins, as well as many others. For instance, Dorothy Smith, an early standpoint theorist and pioneer of critiquing how Sociology, as a field, merely reinforced patriarchal ideologies of culture, rather than attending to the nuances of lived experiences, made massive contributions to feminist philosophy of science by interrogating the foundation of how one should even *do* sociology; she explored these themes in her works, “A Peculiar Eclipsing: Women's Exclusion from Man's Culture” and “A Sociology for Women” (published between 1972 and 1977 and revised as *The Everyday World as Problematic*). However, her work, though at times self-aware of its own limitations, tended to commit the problematic tendency to reduce women to a general standpoint, as well as it was unable to escape its own “inner-circle” discourse that Smith in fact critiques as exclusionary, according to Patricia Hill Collins. Collins, in “Transforming the Inner Circle: Dorothy Smith's Challenge to Sociological Theory,” states “When we account for the diversity of people's experiences, for diversity among women, and for the experiences of people of color and other historically marginalized groups, the importance of local knowledges-of theorizing from locations other than the controlling “texts” of dominant discourse-comes into sharper focus” (78).

Inevitably, serious attention to the nuance of marginalized experiences and discourses were not carefully figured in yet to the white feminist-of-science agenda, leading Collins to theorize a Black feminist standpoint in her works: “Learning from the Outsider Within: The Sociological Significance of Black Feminist Thought”; “The Social Construction of Black Feminist Thought.”; *Black Feminist Thought*. Another critic of Smith’s work, Susan Hekman, attempted in ‘97 to “reopen the debate of feminist standpoint theory” in her article “Truth and Method: Feminist Standpoint Theory Revisited,” by commenting on the inherent contradictions in the works of Dorothy Smith (and others, like Nancy Hartsock). On Smith she comments: “Her constantly reiterated thesis is that her approach is superior to ‘abstract sociology’ because it is rooted in ‘an actual material setting, an actual local and particular place in the world’ (1979, 181)” (348), and that Smith does this without acknowledging “that that ‘reality’ is also discursively constituted. To do so would be to abandon the neat dichotomy between abstract concepts and lived reality on which her approach rest” (348). Clearly, feminist standpoint epistemology was riddled with its own contradictions, which Hekman also points out in another crucial thinker, Nancy Hartsock.

Nancy Hartsock, known for characterizing “the feminist standpoint” in her 1983 book, *Money, Sex, and Power*, and subsequent article, “*The Feminist Standpoint*,” was like Smith one of the first to succinctly synthesize a Marxist standpoint theory of the proletariat with that of the feminist’s unique social position to critique androcentric hegemony in science. Hartsock specifically argues that “women’s lives make available a particular and privileged vantage point on male supremacy” (284). Hartsock, however, also commits contradiction as she simultaneously argues social relations as constructed through difference in material experiences (a social constructionist argument), while also stating there is some universal and mutual reality women and only women can access. For Hartsock, what women

can know is more “real” because of their marginal position, which puts androcentric knowledge on a lower existential rung of truth. Hekman points out with support of Foucault who, as Hekman points out, would characterize all knowledge production as “partial and perverse,” that “The incorporation of object-relations theory makes her {Hartsock’s} defense of this position even more difficult. If, as object-relations theory claims, our relations with others define our perceptions, then selecting one of these perceptions as “real” is instantly suspect” (345). Feminists were grappling with how to simultaneously keep a unified political feminist standpoint intact without undercutting the very poststructuralist theory that led feminists to question the relative, subjective nature of androcentric knowledge in the first place.

While Hekman pressed feminists to interrogate how a unified feminist standpoint that privileges women’s perspective as “more real” than any other, others pushed back for Hekman’s elision of focus on the original political project of feminist standpoint theory: the analytical force of semi-coherent groups with mutual experience. Hekman writes that “if we abandon a single axis of analysis, the standpoint of women, and instead try to accommodate the multiple, potentially infinite standpoints of diverse women, do we not also lose the analytic force of our argument?” (349). But Patricia Hill Collins’ states in her “Comment on Hekman’s ‘Truth and Method: Feminist Standpoint Theory Revisited’: Where’s the Power?,” that Hekman “simply misses the point of standpoint theory overall” (375) because “The notion of standpoint refers to groups having shared histories based on their shared location in relations of power-standpoints” (376). Hekman, by resisting an understanding of a unified feminist standpoint because of its potential error in conflating individual experiences, “distorts,” according to Sandra Harding, and “depoliticizes,” according to Hill Collins, the original project of feminist standpoint theory. Hartsock, too, characterized Hekman’s resistance to a unified standpoint as “a kind of American pluralism that prefers to speak not about power or justice but, rather, about knowledge and epistemology.” Though Hekman eventually dismisses these criticisms, arguing she is as invested in the political stakes of a feminist standpoint as are the others, we can see among these crucial figures of early feminist debates how fraught the discussion over what feminist standpoint theory should accomplish would remain throughout the subsequent decades.

One solution to this tension came in Donna Haraway’s explicit response to those like Hartsock and Harding in her hallmark 1988 essay, “Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective.” Though Haraway had been making crucial contributions to the question of science in feminism for years with works like *Crystals, Fabrics, and Fields*, and her *Cyborg Manifesto*, “Situated Knowledges,” biting characterizes the defining debate of women in science and technology studies in mostly the 80’s and on: finding the middle ground between radical constructivist views of science as mere substanceless rhetoric, and on the other hand, the possibility of a “real, objective” world order, just without the damaging lens of centuries of androcentrism. Haraway explains:

So, I think my problem, and “our” problem, is how to have *simultaneously* an account of radical historical contingency for all knowledge claims and knowing subjects, a critical practice for recognizing our own “semiotic technologies” for making meanings, *and* a no-nonsense commitment to faithful accounts of a real world, one that is partially shared and that is friendly to earthwide projects of finite freedom, adequate material abundance, modest meaning in suffering, and limited happiness. (579, emphasis original)

Her solution to the paradox of attempting to grasp this “greasy pole” from both directions, is to change the central metaphor of intervention, and for her, that new metaphor is *vision*:

I would like to insist on the embodied nature of all vision and so reclaim the sensory system that has been used to signify a leap out of the marked into the conquering gaze from nowhere...I would like a doctrine of embodied objectivity that accommodates paradoxical and critical feminist science projects: Feminist objectivity means quite simply *situated knowledges*. (581, emphasis original)

And thus, the terms of *situated knower* and *situated knowledge* became integral to the future directions of FSTS, though Haraway was among many others locating the feminist perspectives at the local level; Dorothy Smith stated a year earlier that “the effect of locating the knower in the everyday world of experience pulls what we know as the ‘microsociological’ level of the everyday world and the ‘macrosociological’ level, which we make observable as ‘power elites,’ ‘formal organization,’ ‘stratification,’ and the ‘state,’ into a determinate relation” (1987, p. 99), and of course, Hartsock’s feminist standpoint theory also rested on the notion of women’s uniquely situated perspective. At least now, most feminists could agree that the common underlying thread of feminist empiricism and feminist standpoint epistemology is to view epistemology as a site with local contingencies.

Despite the analytical usefulness of Haraway’s term, “situated knowledge,” or Sandra Harding’s “strong objectivity,” both of which are still in prevalent circulation today, tension between what is local and knowable

example, I align with feminist empiricist inquiries in assuming that biomedicine(s) has contributions to make to an integrative paradigm of medicine; however, I also argue that Biomedicine shouldn't be conflated with the authority to approve of or legitimate global medicines, especially if the knowledge of those systems simply don't fit within Biomedicine's pre-approved material-discursive apparatuses or positivist epistemologies. This end of the argument aligns me closer to feminist standpoint epistemologies and postmodern criticisms that question the foundation of sciences and medicine as institutions constituted by androcentric² values. A feminist perspective and value in such a matter does not cancel out the empirical insights of biomedicine(s), but asks: is there room for various global medicines' *ways of knowing* the world, not just their physical modalities, to emerge within the empirical container of Biomedicine? And if not, does this insularity happen to disadvantage women, Indigenous healers, or any other marginalized groups?

Finally, this project is also feminist in the sense that it is interested in neither wholly engaging with nor critiquing sciences. Instead, it integrates the possibilities of either, as well as

to the knower, versus a commitment to some objective reality, remains a foundational tension of discussions found within feminist science studies; we can see this clearly in the example of Alison Wylie questioning Harding's decidedly constructivist arguments for new directions in feminist science studies in 2008: "At the same time, however, the antinomies generated by the "science wars" leave open few avenues for constructive response; if science is a creature of context, if universalizing and foundational claims are untenable, how do we adjudicate competing knowledge claims? Do any claims carry epistemic authority beyond the contexts of their production?" (Wylie 202). Here, Wylie positions Harding as trending away from feminist empiricism toward social constructivist arguments, though Harding herself classified this spectrum as necessarily hybrid in 1986. Harding would continue to advocate for variations of feminist empiricism and robust reflexivity, as her next several books show, especially as they regard critiquing Eurocentric sciences. It is in the last decades of the twentieth century that some feminists like Harding and Haraway turn with the lens of situated knowledge and strong objectivity to look explicitly at the effects of postcolonialism on the production of science through the schools of postcolonial studies and new materialisms.

² I define "androcentric" as the capacity (and effects thereof) to conceive of reality through a cis-male perspective. For example, Rosi Braidotti claims that "The feminist post-anthropocentric approach, however, also challenges the androcentrism of the post-structuralists' corporeal materialism" (198). In this case, feminist conceptions of the posthuman challenge the world-building and world-conceiving that for most of "Western" history was dominated by men.

asking for the suspension of belief in a capital “S” Science as the only appropriate schema for measuring the value of global medicines. I maintain that when and if sciences provide an applicable lens through which the value or legitimacy of global healing modalities is measured, that astute attention need be paid to both the values of responsibility and fairness, as advocated for by Harding in *Objectivity and Diversity*, as well as critical accountability for the social location of such knowledge making. These major theoretical claims are grounded in the theoretical framework I explicate next, where I show that even feminist new materialisms benefit conceptually from de/postcolonial analysis. Because of this, I will not name my theoretical framework from here forward as new materialist per se; instead, I emphasize the feminist and anti-colonial aspects of my theoretical framework for brevity and accuracy of the most encompassing lenses of my work; the framework that emerges by putting these fields in conversation with one another is integral to locating the “differences³” that IM processes produce.

1.2.1 New Materialist and De/Postcolonial Science Feminisms

The central organizing factors of this dissertation are the critiques and contributions of feminist philosophers of the 20th and 21st century, especially those who make feminist interventions in the studies of science and medicine. As most feminist philosophers of science came to integrate the paradoxical truths of postmodern feminism, standpoint epistemology, and feminist empiricism into conceptual lenses like situated knowledge (Haraway) and strong objectivity (Harding) in the late ‘90s and early 21st century, these concepts were deployed further

³ This term signals the projects of feminism which aim to locate and enhance the agency of groups that are different from those social groups in power.

into two sub-disciplines that are particularly salient to my investigation of the processes of IM: new materialisms and de/postcolonial science studies. Postmodernism had been extraordinarily powerful for feminists to question the once-solid basis of authority for androcentric science, but now feminists would increasingly highlight that focus on language and discourse supplanted focus on the agency of materiality itself; this transition necessarily pushed feminists to shift focus from arguments about epistemology to questions of ontology since now *all* matter, not just the power of the discursive, was up for discussions of agency (Barad; Braidotti; Grosz; Pitts-Taylor; Alaimo & Hekman; Coole & Frost). This push from discourse to materiality, from epistemology to ontology, generated the field of new materialisms. Shifting feminist conversations from epistemology to ontology also inspired the adjacent field of rhetoric to adapt theories of agential realism and matter's animacy into ontological theories of rhetoric, which I will take up in greater detail in the Methods section of this Introduction.

In one of the most notable articulations of new materialist ideals, Karen Barad, in close conversation with Haraway, published her theory of posthuman performativity and agential realism,⁴ which dissolved any conception of the ability to study science without acknowledgement of the intra-action of the observer and the observed. Like strong objectivity or situated knowledge, this elegant theory would maintain socio-political accountability for knowledge makers yet remained faithful to a world in which sciences still have purpose and capacity for measurement, for objectivity—if only objectivity is understandable through the ever-emerging intra-action of observer and observed. By giving such agency to inanimate objects, Barad is often heralded as a

⁴ “Posthuman Performativity: Toward an Understanding of How Matter Comes to Matter” and later again in her 2007 book, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*

pioneer of new materialisms⁵ which, in line with feminist aims, brought attention to the “difference” of non-human agency. While most feminist philosophers have, like Barad, reclaimed attention to matter,⁶ and therefore the empiricism that holds constant even under the lens of social constructionist arguments, the field has also given rise to projects that tend to collegially engage with a renewed faith in the substance of capital S “Science,” rather than critiquing it out right (Willey). These critiques derive from de/postcolonial feminists, based on the works of Edward Said, Homi Bhaba, and Gayatri Spivak, who consider the ramifications of androcentric sciences’ role in the processes of colonization.

Postcolonial scholars like Harding and Willey identify that the return to outright privileging of Science seen in some new materialist scholarship can be seen as coming full circle to the original debates when feminists questioned if anything about androcentric science was salvageable; it seems that within a few decades, such skepticism was replaced by many once again aligning with Science as a baseline for understanding nature. A result of this trend, Willey argues in her 2016 article, “A World of Materialisms: Postcolonial Feminist Science Studies and the New Natural” is that “the ‘science’ privileged and often conflated with matter in new materialist storytelling is the

⁵ though Haraway was deconstructing the human/non-human binary in earlier essays where she conceptualizes the cyborg

⁶ Feminists mostly publishing in the 21st century are also affiliated with spearheading ontological, new materialist aims, including Jane Bennett, who argues in *Vibrant Matter: A Political Ecology of Things* (2010) for an enhanced attention to the “thing-power” and “vibrancy”—agency—of nonhuman forces, which should ultimately lead to a sounder ecological and democratic reality. Rosi Braidotti, building on Haraway, explains in her 2006 article, “Posthuman, All Too Human Towards a New Process Ontology,” that “A location is a materialist temporal and spatial site of co-production of the subject, and thus anything but an instance of relativism. The politics of location, or situated knowledges, rests on process ontology to posit the primacy of relations over substances” (199); Braidotti would go on to publish her 2013 book, *The Posthuman* and subsequent articles moving in the direction of reframing feminist concerns through a posthuman ontology of materiality. Also citing figures like Haraway and Barad, Victoria Pitts-Taylor describes the necessity of turning toward ontological theories of matter when she states in “Mattering[6]” that the need to attend to materiality comes, among other reasons, “from internal debates in feminist scholarship, where the sustained theorization of the body has come up against the limits of representational paradigms, and where the onto-epistemological questions posed by feminist scientists and in feminist science studies now appear more relevant than ever” (1).

same science destabilized by postcolonial feminist science studies” (991). Though Willey contends that new materialist and postcolonial sciences studies need not necessarily be at odds with one another, she warns the effect of many new materialist projects has been to “reconsolidate Eurocentric stories about the relationship between ‘materialism’ and ‘Science’” (994), and to “take retrograde steps toward the universal human and positivism” (994).

Harding, again, is largely credited with leading the charge on postcolonial science studies Willey references—the primary aim of which was to *critique* the hegemonic nature of Eurocentric sciences. Harding has a prolific set of publications⁷ forging the path for this line of inquiry, which traces her evolving meditations on the nature of objectivity, the myth of value-neutral science making, and Science’s effects on socio-political justice for the economically and politically vulnerable. But ultimately, even in her latest book, Harding still argues for the preservation of her much older concept, strong objectivity, as well as an even clearer championing for the outright instantiation of the *values* of fairness and responsibility in scientific processes. This position reminds us that even today feminists continue to mull over the same dichotomies they deconstructed decades prior, such as debating whether science should be conducted “value-free” or with clear acknowledgment of now feminist values instead of androcentric ones. By borrowing from Harding’s distinctions of sciences and Science, Willey shows how notable new materialists make premature departures from postcolonial studies, forging a new dichotomy in FSTS that has the effect of deterring humanist progress in general. Closely reading Grosz’s (2011) portrayal of

⁷ *The Science Question in Feminism*, but later also included the titles, *Whose Science? Whose Knowledge* (1991); *The ‘Racial’ Economy of Science: Toward a Democratic Future* (1993); *Is Science Multicultural?* (1998); *Science and Social Inequality: Feminist and Postcolonial Issues* (2006); *Sciences from Below* (2008); *The Postcolonial Science and Technology Studies Reader* (2011) and, most recently, *Objectivity and Diversity* (2015)

sexual differences, Wilson's (2004) opposition to antipsychiatry, and Diana Coole and Samantha Frost's framing of climate change (1993), Willey observes (at length):

The critique/engagement split leaves us the fraught options of either (white) feminist dissolution of the humanist subject or (postcolonial) inscription of its stability, and, in so doing, leaves Science remarkably stable. The characterization of postcolonial feminist science studies and feminist new materialisms as opposite ends of a spectrum of thinking about subjectivity ironically recenters the humanist subject of Western philosophical thought by failing to engage the implications of some of the fundamental insights of feminist postcolonial science studies. That is to say, postcolonial studies itself might be said to operate as a critique of the humanist project (Balagangadhara and Keppens 2009). The singularity of truth, the unity of science, and the values that constitute an imaginary that makes these concepts intelligible are all among the objects of postcolonial science studies critique (Harding 2006). Thus, the very idea that we know what life is, what it means to be human, and so on, should be fundamentally challenged by the project of postcolonial feminist science studies. (1997)

Importantly, Willey imagines a productive diffraction of new materialism and postcolonial science studies as leading to the possibility of new understandings of life, including "those at odds with ones widely considered scientifically true within an epistemological framework that privileges (Western/Northern) reductionist scientific ways of knowing as offering the most credible approaches to conceptualizing, codifying, and understanding our worlds" (1997). This point will be crucial in my subsequent discussions of integrative medicine and the power structures upholding Biomedicine's monopoly on privileged frameworks of nature. Willey reminds her audience, as well, that figures like Barad, Haraway, and Harding's conceptions of socially-contingent

objectivity were never intended to be divorced from their political projects of destabilizing a unified explanatory schema. Yet by turning feminist attention to matter, one liberatory project has tended to supplant another by focusing intellectual energy on the integration of scientific claims about matter with humanist notions of agency, rather than also critiquing how a scientific description of nature is already a power-backed, political constraint. By privileging the agency of matter through Eurocentric systems of measurement and classification, ironically, these projects tend to take the focus away from “different” ways of knowing the world, different cosmologies, that have existed for millennia and always already saw matter as animate; the effect of projects like these is reinforcing the supremacy of Eurocentric thinking in its ability to characterize the natural world by insinuating to now, only as the result of Eurocentric feminist thinking, to have newly given serious intellectual attention to matter’s agency. Willey warns on this front:

If new materialist stories are to be accountable to the insights of postcolonial feminist science studies, they must avoid a few pitfalls. They must admit that recent onto-epistemological insights about the animacy of nature are not new. Counterhegemonic? Yes. But new? No. Second, they must understand the nature of their counterhegemonic status. It is in challenging the epistemological authority of Science as such that the radical potential of alternate (new materialist) conceptions of nature lies. Third, they must reconceive the project of feminist materialism as one of proliferating materialisms rather than telling the truth about matter. (1001)

It is worth pausing here to ask, if materiality’s agency is not new, then when and how was this narrative drowned out by the advances of Eurocentric academic discourse? Indigenous scholar, Frédérique Apffel-Marglin’s work, *Subversive Spiritualities: How Rituals Enact the World*, and Harding’s postcolonial scholarship in *Is Science Multicultural?*, show us that European colonizers

making contact with other civilizations throughout history resulted in the appropriation of other knowledge systems, especially other forms of science. This proliferation and preservation of Eurocentric sciences is necessarily implicated in *decolonial* studies in addition to *postcolonial* studies. Gurminder Bhambra explains in “Postcolonial and Decolonial Dialogues,” that postcolonial and decolonial scholars tend to differ both in disciplinary ties as well as focus upon when/where the process of colonization began, and therefore the effects of “coloniality/modernity.” Bhambra notes that “The key issue to emerge from the work of decolonial scholars is to pull the time horizon of debates on modernity back to the late fifteenth century and extend them southwards to take into account both the activities of southern European countries such as Spain and Portugal, but also the southern half of the continent to be named the Americas” (119).

Harding, though often labeled a postcolonial scholar, does in fact trace such colonizing forces to much earlier contact points, and distinguishes herself how multicultural science is aptly reviewed through both lenses. She states in the intro to *Is Science Multicultural?*, “postcolonialism is not monolithic, and the diversity of its concerns and stances provides valuable resources for thinking about the social and historical contexts in which scientific and technological changes occur” (16). She further distinguishes projects of postcolonial inquiry from decolonial theory by stating:

it can be useful to speak of ‘decolonization’ and ‘decolonizing’ as a distinctive political and intellectual tendency within postcolonial spaces and their diverse discussions. Such terms draw attention to the necessity of active intervention in still prevailing and powerful discourses, their institutions, and practices, in order to end the forms of colonialism and

neocolonialism that still structure most people's lives in the North and everywhere else around the globe. (16)

To review the colonization of sciences, in other words, is both a project much older than some postcolonial accounts may initially figure, as well it continues to be immediately pertinent to the “developments” of “modernity”—both terms representing the currently instantiated equivalent of colonization to most decolonial scholars (Bhambra). The question of when matter went agency-less is inherently implicated in both decolonial and postcolonial spaces of inquiry because, as Harding and Apffel-Marglin show, even the selection of what practices and theories were appropriated into Eurosciences was carefully calculated to enhance and stabilize the colonizing project itself. Harding explains how post-Kuhnian, postcolonial sciences studies increasingly made clear that

Conceptualizing ‘the scientific revolution’ as a distinctive event began to appear more an artifact of subsequent Eurocentric histories than of the actual historical record...It was not some distinctive collection of internal, epistemic characteristics of European minds or cultures that was responsible for development of modern science in Europe...but easily identifiable economic and political interests of European cultures at that moment in time. (29-30)

She goes on to show European colonizing forces simultaneously appropriated what was useful from civilizations far more advanced in certain knowledge systems, while at the same time devaluing the cultural significance of their contributions. Some prominent examples she provides include: Egyptian mystical philosophies and premodern European alchemical traditions that were later ridiculed by European sciences as irrational; Greek, Islamic, Indian, and Arabic legacies of scientific and mathematics that would be claimed by the sciences of the European Renaissance;

Pre-Columbian agriculture, which provided potatoes and therefore the nutrition that sustained colonial advancements, as not even acknowledged for coming from the Americas; and finally, the many technologies borrowed from other civilizations that would propel the colonialist project, including the magnetic needle, rudder, gun powder, geographies, geologies, pharmacologies, medicines, navigational techniques, etc. (34-35). In summary, she notes, “The invention of the European miracle, the Dark Ages, and the scientific revolution all worked to obscure and deny the non-European origins of early modern sciences and technologies” (25). In terms of the question, when did materiality lose its agency, we can see that the colonizers’ view of the rest of the world as a resource rather than active subjects of agency themselves played into such a sterile, lifeless conception of nature. Viewing matter as agentive would be counter-productive to the colonist project itself, as Apffel-Marglin reminds us.

Apffel-Marglin takes up Barad’s agential realism in her own work about matter’s agency to show that “the perspective of agential realism restores a kind of contemporary form of hylozoism” (63), with hylozoism being a common term for the belief in the animacy and agency of all that exists. Her work implies that the animacy of nature is not something discovered by white Western feminists but is a result of deconstructing a history that supplanted cultures which always already saw matter as animate. In fact, matter has been seen historically, by cultures (including the Stoics—Aristotle being a notable hylozoist) far and wide, to have agency for much longer than it was seen as agency-less. Apffel-Marglin notes that “Agency-less, mechanical nature began to emerge in the sixteenth- and seventeenth-century Western Europe” (28), and that therefore “In the seventeenth century, many hylozoists became the abject other for the natural philosophers” (31)—natural philosophers being the scientists of this age. “By the end of the seventeenth century,” she figures, “hylozoism and the view of matter as having agency on par with human agency had been

successfully defeated” (31). In other words, it’s feminist scholarship that has focused too closely on critiquing *or* engaging with Eurocentric science, rather than integrating the insights of communities *not standardly characterized as scientific*, that has led to the self-proclaimed renaissance of a feminist turn toward to matter.

A concrete case of this faulty tendency in new materialist scholarship echoes the observations Willey makes on Wilson, Grosz, and Coole & Frosts’ work about exchanging a cordial attitude of engagement with sciences for critical scrutiny on whether Science is the appropriate evaluatory framework in the first instance. In Alaimo and Hekman’s introduction to *Material Feminisms*, the authors claim that “‘Material feminists’ want to know *how we can define the ‘real’ in science* and how we can describe nonhuman agency *in a scientific context*” (7 emphasis mine). The authors also cite the example, like Coole and Frost, of climate change, stating: “Clearly, environmental politics demands a renewed understanding *that science can disclose indispensable knowledge about nonhuman creatures, ecosystems, and other natural forces*” (8 emphasis mine). In the very next line, Alaimo and Hekman position the work of the anthology as a radical reaction to postmodern theories which have tended to imagine the natural world “as a mere resource for technological progress or social construction” (9); material feminisms, on the other hand, “must insist that nature be considered a noteworthy actor *within the realm of politics as well as science*” (9 emphasis mine). Here, once again, we see a turning away from social constructionist arguments positioned as liberatory to matter, while simultaneously ignoring that plenty of, for example, Indigenous cultures have seen and continue to see matter as animate without necessarily engaging with the explanatory schema of Science. These moves also elide the truth that Science has been one of the most violent colonizing forces on the planet to date, and so

the ambition to comprehend the “real” in terms of Science alone is already a project implicated in the oppression of others.

While Willey argues that new materialist scholarship has the tendency to elide the insights of postcolonial feminisms to its own detriment, my own view is that new materialist accounts not only elide de/postcolonial insights but differ categorically from the projects of earlier feminist intervention (standpoint epistemology, postmodern feminism, feminist empiricism) in important ways, also to their detriment. As Willey shows, postcolonial scholars assume and critique Science’s instability as a category, yet new materialist work tends to reinscribe the stability of that enterprise, re-inducing the hegemonic project of erasing other ways of knowing materiality.

In deviation from Willey’s claim that new materialist accounts are not new, yet counter-hegemonic, I would argue that new materialisms are counter-hegemonic only in a superficial sense. Feminist standpoint theories assume correctly that androcentric science is the appropriate origin of critique because there is no other logical starting point to this discussion. New materialist accounts, however, make the mistake of assuming the same starting point: that it is revolutionary to point out that sexist science has disregarded the animacy of matter. Even if this is true, new materialisms did not need to be purely a critique *of Science*, but a resuscitation and regathering of *non-academic* knowledges, or, it needed to be all of these projects combined. In summary, new materialist accounts position themselves as (falsely) novel solutions to feminist’s critiques of science, while simultaneously ignoring some of the most crucial and fundamental postcolonial, standpoint epistemology critiques of Science. This makes an uncritical deployment of new materialism a highly precarious theoretical origin for *critical* inquiry of IM processes. A bolder counter-hegemonic discourse of materiality would resist the temptation to only argue against an Eurocentric, academic patriarchy and would instead, as one example, craft the opportunity to

collaborate with non-academic, Indigenous cosmologies of matter, as this dissertation attempts to do.

The most significant conceptual *addition* of feminist new materialisms, in my estimation, is the shift of feminist attention from epistemology to ontology, while maintaining a fierce political accountability of situated agents, captured by theorists like Karen Barad. It is my contention that feminist philosophers who identify as postcolonial or new materialists urgently need to decenter, *not eliminate*, scientific narratives of matter's agency, while maintaining an ontological theory of agency that dissolves all nature/culture, mind/body, subject/object dichotomies characteristic of the hegemonic projects of Science. Decentering Science continues to be crucial to interrogating the potentially oppressive processes of integrative medicine today, as well as it requires further interrogation of the past when colonization process began in the 15th century. For these reasons, I do identify my theoretical framework as both de- and post- colonial, because as Harding notes, to categorize work as decolonial also implies "the necessity of *active* intervention in *still prevailing* and powerful discourses, their institutions, and practices" (16 emphasis mine); I will summarize the implication of both post- and de- colonial scholarship in the term "anti-colonial" from here forward. However, for all these reasons explored above, I do not identify my framework as new materialist per se; while this project does align with the ontology of agential realism, I view this ontology as distinct from new materialisms that uncritically engage with Science. These theoretical distinctions are crucial when reviewing who is helped and who is oppressed in the processes of IM—especially in the investigation of whose knowledge counts in the Biomedical absorption of global medicines, when many of those practices originate in time and place before Biomedicine even existed.

1.3 Methodology: Constructivist Grounded Theory & Rhetorical Analysis

In order to investigate the processes of integrative medicine, and to allow, inductively, patterns of power disparities to emerge from the data itself, I conducted this dissertation according to the principles of constructivist grounded theory, especially as it is articulated by Kathy Charmaz in various publications. In addition to constructivist grounded theory (CGT), which emanates from Sociology, I also deploy rhetorical analysis from my own home field in Rhetoric and Composition. While grounded theory provides the over-arching methodology for how I collected and processed data, rhetorical analysis provides a method for engaging with the material-discursive in order to reveal its agency to affect reality. Rhetoric, when articulated as an ontology as I will later in this section, also fortifies my theoretical, feminist alignment with the agency of humans and non-humans. First, I will explain my dissertation's relationship to grounded theory, then I will pick up how rhetorical analysis and theory complements grounded theory as the appropriate modes of inquiry for this dissertation.

1.3.1 Grounded Theory as Self-Reflexive, Critical Inquiry

An evolution of the original grounded theory (GT) articulated in 1967 by Glaser and Strauss, Charmaz's emphasis on the socially constructed nature of all data, while still allowing data to be the origin of inductive insights, was the relevant and necessary lens to pursue my research through for several reasons I review in this section. Some of the central factors in choosing GT included its salient extensions of critical inquiry and feminist philosophy that I align with above, including notions of a socially situated researcher and the skepticism of positivist epistemologies and value-free inquiry; reflexive awareness of the ways in which neoliberalism

affects the content and collection of data; as well as grounded theory's ability to extend insights of new materialism and de/postcolonial theory, and the interrogation of institutional privileges as a means of conducting research. Charmaz and other grounded theorists have critiqued⁸ Glaser and Strauss' formulations of GT for not explicitly acknowledging the role of a researcher's subjectivity; these critiques led to the re-formulations of *constructivist* grounded theory(s), which insist that to investigate the processes of a phenomenon, we must also explicitly investigate ourselves in relationship to the study of those processes because that relationship alone will reveal valuable data that affects the conclusions of our research.

Constructivist grounded theorists emphatically embrace the insights of feminist standpoint epistemologies; for Charmaz, this means that grounded theory's "methodological self-

⁸ The exigence for creating grounded theory was largely due to Glaser and Strauss' frustration with how the invention and creativity required of developing new theory in Sociology was effectively shut down by the structure of mentorship within the academy itself. In the introduction to their '67 book, *The Discovery of Grounded Theory Strategies for Qualitative Research*, the authors explain "In trying to stimulate all sociologists to discover grounded theory-from those who are only at the dissertation stage of their careers to those who are already "retired" professors-we hope to contribute toward the equalizing of efforts in generating theory, which are now often limited to the earlier stages of a sociological career" (7). In the 60's, the notion of advocating for doctoral students to be innovative with qualitative research methods was certainly unconventional. Glaser and Strauss even define grounded theory very simply, and again, with egalitarian undertones: "We believe that the discovery of theory from data-which we call grounded theory-is a major task confronting sociology today, for, as we shall try to show, such a theory fits empirical situations, and is understandable to sociologists and layman alike. Most important, it works-provides us with relevant predictions, explanations, interpretations and applications" (1). The discovery of theory *from* data, rather than parroting theory from "the masters" ad hoc upon qualitative research, was the novel contribution of this methodological approach. However, as I alluded to briefly above, this original instantiation of grounded theory would not be viewed as quite the standard of egalitarian methodology to everyone in the years to come. Charmaz points out that "Grounded theory emerged from a robust realist tradition in qualitative inquiry in the 1960s that assumed the objectivism of positivism and a realist view of data" (747). Consequently, she points out:

Not surprisingly, in their rationale for using documents, Glaser and Strauss (1967) viewed library stacks as filled with "voices begging to be heard" (p. 163). They treat the voices to be heard as objective content without addressing the respective author's purpose, the production of the text, and its audiences' interpretation and use of it. Nor do Glaser and Strauss examine how researchers' taken-for-granted standpoints and conceptual interests may shape their reading and rendering of the text. (748)

Charmaz notes that Glaser perpetuated similar ideas when he published in 2001, where he claims that data are "abstract variables detached from time, place, and people," and again in 2011, claiming, "What is real for the GT researcher is exactly what is going on in his [sic] 'whatever' data and data mix." What is surprising about this abstinence from investigating the privilege implied by being able to abstract data so neatly from its social situatedness, as I showed at length earlier, is that one origin of critique of positivist epistemology came from feminists within Sociology, like Dorothy Smith, who published these concepts only a few years after Glaser and Strauss' book.

consciousness requires scrutinizing our positions, privileges, and priorities and assessing how they affect our steps during the research process and our relationships with research participants” (35). In other words, it is the original egalitarian project of grounded theory integrated with the insights of the science question in feminism that has led to CGT’s robust reliability for projects like my dissertation which seek to expose power disparity in various cultural processes, while also questioning what my own subjective role is in forging such insights.

My purpose in this dissertation is to elaborate the value of local and multiple healing knowledges, and therefore, also the analysis of how some healing practices get privileged over others. Charmaz notes that “the notions of justice and injustice become ‘enacted processes, made real through actions performed again and again,’” and so “Studying questions about justice and injustice as enacted processes can inform critical inquiry and initiate new research directions” (35). In line with (feminist, anti-colonial) constructivist grounded theory aims, I expose *what processes create the effect of barriers preventing something like “full integration,”* though I argue ultimately, there will likely never be a perfect goal of integration achieved (that would mean everybody would have to agree on what that means, and that is the least likely outcome of this research). IM would wisely be seen instead as a moving target that we may get closer and closer toward, never quite fully reaching. Of course, if one is to look at what barriers prevent or enable the processes of deep integration, there will naturally be consequences for the groups implicated by such barriers, which is also the objective of this project to expose. As Charmaz notes, because grounded theory is interested in exposing the ways in which in/justice is enacted through various processes, this methodology creates the conditions “to expose, oppose, and redress forms of oppression, inequality, and injustice” (35). What are the effects of current routes of prioritization of IM models in the US? With this and the former question in mind, what I *can* do here is offer an *embodied* or

strong objectivity—the middle ground between what Donna Haraway coined as FSTS’ “two greasy poles” of objectivism and relativism—about who is currently being empowered and who is being disadvantaged by current routes of prioritization in IM (and sometimes both), based on empirical, qualitative data. The answers to these questions will necessarily depend again on who is asking and from what point(s) of vision. So what is my own multiple, transient subjectivity in writing this project, and what are the limits of doing so?

My subject position in forging this analysis is both constantly evolving yet practically rooted in my life experiences. My perspective is the result of my training in Western academic institutions, which are riddled with their own forms of institutional inequalities and colonizing practices, and also my immersion in non-established, holistic medicines, which is the result of living on three different continents and being the daughter of a long line of healers. I have both an embodied, experiential sense of what it means to be an unorthodox healer and the healed one, as well as the sharp realization that I will never be able to identify with Indigenous practitioners of healing systems that are witnessing their sacred practices get swallowed by “developed” institutions like Biomedicine. In her articulation of a feminist postcolonial standpoint, *Is Science Multicultural?*, Harding explains that such a stance “does not speak *for* others, for peoples from non-European cultures, though it is informed by their accounts” (18). By distinguishing that she speaks *alongside* and not *for* those adversely affected by colonization, Harding here references the conversation of feminist postcolonial scholars like Linda Alcoff, Susan Jarrett, and Gayatri Spivak who have discussed the postmodern paradoxes of any attempt to speak *for* the Othered at length (“Beside Ourselves”; “Can the Subaltern Speak”; “The Problem with Speaking for Others”). Most succinctly, the insights of these scholars emphasize that the uncritical attempt to speak for others losing their agency to colonization processes is hegemony itself.

Charmaz, too, addresses how grounded theory requires the self-reflexivity of the researcher when she says, “Methodological self-consciousness means examining ourselves in the research process, the meanings we make and the actions we take each step along the way. Methodological self-consciousness also means becoming aware of our unearned privileges as well as taken-for-granted privileges accompanying our positions and roles” (35). The unearned privilege she references here includes that “Qualitative research has been infused with and dominated by white Anglo-North American worldviews, methodological assumptions, and concrete methodological strategies” (35). Rather than taking these dimensions of my subjectivity for granted as a researcher, like these feminist postcolonial and grounded theory scholars have articulated before me, I hope, as just one limited voice, to speak *to*, never *for*, the communities with vested interests in understanding more deeply what integration processes look like and what the effects of such integrations are, lest in some way I have the effect of advocating for increased attention toward and listening to the actual agents who are losing their voices and practices to these processes.

For all the reasons above, this dissertation should not be taken as “the word” on IM, but merely one project that takes one partial look at these processes, and one that really only accomplishes what can be accomplished from within the academy, which is a limitation itself; this project can’t replace the work of instituting concrete policy changes, the invention of more inclusive scientific methods, or the creation of conferences or platforms where Indigenous healers, for example, are invited to speak *for themselves*. Of course, like the insights of Spivak, Alcoff, and Jarret show, there is also no monolithic oppressed subject, and therefore who I am speaking *to* is as wide and intersectional as the Earth’s population itself. This does not mean I pardon myself from the task of attempting to integrate some of those voices in this project, too. It just means that moving toward a more democratic conception of integrative medicine will require the

collaboration of a limitless amount of agents, which is well beyond the scope of this project. To make my task even trickier (or of the trickster narrative tradition) here, I also consider the Earth, who speaks loudly for all of us to hear—yet because this language does not come out in word form is too often read as agency-less—to be *someone* I am speaking to and not for here. As I argue throughout subsequent chapters, the oppression of persons' healing systems cannot exist but as embedded within the texture of agencyless land, and the two will always be mutually entangled, especially as they regard philosophies of healing. The analysis of one must necessarily entail a closer look at the other, and this conception of the entanglement of human and environmental oppression are integral to mine and decades of Ecofeminist, and more importantly, non-academic gazes.

The final reason I will emphasize here for deploying CGT is how its very methodology encourages the open-endedness of resources that emerge as a researcher follows her data. Charmaz explains that “Constructivist grounded theory depends on pursuing emergent questions during the study. Answering these questions can mean gathering different types of data that the researcher may not have anticipated such as institutional records, public policy statements, or follow-up interviews” (41). The resources gathered in this dissertation are a direct result of following the trail of where my research and data led me. For example, I originally intended to do intensive fieldwork with a local, highly-reputable hospital's Integrative Medicine department, but because of the COVID-19 pandemic, these plans were adjusted to virtually interviewing practitioners and the director of this department, as well as rhetorically analyzing public-facing documents of the department, such as their website and quarterly newsletters. I reference these interviews throughout the dissertation as a primary form of evidence that complements the analyses I carry out by other means. By hearing the voices of “boots on the ground,” I could further align initial

hypotheses about power dynamics within medical institutions with the concrete evidence of their lived experiences. By interviewing IM practitioners, I also began to understand how crucial the illusion of *choice* was for both practitioners and potential clients, and this made me consider how a national document that outlines IM implementation may influence how IM is being implemented at local levels. These observations led me to generating the primary code of “rhetoric of choice” in the nvivo software, before even deciding to find and analyze the National Institute of Health’s strategic manual for IM implementation. Once I committed to analyzing this document, I was able to show how the rhetoric of choice pans out at local and national levels, and this coding and new textual resource combination now comprise the entirety of my third chapter. Furthermore, after analyzing the NIH’s manual, I became more keenly aware of how national rhetoric about IM is a continuation of “development” rhetoric promoted within a neoliberal, capitalist economy. This insight led me to re-figuring my initial theoretical framework from viewing de/postcolonial studies as notably relevant to moving it center stage in my theoretical framework. The rest of my dissertation reflects the primacy of understanding that IM is not a new phenomenon as it is rhetorically characterized by many; it is, at least in part, a continuation of colonization and appropriation that began with the first colonizing endeavors in the 1400s.

In summary, the succinct overview of my research process was as follows: I originally intended (before Covid) to make intensive fieldwork at a local IM hospital department my primary basis of evidence for this project. After securing contact, via email, with the department’s director, I was given a list of emails for practitioners in the department, whom I reached out to next. I secured 5 interviews in total: two with the director and three with IM practitioners whose respective specialties were acupuncture, Mindfulness-Based Stress Reduction (MSBR), and fascia work. The interviews ranged from 40-90 minutes and were transcribed using nvivo coding

software. Because of the pandemic, these interviews were virtual and in-person visits were forbidden. I keep all references to the hospital and personnel anonymous, using pseudonyms throughout the dissertation to refer to the specialists.

As it became clear that contact with the department would remain limited, I turned my focus to textual analysis, coding both the interviews and relevant research, especially in the field of sociology, in *nvivo*. Because more work has been done on practical and epistemic tensions in IM research, I especially focused my coding on the difficulties of integrating philosophies or ontologies of integrative medicine. The most common codes that emerged therefrom were “the agency of choice,” “challenges to integration,” “biomedical ontology,” “IM ontologies,” “appropriation,” and “integration is hard to measure.” All six of these codes remain defining features of the chapters of my dissertation which explore the illusion of consumer choice, and the challenges of merging ontologies, languages, and various cultural practices without violently appropriating them. From this point forward, rhetorical analysis (which I will elaborate upon next section) took over as the main method for deconstructing national and international IM discourse, especially as I continued to collect feminist scholarship on “alternative” and “holistic” health and medicine. Chapter four is unique in that it is almost exclusively a theoretical analysis of IM ontologies.

As my interviews were crucial to the initial design and focus of the rest of my research, I consider the interviews a primary form of evidence in this dissertation, though in the text itself they function more like supplemental vignettes that support rhetorical analysis and cultural critiques of IM processes. My own experience as a holistic health practitioner also heavily influences the evidence I consider important to address in this dissertation, and therefore I view my own experience as a form of evidence informing this project, as well as the many experiences

of those most affected by IM processes. I took notes and memos almost constantly throughout the research process to keep asking myself: “why are you asking this question this way” and “what implicit assumption do you already hold to make you conclude X”? In the coda of this dissertation, I will provide a final reflection on how researching and composing through constructivist grounded theory was affected by my evolving researcher identity.

1.3.2 Rhetoric as Ontology and Method

In the previous section, I show why CGT is useful for self-reflexive critical inquiry, and here I will also make the case, as Charmaz does, that CGT also implicates new materialist conceptions of agency, which is crucial to the conception of rhetoric I work with as an ontology and method in this dissertation. In “The Power of Grounded Theory,” Charmaz explains the link between pragmatist philosophy and CGT by stating: “Unlike most social science perspectives, pragmatism assumes process and takes stability as problematic. Stable social structures depend on the processes that constitute them. These processes largely occur through people’s actions although scholars now also take into account the environment and nonhuman actors” (38). The reference to the environment and nonhuman actors, as I have touched on in previous sections, refers to the turn toward materiality both in feminist philosophy as well as other fields, including rhetorical studies. As I have established my alignment with matter’s animacy earlier, so too does my conception of rhetoric necessarily implicate an ontology of human and nonhuman rhetorical agency. While Science has had the historical tendency to reject rhetoric as a fruitful mode of inquiry, as I will detail momentarily, I argue that in order for inter-disciplinary work between rhetoricians and sociologists to be productive, that various scientific committees, including, sociology, also adopt a definition of rhetoric that is agentic to the degree that rhetoric generates (human and nonhuman)

reality itself, as opposed to a reductive definition of rhetoric as substance-lacking persuasion. Put most simply, I define rhetoric as *ontological force* for the purposes of this project, which I will now elaborate upon.

In *The Politics of Pain Medicine: A Rhetorical-Ontological Inquiry*, Scott Graham explores how part of Science's historical resistance⁹ to acknowledge the rhetorical dimensions of its work is that rhetoric was taught and deployed in classical times as a set of technologies for argumentation and persuasion. Therefore, Graham writes, "These dictums were not originally intended to be used as an analytic frame" (12). However, Graham, alongside rhetoricians like Christa Teston and Thomas Rickert (*Bodies in Flux; Ambient Rhetoric*), have witnessed and themselves propelled the "significant adaptation and refinement {of rhetoric} to be deployed effectively for scholarly inquiry" (*Politics of Pain* 12). Furthermore, aside from now being a useful analytical frame for scholarly work, rhetoric has also adapted to scrutinizing the rhetorical agency of far more than powerful orators, as it was classically taught. For many rhetoricians, including Graham, Rickert, and Teston, rhetorical studies adapted to the material turn and agential realist ontology of feminist philosophers, which displaced the emphasis on discourse as the core constituent of meaning-making in reality—clearly a rhetorical domain—to now acknowledging the agential role materiality plays in reality.

Though there is no single way scholars have taken up interest in attributing agency to materiality (Latour, Graham, Barad, Bennet, Coole, Frost, Teston), in general rhetoricians who

⁹ Graham speaks of Science and Technology Studies' resistance to rhetoric, but the field of STS is distinct from the historical resistance of capital "S" Science to acknowledge rhetorical dimensions of its work. It is more accurate currently to acknowledge that STS deals *heavily* with the rhetorical dimensions of its study (Latour, Haraway, Barad), whereas capital "S" Science tends to have ontological discrepancy with the idea that scientific knowledge is partial, locatable, and context-contingent, as rhetoric assumes as an ontological baseline. For this reason, I'd argue it is more accurate to say that historically, Science resists rhetorical dimensions of its work, rather than STS, which is a field intrinsically forged around the concern of socio-political ramifications of science and tech studies.

also identify as new materialists at a minimum tend to view rhetoric's reach as "ecological" (Teston 2), including studying evolving relationships amongst human, nonhuman, discursive, and material dimensions as parts of its inquiry. As Teston puts it: "An ecological model of rhetoric characterizes 'rhetoric' as a verb. A performance. A constant process of unpredictable unfolding. To study rhetoric, therefore, is to study flux and flow. To study rhetoric is to explore the process of becoming (Bohm 1981)" (2). In their 2018 book, *Tracing Rhetoric and Material Life*, McGreavy et al. also track rhetoric's "ecological trajectories" through various disciplinary threads in rhetoric, composition, and communication studies. By doing so, they suggest that rhetorical studies come to "see matter as something not animated by a god, infused with human meaning, or socially constructed, but rather as intrinsically generative and self-animated—as 'vibrant, vital, energetic, lively, quivering, vibratory, evanescent, and effuescent'—this would mark a new articulation of environmentalism better termed 'vital materialism'" (6). These re-conceptions of rhetoric thrust the discipline out of its ancient container as "the available means of persuasion" and instead recognize that rhetoric is a force capable of building worlds in its own right. In response to these flexible adaptations of rhetorical studies, Graham dissolves the boundaries of disciplines rhetoric can apply to in his conception of "*rhetorical-ontological inquiry*," which is "part of an intentional effort to ally my approach much more closely with multidisciplinary STS and its concomitant focus on sociocultural and material aspects of science and technology" (*Politics of Pain* 7).

In this work, I combine aspects of McGreavy et al.'s conception of rhetoric as vital force, Graham's definition of rhetoric as ontological-inquiry, and Teston's characterization of rhetoric as a verb in the term "ontological force"; I do this to account for how considering rhetoric ontological destabilizes any brute agentive distinction between human and nonhuman actors in their capacity to constitute and affect reality. I also consider the process of affecting reality, like Teston,

continuous, verb-like in its constant doing, and ever-present. I therefore use the word “force,” like McGreavy et al., to modify “ontological.” We can observe an ever-present rhetorical, ontological force in the study of any given ecology of matter and discourse, as the capacity for matter and discourse to constitute realities is infinite and on-going; therefore, my objects of rhetorical analysis in this work include all forms of the material/discursive.

For example, in Chapter Four I insist that IM professionals reconceive of the medical encounter through hylozoism in order to re-consider the role our natural environment plays within healing outcomes. Health is not just the outcome of what a doctor tells you to do through language, but of the intra-action of human and nonhuman agents which produce the reality of illness or health. Without this conception of rhetoric, philosophers, scientists, and healthcare professionals can fall into the trap of assuming rhetorical studies, as a discipline, has proceeded no further than one of its ancient conceptions as empty persuasion, making the mistake that Science, because it deals with physical matter, is immune to subjective world-building. In other words, rhetoric is not just an epistemology or knowledge set to view the world (or sciences) through, but a very means of making reality (and sciences) itself, and therefore, acts as an ontological force agentive enough to bring reality(s) into being in the first place.

In addressing scientific or biomedical audiences specifically, one of the main suggestions from this work is that it is incumbent upon scientists to adopt a view of rhetoric as ontological force. This perspective takes seriously the impact discourse has in shaping materiality and vice versa. Otherwise, scientists elide the role of agency their ideology has to shape the practices in our material world, conveniently distancing themselves from any detrimental implications thereof. In the case of integrative medicine, this could look like, as one example, neuroscientists insisting that medicating the brain is still the primary way to intervene in depression or addiction, while

devaluing holistic medicine's capacity to intervene in addiction without pharmaceuticals, as I will explore in depth in Chapter Three. The consequences of a (non-integrative) neurocentric paradigm of mental disorders has resulted in still exponentially-rising trends of addiction, depression, and anxiety rates, and it has also led to unprecedented overdosing casualties from pharmaceutical medications. It's neither rigorous nor ethical to ignore the socio-cultural ramifications of scientific assumptions about healing if its most privileged interventions haven't guaranteed robust margins of safety or reliability.

In addressing rhetoricians specifically, I suggest they be prepared to ebb and flow with the important work being done in the sciences, not just as discourse-police, but as genuine contributors to the questions sciences ask in the first place, and therefore, what (ethically-guided) methods and practices ensue. Like Willey points out, we cannot simply engage with sciences in good faith that everything being done in the name of Science is absolved from colonizing, appropriating forces, and so too does genuine engagement with sciences need to be reflexive, not facile. Rhetoricians continue to have a responsibility in exploring the connection of discourses and their correspondent, manifesting realities, especially as those realities pertain to some of the most powerful institutions with almost uncontested liberty to define, diagnose, and treat human health concerns. In contributing to the field of rhetorical studies, I show in this dissertation how IM rhetoric has the capacity to build or dissolve oppressive or agentive relationships within the global healthcare system. I also argue that IM rhetoric has the ability to unintentionally perpetuate the very oppressive dynamics it often claims to set out to resolve, meaning that studies like the present one can assist IM personnel, stakeholders, and officials in closing the gap between what they mean for IM to accomplish as an institution, in contrast to what its current global effects are.

1.4 Chapter Overview

1.4.1 Chapter 2

Chapter Two asks whether IM rhetoric and processes can enact sites of intersectional, anti-colonial feminist resistance. Challenging former feminist perspectives on Integrative Medicine, I argue that rather than IM unproblematically being the feminist alternative to Biomedicine, that IM re-produces many of the same ontological and pragmatic limitations of Biomedicine for women and other disenfranchised groups. I also draw on the insight of my interviewees to bolster and complexify what current power disparities characterize the IM workplace. I close by integrating the voices of Indigenous scholars who argue that feminism which merely reproduces the values of “developed” nations will never adequately care for women’s healthcare globally.

1.4.2 Chapter 3

Chapter Three is mainly a rhetorical analysis of who actually has the choice to receive and give IM care within the National Institute of Health’s manual for IM implementation and research design. Building upon the necessity of a robust feminist, anti-colonial framework in Chapters One & Two, Chapter Three puts theory into action by demonstrating how national discourse has the capacity to uphold the processes of modern neoliberal colonization under the name of scientific development. This chapter concludes with implications of the non-human agency such a document carries to craft material-discursive processes of IM for the foreseeable future.

1.4.3 Chapter 4

Chapter Four asks what IM could look like if a feminist, anti-colonial framework is taken seriously and applied to future material-discursive enterprises of IM. For example, by integrating a hylozoist ontology of medicine—one that includes the materiality of matter, or the enhanced role of mind and emotion—we could begin to approach more idealistic integrations of more democratic medicine overall. This chapter demonstrates that not only is Biomedicine the anomaly globally for not integrating the animacy of all matter into its ontology, but that doing so would not threaten what is true and real about biomedicine(s)' efficacy either. I argue that rather than biomedical ontology needing to be overwritten, that biomedical and hylozoist ontologies can co-exist like crucial inter-locking pieces of a meta-ontology. This example of substantive integration would usher IM closer to the goals it claims rhetorically to achieve.

1.4.4 Coda

The coda integrates the insights of the former chapters with the self-reflexive analysis of my subjectivity as a researcher. I give final cases to continue integrating or to stop integrating global medicines, but ultimately argue for a highly cautious, self-reflexive approach to integration that looks for “co-existence” rather than the full dissolution of disparate ontologies and practices into one form of medicine. I reflect autobiographically on how my background and identity played a crucial role in the articulation of this conclusion.

2 Is Integrative Medicine Feminist? Biopower, Subjectivity, and Feminist Resistance in Integrative Medicine

Integrative Medicine (IM) advocates commonly deploy powerful, persuasive rhetoric to portray IM as a liberatory, even feminist, model of futuristic healthcare. The first place that language constrains our understanding of IM's relationship to power is in the very naming of what IM purports to integrate, as I discussed in the Introduction. In this chapter, I discuss the most common metaphorical language deployed by IM advocates who aim to describe what an IM intervention accomplishes that Biomedicine doesn't. In particular, Barbara Willard, a communication scholar, argues that IM metaphors demonstrate IM's potential as a progressive, feminist intervention in medical practices¹⁰. While I maintain and agree with Willard that IM presents the opportunity to enact forms of feminist resistance in the healthcare system, I contest her perspective by drawing attention to intersectional¹¹, anti-colonial concerns about IM stakeholders' ability to position neoliberal tactics of self-surveilled consumerism as IM patient and practitioner agency, which complicates IM's feminist potential.

¹⁰ One other sociologist, Anne Scott, argues in a '98 article entitled "Homeopathy as a feminist form of medicine" that one specific approach to holistic healthcare, homeopathy, enacts feminist values because it challenges the ontological dualism associated with patriarchal medicine (e.g., nature/reason, nature/culture, mind/body). I do not focus on this case in this chapter, however, because while Scott's focal points reflect the same dynamics Willard is concerned with about the feminist potential of IM (Scott's focal points are the power imbalance within the practitioner/patient relationship; the exclusion of social concerns from the biomedical model; and, the trivialization of women's concerns and knowledge within the clinical encounter), Scott's arguments for how homeopathy enact these kinds of resistance are highly specific to this one form of treatment. Furthermore, while Scott explicitly states that homeopathy challenges ontological dualism, this dimension of critique is implied by Willard's exposition about why the feminist healthcare movement began in the first place. Finally, I deliberately leave Scott's contribution to be explicated further in the coda because I will treat the convergence of disparate ontologies implicated by IM with greater care there.

¹¹ I borrow Kimberlé Crenshaw's famous term here to designate that oppression happens at various intersections of identity. When I use the term "intersectional," I am asking if IM protects all groups that intersectional feminism protects, including BIPOC, trans* folks, persons who identify as women, persons who are differently abled, and anyone in the LGBTQIA+ community. Comprehensive analysis of how IM affects each of these groups is beyond the scope of this chapter but designates the exigence for further research.

To make this case, I extend medical sociologists Christopher Fries and Deborah Lupton's observations about the limits of IM's egalitarian nature, by showing how these limits directly affect women and other marginalized groups specifically. I also draw upon the insights of my interviewees to show how power constrains and enables patient and practitioner's agency to navigate IM processes, providing, at times sympathetic, and at others, alternative perspectives to claims Willard makes about IM's ability to balance power disparities. I conclude the chapter by engaging with Indigenous feminist scholars Dian Million and Frédérique Apffel-Marglin to show that the site of resistance Willard identifies, is, at its best, merely a reinforcement of feminist values that developed in direct relationship to neoliberal ideals of self-control and individualism, but even as such is limited in its ability to provide quality healthcare to most in the US. As a site that upholds these, what Apffel-Marglin calls, developmentalist feminist values, IM rhetoric and processes also effect women globally. Specially, they have the effect of colonizing Indigenous ways of being out of existence in exchange for the normalization of a global, neoliberal subjectivity as, not just an economy, but an approach to healthcare and life in general.

IM does have feminist potential but only when we address the material-discursive dimensions of IM discourse, including its rhetorical effects which may, in practice, stifle anti-colonial, intersectional feminist advances. IM practitioners claim to re-balance the relationship of equality between doctor and patient, for example, but this equality is not currently extended to everyone seeking healthcare—the very possibility of who can experience this equality is already constrained by material-discursive apparatuses that privilege an ideal IM patient. I will explain, based on this analysis of power dynamics in IM processes, who the ideal IM patient is to date, and therefore who potentially gets left behind by figuring IM prematurely as an emancipatory, feminist project.

The vast majority of IM scholarship to date falls into two general categories: journals which specialize in generating the evidence-basis for IM research and medical sociology publications which look at the socio-political dimensions of IM processes. This chapter concentrates on the contributions of the latter to demonstrate that critical scrutiny of IM processes is not new, though it certainly requires more recent insights based on how quickly IM is changing. Criticism of the IM paradigm is widespread in medical sociology, and it has been even before the increasingly accepted naming of an “integrative medicine” paradigm, as we can see from Janet McKee’s hallmark essay (1988), “Holistic Health and the Critique of Western Medicine.” McKee and others set the ground for important IM critiques like Lupton’s *Medicine as Culture* and various Foucauldian analyses of the biopower inherent to IM processes from sociologist Fries that I engage with in this chapter.

While most medical sociology recognizes the emancipatory project of IM processes as rhetorical rather than lived, one scholar outside of medical sociology, Barbara Willard, argues in a 2005 article, “Feminist Interventions in Biomedical Discourse: An Analysis of the Rhetoric of Integrative Medicine” that “the meaning created through these {IM} metaphor clusters performs a feminist intervention into biomedical discourse, having the potential to significantly alter health care practices in the U.S.” (115). Though she cites publications like Lupton’s, which strongly criticize IM processes, Willard’s article takes a far more optimistic look at how IM can further build upon three primary symbolic sites of feminist interventions that can be found in IM discourse: 1) feminization of medicine, 2) bodily site of contestation, and 3) the body as a project. Her major claims focus upon how IM is providing integrative practitioners with an elevated status in healthcare settings, the enhanced agency of the IM patient to take control of their own mind-bodies, and that IM creates a “relationship of equality” between doctor and patient. Each of these

claims necessarily rest upon the assumption that the vectors of power within the medical setting turn from top-down authority to the leveling of power amidst all agents in the IM encounter, which does not capture the full picture of IM processes.

In what follows, I draw on Willard's work to show how dominant metaphorical language deployed by IM advocates is effective in persuading potential patients to identify with the values of IM; but I also maintain that persuading consumers into perceiving IM as emancipatory is not enough to be feminist. The reality of IM processes and discourse is that they maintain appropriative, colonizing forces, they uphold the dominance of biomedical verification, and that IM is mainly accessible to economically and racially privileged consumers. Presenting IM rhetorically as the liberatory alternative to Biomedicine is only the first step. Reconceiving of rhetoric as an ontological force, I argue with the addition of medical sociologists' insights that following through on the pragmatic, material level of reality is crucial for IM to be considered feminist. In order to achieve intersectional, anti-colonial feminist aims, IM scholarship needn't only care if women are receiving better healthcare but ask if all disenfranchised groups already disadvantaged by biomedical healthcare systems are served by this rapidly growing turn to IM.

2.1 IM Rhetoric as Feminist, Emancipatory, and Progressive

While many officials of IM institutes claim that the turn toward IM derived from logical observations about the shortcomings of biomedical procedures, others maintain that had public pressure never been applied to Biomedicine for its socio-political limitations, we would not see the swell of patients flocking to IM we do today. In her rhetorical analysis of IM discourse, Willard locates the rising turn toward IM (she, Fries, and Lupton will call it CAM—complementary and

alternative medicine) specifically as continuity of feminist interventions in normative biomedical practices which historically marginalized women. She cites Carol Weisman's examples of women's frustration with normative healthcare to show what these socio-political limitations of Biomedicine were/are: "the medical profession was perceived as treating women in a condescending manner, withholding information, overusing surgery and risky drugs and devices, medicalizing women's reproductive functions, and reinforcing sexual stereotypes" (121). The rise of feminist criticism of biomedical practices also pointed out, for example, "the inaccessibility of medical discourse and emphasized the need for straightforward medical knowledge about the female body and women's empowerment over their own health care" (116). The feminist healthcare movement was predicated upon exposing and transforming these skewed power dynamics.

As a result of this empowered feminist intervention, Willard argues, "many women turned to complementary and alternative medicine (CAM) because of increased personal attention from doctors, the perception of patient empowerment, and a sense of participative decision making in determining healing approaches" (116). By identifying the exigence for feminist attention to IM, Willard is able to deploy a rhetorical analysis of IM metaphors which symbolically perform feminist resistance to overly patriarchal constructions of medical meanings. She cites, building upon Lupton's claims about the same metaphors in *Medicine as Culture*, the dominance of military/masculine metaphors (e.g., "battling" cancer, "fighting" disease, "winning the war against drugs and addiction") that have characterized Biomedicine as patriarchal, in order to show how IM advocates capitalize on these metaphors to embody the more desirable alternative to "fighting" or "battling" disease. Willard states:

Typically, straw man metaphors are considered to be fallacious arguments, but in this case, CAM practitioners reclaim this fallacy as a rhetorical tool used in their efforts to critique biomedical discourse. Integrative practitioners use straw man metaphors to link a masculine system of associated commonplaces to the purported rhetoric of traditional medicine, framing the practice of Western medicine in a negative light as overly hierarchical, invasive, and aggressive. At the same time, integrative practitioners offer an alternative discourse that characterizes their practice as a more feminine, nurturing, and empowering approach to health care. (124)

In this passage, Willard demonstrates skepticism of the strawman arguments famous IM advocates deploy to criticize the workings of Biomedicine. Two of the authors Willard features, Christiane Northrup and Andrew Weil—who is known as the godfather of American IM—are both MDs certified in the US, and both have significant online followings, as well as dozens of publications. Northrup and Weil, while now public figures, started out in the medical field like any other medical student, and therefore, I would add, have the ethos to speak to not just the kinds of claims made in medical discourse, but the very scientific expertise that biomedicine(s) requires; therefore, they also have an embodied access to how scientific expertise is performed discursively at the institutional level beyond what rhetoricians may intellectually identify from outside of that field. I make the distinction from Willard that it's inchoate to present figures like Northrup and Weil purely as "CAM" practitioners who "misrepresent biomedical discourse," as their initial training in biomedicine(s) forged the very exigence for the field of IM they helped to invent in the US.

Moreover, the use of the term "strawman" here is itself somewhat of a strawman because Willard's focus on substanceless metaphors for Biomedicine distracts readers from an even more substantive issue: that IM rhetoric can misrepresent and mislead the public about IM itself. First,

to imply that Northrup and Weil do not convey substantive, well-documented issues within Biomedicine because of their use of metaphorical language is problematic because all language is symbolic; *any* representation of a substantive issue in medicine is spoken through metaphor. Indeed, Lupton makes this point when she notes,

The irony here is that for most users of orthodox medicine the symbols and rituals of medical care are just as mysterious as those used in CAM. Most patients have little understanding of the bioscientific basis of a diagnosis or why a certain drug or treatment is prescribed: for them, it is simply a matter of faith, of belief in the ‘magic’ of medicine and the credentials of the practitioner. (133)

Willard, however, is arguing that IM advocates are basing their criticisms of Biomedicine on strawmen, which are substanceless arguments. If IM advocates were basing their criticisms on fallacious arguments, then their language would not have revolutionary potential because it isn’t representing genuine issues within the medical system. In other words, if Northrup and Weil were *substanceless* with their language, like Willard is claiming, we also couldn’t rely on these metaphors as a substantive site of feminist resistance as Willard also wants to claim.

Instead, I argue, Willard’s attention on IM advocates “misrepresenting” Biomedicine is an argument that distracts from even more core, substantive issues related to IM rhetoric because first, IM criticisms of Biomedicine are grounded in empirical, concrete data about Biomedicine’s shortcomings; examples include that biomedical approaches to chronic and lifestyle diseases are systemically faltering, and biomedical agents are often no exception to institutional racism, sexism, and ableism that, in part, characterizes healthcare encounters in the US. The second reason Willard’s focus on biomedical metaphors is a distraction is that in conversations of IM rhetoric, it is far less urgent to look at how IM practitioners misrepresent biomedical discourse than it is to

look at how IM metaphors elide the dynamic realities of IM processes themselves. This is the case because rather than deploying these metaphors as a pure, unproblematic alternative to Biomedicine, IM rhetoric can have the effect of hiding the dimension of IM that reproduces features of the oppressive biomedical system it so often claims to resolve.

To clarify, I do not deny that IM practitioners *can* misrepresent biomedicine(s) rhetorically. But it appears more urgent to attend to how IM practitioners *misrepresent IM itself*, because Biomedicines' limitations have been well-documented, and IM is often rhetorically presented as the solution to those limitations, making it all the more potentially misleading. While millions of patients on the planet are looking to IM discourse for answers, it is crucial that IM is represented as accurately as possible for its own limitations, so that consumers have the most possible information to base decisions upon. This priority would create a bedrock for deeper agency of consumers not just of healthcare but of the discourse that characterizes it.

By revising the focal point that Willard initially identifies, the question then becomes, how do IM advocates, with robust ethos to speak to both biomedicine(s) and IM, represent IM through metaphorical language, and what realities do these symbolic expressions engender or elide? Willard shares how her analysis

indicates that the primary method used in the rhetoric of CAM medicine involves paraphrasing masculine and military metaphors, giving the impression that they dominate biomedical discourse and thereby control traditional medical practice...CAM practitioners take what may be customarily seen as an appropriate metaphor (disease as the enemy - with a heroic doctor saving the body) and attach to it a negative connotation (doctors fight our health battles for us, taking away our power). These straw man metaphors function to

persuade readers that alternative medical practices are often preferable to traditional Western medicine. (124-125)

She also argues that while these metaphors are strawmen, they provide substantive resistance to Biomedicine, engendering the patient's embodiment of IM:

These conceptual interventions have the potential to restructure medical experiences by creating a liberatory health practice. As individuals are persuaded by the metaphor clusters and begin to engage in integrative health practices, they begin to inhabit an embodied discourse. In other words, they perform the act of integrative health care. Their bodily practices become the sites of systemic intervention. (140)

For Willard, the deployment of these fallacious arguments engender the substantive, embodied site of resistance, including discourse and bodies, which would lead to a more feminist healthcare system overall. She cites at least three major ways that this newly emerging power dynamic manifests, including a new "relationship of equality" between doctor and patient, the enhanced status for IM practitioners, and the enhanced agency and bodily autonomy for IM patients overall. Next, I complicate Willard's conception of feminist resistance in each of these sites by integrating insights from medical sociologists Lupton and Fries, as well as the insights from the IM practitioners I interviewed at my local fieldwork site. Lupton and Fries specifically draw on critical and cultural theory to examine dimensions of Foucauldian biopower and the self-surveilled subject within IM/CAM rhetoric. IM processes require practical, material reform as well as the revision of rhetorical appeals which would account for these critical perspectives before IM can be considered a robust site of feminist intervention in medicine.

2.2 Relationship of Equality between Doctor and Patient & Enhanced Patient Agency

Willard claims that IM rhetoric enacts feminist agency by contrasting itself metaphorically to Biomedicine. However, IM rhetoric functions in at least two additional ways that Willard does not highlight: 1) IM rhetoric poses itself not just in discursive opposition to Biomedicine but often capitalizes upon Biomedicine's own discursive markers to create IM consumer identification with Biomedical values, and 2) that even IM rhetoric which is designed to position itself as opposite to Biomedicine has the effect of not just persuading consumers to identify with IM but to elide any focus on how IM itself reproduces Biomedical dominance in the marketplace. Willard insists that the agency of IM rhetoric engenders a reality in healthcare where the patient is now re-figured as agentive, even "equal" with the doctor's authority, but in this section, I show that IM rhetoric also has the ability to engender realities that reproduce the very doctor-patient hierarchy characteristic of Biomedicine that IM attempts to revise.

The relationship between doctor and patient can be read, according to Lupton, as a social class schism which acts to preserve power on the side of the doctor within a biomedical framework. The performance of power, rather than inherently being an exploitation of that structure, can also more generously be read as the process of socialization doctors themselves are inculcated through. Lupton elaborates:

according to the functionalist and Foucauldian perspectives, power enables doctors to act in the competent role demanded of them by most patients, and which is legally and professionally prescribed. Thus doctors are not necessarily behaving in a deliberate attempt to oppress their patients and subordinate staff; they are behaving in a way which is expected of them by their co-workers and their patients, and cannot easily 'decide to break the frame of their professional game' without serious consequences (Maseide, 1991: 552). Doctors

themselves are subject to the field of power that constitutes institutionalized norms of behavior in medical practice, while patients expect such behavior as necessary and rational.

(125)

This view of the doctor's agency in the medical encounter echoes Willard's claim that it would be a strawman to purely view power imbalances in the medical encounter as a form of oppression; IM metaphors certainly carry the potential to paint an inaccurate generalization about the intentions of all doctors in a biomedical setting. In addition to the socialization of medical school, hopeful doctors also arrive at medical school with the relativity of their perception shaped by formative social environments which affect how they experience their relationship to patients. Lupton states that while doctors are in most cases performing duties as they are expected of them, they continue to be responsible for the presuppositions they work and diagnose through: "Doctors in western societies invariably come from the ranks of the privileged classes, with only a minority of working-class origin. Their background and life experiences therefore tend to prevent them from taking due cognizance of the social structural roots of their patients' ill-health" (115). The concern Lupton expresses here also shows why, despite the reality that strawman metaphors can deter from the accuracy of all doctor's intentions, that a feminist intervention in medical practice was necessary regardless. This intervention was not predicated upon the accumulation of intentionally fallacious narratives but of the overwhelmingly similar experience of women's subordination within the healthcare system; the social advantage of a mostly privileged, male workforce led to the exclusion and marginalization of women as medical subjects. Willard claims CAM is already rebalancing this disparity:

Most significant, this feminist intervention in the biomedical model has contributed to a substantial and positive change in the way we conceptualize medical practice, including

how patients view themselves as empowered agents of change, how medical personnel respond to patients as individual actors and decision-makers, and how the patient and the health care provider *form a relationship of equality* (144 emphasis mine).

Willard highlights here how traditionally hierarchical medical encounters have seen qualitative shifts over the last few decades, emphasizing an optimistic interpretation about the equality implied in current IM processes. Lupton, in addition, also argues that “In some ways CAM does fulfil its promise”:

Most CAM therapies...offer instead treatment which depends upon the sensitivity of the patient and practitioner relationship, and simple, non-technical, non-invasive methods (for example, hypnosis, massage, meditation, nutritional therapy, herbal remedies, heat treatment, acupuncture) to effect a cure. The emphasis upon the individual’s life-history and the combining of the mental, the spiritual and the environmental with the physical dimensions of health address many people’s dissatisfaction with the mechanical, fragmented body image of biomedicine and their need to conceptualize their health in a holistic manner which deals with the context of their everyday lives. (131)

What Willard and Lupton show here regarding IM’s strengths in rebalancing power dynamics is further exemplified and clarified in the evidence I received at my fieldwork site with an IM hospital. I was told in my interviews with IM practitioners that their patients report being seen and heard in their offices in ways the rest of the hospital rarely replicated. Robin explained to me that her patients are relieved to not be viewed as a “collection of body parts.” She also told me “They love how it feels to be here, they love how we talk to each other about the patient, they feel very seen and heard. Belief is a big part of it. It’s not placebo, but it does kind of work like that. Belief is huge, they have to resonate, like, trust, you—it’s relationship medicine.” Another practitioner

in the office, Jade, clarified to me that IM modalities have the capacity to help anyone precisely because her role is not to impart wisdom on the patient but to facilitate the patient in finding their own inner guidance. She explained to me “I don’t have to be an expert on what it’s like to grow up as an impoverished Black male who has been to jail because I facilitate a process in which they lead themselves. It respects the human—takes the hierarchy out of the relationship.” IM spaces, in other words, allow patients to embody an active rather than passive role to their health maintenance, and practitioners and doctors are willing to combine the wisdom of the patient with their own professional training in order to negotiate the meaning and outcomes of their illnesses, leveling out the often non-negotiable power dynamic that historically characterizes the biomedical encounter for intersectionally-marginalized groups.

Critics of the IM movement, in contrast to perspectives above, show however that enhanced patient agency is not merely the result of doctors willing to exchange knowledge with patients. Sociologist Christopher Fries maintains that the current thrust we see toward IM is largely the result of a Foucauldian surveillance state that privileges the biopower of health consumer’s self-regulation, or, what Lupton coined in ‘95 as “the imperative of health,” “in which individuals are encouraged by population health promotion schemes to become concerned and reflexive in the individualized specialization of medicine” (356). Without acknowledging this economic dimension, Willard claims that the IM encounter is feminist because patients and doctors consciously and willingly rebalance power between them.

However, a more critical perspective emphasizes that the ideal IM patient is someone who unintentionally elides focus on socio-political causes of ill health in exchange for the narrative of their total responsibility of their own mind-bodies. Rather than IM coming about because of the willing concession of biomedical agents, as Fries identifies, the economy is certainly a driving

factor forcing Biomedicine to adapt to consumer demand for alternative, self-centered modes of healing. This creates the effect that biomedical institutions appear to offer choices to the healthcare patient, yet those choices are highly constrained based on what would allow biomedical institutions to continue securing financial profit and epistemic dominance over healing philosophies. Consider the reality that in the US, most IM practices are not covered by insurance, and in order for them to be considered multiple institutions would need to agree on the *scientific* evidence-basis for the legitimization of these practices. This is a process that will involve congress, the National Institute of Health, university and hospital-based research, as well as insurance companies. All of these institutions have their own exigence for including or excluding global medicines in the US healthcare system, perhaps the most obvious example of dissonant goals being that insurance companies are first and foremost a business, not healthcare providers. If IM was effective at what it aimed to achieve, individual responsibility and maintenance of health, then the need for hospitals, big insurance, and big pharma, which backs many government interests, would decline. What this means for patients is that rather than purely being the co-creators of their alternative wellness plans, as IM rhetoric tends to proclaim, patients are funneled through a neoliberal subjectivity that posits itself as self-aware, even subversive, while ultimately, their money lands back at the base of a stable biomedical infrastructure. As Fries notes,

These consumers have absorbed the neoliberal doctrine of individual responsibility and, in a context of cultural antagonisms between public trust, risk, and scientific legitimacy combining to erode confidence in expert knowledge, are seeking out the protection and assurance that comes with the use of complementary/alternative medicine. (357)

Based on Fries' insights here, it is clear that one of the detriments of IM, New Age, and self-care cultures—which resonate with postmodern values of challenging traditional authority—is

precisely how too much emphasis on the individual distorts needed attention on powerful entities. Prestigious American universities or hospitals with IM departments, including Harvard and Duke, are currently having the effect of continuing to secure biopower within biomedical institutions that present themselves rhetorically as integrated healthcare. Meanwhile, as the IM consumer assumes the responsibility for greater responsibility of their health, less attention within the medical encounter is drawn toward socio-political factors of ill-health, including environmental regulations, access to clean water, nutritious/affordable food, clean air, etc. While consumers may actively believe they are seeking out agentive forms of healthcare that would destabilize a biomedical paradigm, their healthcare choices remain designated by capitalist interests that comprehend the rhetorical effectiveness and the financially lucrative strategy of selling IM as a form of consumer agency. Because most IM services are out-of-pocket in the US, a financially privileged class will enact this consumer agency, and the effect is that the vast majority of health care patients in the US remain dependent on expensive and invasive biomedical procedures. Simply receiving IM healthcare does not inherently destabilize power dynamics of Biomedicine's control over the IM encounter.

In addition to IM rhetoric persuading consumers that their approach to healthcare is better because it is *different* than Biomedicine, IM rhetoric also often subtly identifies itself within the discursive markers of Biomedicine that consumers would recognize the familiarity of (e.g., FDA discourse about safety and effectiveness). Fries summarizes this point when he states, "The biomedical response to the counterhegemonic threat of alternative medicine has adapted alongside the evolving biopolitics of subjectivity, shifting discursive emphasis to issues of *efficacy*, *safety*, *cost-effectiveness*, and *mechanism*, while enrolling corporate sponsorship and placing the autonomous individual as the centerpiece for the governance of health" (364 emphasis mine). Here

we see the deployment of biomedical metaphors, not to distinguish IM from Biomedicine, but which function to reassure patients about the safety and reliability of global medicines through Biomedical discursive verification.

This rhetorical appeal is persuasive because it misrepresents the reality of how efficacious and relatively safe *holistic* global medicine can be, and has been for millennia, in comparison to Biomedicine's invasive, chemical, and technological procedures. The director of my fieldwork site told me directly that at least one reason biomedical professionals are allowing more patients to openly discuss IM with them is because they know how low the risk of bodily harm from holistic medicine is compared to biomedical procedures— "doctors figure, it's probably placebo but at least there is no evidence of acupuncture, Ayurveda, or yoga ever hurting someone," he said to me. These appeals to efficacy and safety intentionally elide any mention to figures of biomedical iatrogenesis, or, the medical complications or death that result from the discretion of biomedical doctors and/or procedures. In *Coyote Medicine*, M.D. Lewis Mehl-Madrona details at length his experience with watching patient after patient become affected by, many times fatal, yet entirely preventable diseases that only resulted from the procedure-driven protocol of opening the body to "know" what is going on inside.

Biomedical procedures and professionals are directly culpable for patients that die because of overly aggressive or invasive procedures, yet IM rhetoric often implies holistic global medicines are untrustworthy until Biomedical procedures are able to securely process and approve of them. Nowhere in the evidence I've gathered is IM rhetoric framed so that the safety and reliability of biomedical procedures is verifiable through the epistemology or philosophy of other, especially holistic, global medicines. This reminds us that regardless of how egalitarian IM rhetoric aims to

be, imagining the authority to verify being shared or even flipping the other way seems currently implausible.

Of course, in addition to metaphorical language that allows consumers to subtly identify with the comfort of biomedical values within IM rhetoric, IM rhetoric can also be effective by framing itself in opposition to dominant biomedical metaphors, as Willard stated earlier. Lupton, cites the examples of CAM practitioner's and patients using language like "fulfillment", "balance", "feeling comfortable", "feeling tranquil", "peace of mind", "being fully me" and "feeling positive" (131). She shares that "These definitions of health and well-being are markedly different from conventional medical definitions, with their focus on self-knowledge, balance, a positive mindset, self-agency, control over one's life and on emotional states and overall feelings rather than responses from specific body sites" (131). However, even by shifting the patient's attention metaphorically from passive to active roles within their own healing process, again, emphasis on the socio-political dimensions of healthcare access, appropriation, and capitalism are lost. Lupton articulates this problem as such: "CAM often joins scientific medicine in not sufficiently acknowledging the important link between individuals' health and the broader social milieu in which they live (such as the impact of social class), and thereby may serve as merely one facet of the institution of medicine's role in legitimizing and obscuring the prevailing social inequalities leading to ill-health" (132).

While CAM or IM in some ways does fulfil its promise to rebalance power disparities between doctor and patient, between the system and the individual, many barriers remain in place for IM to achieve what it sets out to do rhetorically if it is to enact feminist resistance. Willard argues that "those who follow integrative medical practices take control of their bodies. They do not place the fate of their bodies in the hands of a professional; rather, they participate in the

creation and management of their health” (141). She cites this full reclamation and control of the body without any reference to Lupton’s conclusions about the imperative of health or neoliberal subjectivity, which is, at least in part, controlled by the economy, not the individual. Instead, Willard highlights that the effects of IM metaphors which distinguish themselves from Biomedicine are at least partially responsible for this revolution in healthcare. But IM metaphors are not just deployed in opposition to biomedical discourse; at times, they capitalize upon the very discursive markers of Biomedicine familiarity, as we see in terminology like “safety,” “efficacy,” and “mechanistic” understandings, creating a covert identification of a consumer’s values within a neoliberal, Biomedical normative experience of healthcare. Furthermore, if the ideal IM patient is someone who resonates not just with how IM is different but, at times, the same as Biomedicine; has enough financial security to dabble in alternative healthcare choices; and spends less time questioning what the socio-political impact of funding IM is, then this ideal IM patient is, I would argue, not inherently enacting feminist resistance, nor is the system that supports this form of consumerism.

Before we can rebalance the doctor-patient relationship as one of feminist agency, IM rhetoric will need to evolve to be more transparent about the ontological force it has to reinforce biomedical dominance as a marketplace, thereby making standard healthcare still the first and only option for most healthcare consumers in the country. Furthermore, more attention is needed upon how IM services already enable an educated and financially elite clientele to benefit from those services, leaving behind the same groups that already suffer systemic disadvantages in the current biomedical paradigm. Finally, scholarly attention continues to be necessary to examine the material-discursive dimensions of how Biomedicine appropriates global medicines in order to function within Biomedicine.

2.3 Enhanced Status for IM Practitioners

Willard also argues that IM rhetoric not only poses a site of feminist agency for doctors and patients but for IM practitioners themselves. She shows how IM rhetoric engenders the material outcome of IM practitioners now increasingly enjoying an enhanced status and privilege within the healthcare system. However, I add that this portrayal of material outcomes is insufficient to convey the complexity of how practitioners experience agency within the IM institution. Willard states, and my fieldwork anecdotes echoed, that IM practitioners do enjoy many benefits, including the cultural cache of affiliation with Biomedicine. However, IM specialists also continue to experience the effects of representing a still-marginal approach to healthcare within the biomedical system. In parallel with arguments laid out above, I argue that rather than figuring IM rhetoric purely as a site of feminist resistance which rebalances power disparities between medical professionals, that a closer look at the multiplicity of material outcomes shows that IM practitioners themselves can, at times, participate in the othering of global medicines themselves, as well as they often continue to be treated as last resorts within the hospital when it comes to patient diagnosis and extended care. IM practitioners are not inherently enacting feminist resistance by representing an “alternative” approach to Biomedicine if they passively participate in reproducing the systemic and structural inequality that Biomedicine is well-documented for engendering for patients, as well as its own supplemental affiliations, like IM.

Willard positions IM rhetoric, however, and the IM patient’s body, as a site of feminist resistance because it has allowed once marginalized approaches to healing, and their correspondent practitioners, to now benefit from a higher social status: “These medical professionals were, historically, central figures in health care until the creation of the biomedical profession in the nineteenth century...However, with the growing use of holistic, alternative, and integrative

medical practices, these practitioners are once again enjoying *a respected place in the health care system*” (141 emphasis mine). I saw this trend of enhanced status both acknowledged and refuted in my interviews with IM practitioners. Two of my interviewees openly recognized that they benefited both socially and financially from the cultural cache of being affiliated with a highly reputable and lucrative institution like the hospital they worked for. Interestingly, one of the same practitioners complained that his single greatest frustration with his workplace was the lack of inter-departmental respect and referrals for treatment. Terry explained to me how many times he had tried to connect with other doctors to do research on his area of expertise, fascia, but very few ever followed through with him. His main guess as to why that would be was because he lacked the credentials of a doctor or academic that other researchers would take seriously; he felt consistently disregarded as an intellectual in his workplace. Another interviewee, Robin, had almost the exact opposite perspective that Willard identifies. She told me:

We are the stepchild that is not acknowledged. No finances, no press, they do not know what a resource they have. It doesn't trickle down to us. They {the doctors} are very territorial. Even if we can go over, we need approval from a doctor—they are not allowed into the data/notes because they are not employees. They have to use paper charts. There is no channel to petition for change.

In this local example, Robin was frustrated that in 2020, IM practitioners of her department were not afforded the credentials to enter the electronic hospital databases for patients. Having to fill out paperwork and put that paperwork in paper files means that no doctor, from any other part of the hospital, would ever glance at most IM practitioners' notes on clients, making their insight irrelevant to the rest of the hospital. Furthermore, though this particular department is in the top ten institutions in the nation in terms of client volume, Robin emphasized how the hospital itself

spends no money on promotion of their service, which mystified her because it is clearly such a profound resource for the hospital with such high traffic coming through. Of course, this dynamic is in part due to the employee status of the IM staff, which is that they are independent contractors, and therefore, only pay the hospital a percentage to use their space. The hospital doesn't profit on the out-of-pocket cost of, at times, multi-thousand-dollar IM treatments because the majority of that money goes to the practitioner, and therefore, the hospital does not invest in promoting the practitioners or services themselves. Robin's final conclusion about this was that "{Hospital Name} does not make money on us, which is why we are not fully integrated. It doesn't make sense because we cost less and patients need less meds with us. Lack of integration is directly linked to confusion about how to profit from this." Perhaps one of the most surprising moments in my interviews came from the practitioner who claimed to enjoy the status and privilege of association with {Hospital Name} because later in the interview in response to my question about what is responsible for the "wave" we see of clients going toward IM, she said, "I don't feel a huge wave of integration; I feel othered."

What these perspectives don't reference is the reality that IM practitioners in the US are predominantly made up of the same demographic of people that medical doctors are: they mostly come from privileged educational and financial backgrounds, and in every case of my interviews, they all presented as white. This poses challenges when looking more closely at how these practitioners engage with and rhetorically present global medicines, which originate in Indigenous cultures, to their patients. Acupuncture, Mindfulness-Based Stress Reduction, and fascia work, which were the three modes of my interviewees, all originated outside of a biomedical frameworks, yet each of my interviewees deploy these modes through a linguistic context that privileges the Biomedical legitimacy and verification of those practices.

All three of my practitioner interviews and the center's director emphasized that their identification with IM is directly related to the extent that sciences are able to verify and legitimate those practices within a biomedical framework. Jade mentioned she thought the greatest barrier to IM is its association with New Age rhetoric because it detracts from the scientific legitimacy of her practice—her practice, Mindfulness-Based Stress Reduction was founded by John Kabat Zinn, who built this practice from Zen Buddhist traditions. Jade told me she deliberately downplays these cultural origins out of fear of turning clients away, even though she herself identifies with tenets of Buddhism as a lifestyle. Terry and Robin both were driven by the research aspect of their careers, working to closely relate their practices within findings of bioscientific literature. When I asked, my practitioners expressed more concern that the public didn't comprehend the scientific validity of their work than they were with the potential to appropriate or colonize global medicines within a scientific framework. I will discuss these implications in much more depth in Chapter Three, but here it is important to consider that even though IM practitioners willingly engage with holistic global medicine through their own identification within Biomedicine, they are still often positioned marginally within the medical system. Lupton elaborates that

While mainstream health practitioners have increasingly incorporated CAM into their own practices, they continue to maintain a strong distinction between what they regard as 'scientific' medicine and CAM. Practitioners of the latter continue to be marginalized and subordinated in mainstream health-care settings and aspects of CAM considered least scientific by orthodox practitioners may be removed as part of their co-option of CAM into their own practices (Wiese et al., 2010). (132)

Lupton's claims were consistent with the practitioners' experiences that I interviewed, as Jade, a former CEO of a hospice network, told me that if there is ever a budget cut within a hospital,

CAM/IM is the first department to go. And even this process of legitimizing their IM practices through verification makes IM practitioners more like biomedical professionals than IM rhetoric often promotes. Lupton frames this issue as a matter of struggling to balance what is unique about IM approaches with the need to be recognized as valid within a system that intrinsically marginalizes their unusual approaches: “In their struggles for legitimacy, therefore, CAM therapies are steadily weakening the boundary between the traditional and the holistic approaches to health care and thus losing any potential they may have had to offer an alternative to scientific medicine” (133).

As we can see, Willard’s claim that CAM practitioners are now once again “enjoying a respected place in the healthcare system” is not quite as straightforward as IM rhetoric may make it appear. She follows this claim stating that the result of this newer status for CAM is that “Consequently, we can find a number of health insurance companies including a variety of CAM therapies in their coverage” (141). However, this claim too, is limited in its application. Three of my four interviewees said the greatest barrier CAM/IM faces in being taken seriously as an aspect of the healthcare system, and also what would make CAM/IM accessible to most of the population, is the lack of insurance coverage for these modalities. At my fieldwork site only one of the dozens of modes offered was covered by insurance, and even that mode, acupuncture, is only covered under 6 codes of human ailments, like neck pain. Any other reason for needing acupuncture is not recognized as legitimately requiring health insurance coverage, making CAM once again a highly inaccessible form of healthcare for the majority of the population.

To return to the question, is IM rhetoric feminist in its capacity to rebalance the power dynamics of IM practitioners with medical professionals and doctors, several concerns arise. First, how IM practitioners “get taken seriously” is local and individual to that person’s workplace. I

provide examples above of my interviewees, but they also shared how at different hospitals even within the same region, practitioners enjoy various forms of liberties they don't—for example, running a public Facebook page to enhance traffic, which is forbidden at my fieldwork site, and also the ability to have a “button” to be paged from other parts of the hospital as a consultant. While there is no monolithic way power disparity plays out within the institutional setting, some commonalities certainly persist. In most instances, IM modalities continue to be treated as supplemental, or even as “last shot” attempts rather than being an aspect of initial, standard triage for a patient, as my interviewees shared with me. The combination of lack of press, lack of institutional channels for revisions within the department, or not even being considered employees present more examples of these common barriers.

And of course, while IM continues to be institutionally othered, this means that the vast majority of health care patients continue to be funneled through the standard health care system, precisely because their insurances do not recognize IM as legitimate forms of treatment. It will be interesting to see in the coming decades whether the evidence basis IM research is striving to gather will be sufficient grounds for insurance companies to pick up these modalities, or if implicit assumptions about holistic global medicines will be a stronger force to keep these modalities othered than evidence could ever clear up.

This question highlights yet another barrier about the power disparity amidst IM and biomedical professionals; how they self-identify and distinguish themselves from one another matters greatly to how IM is presented to the public. IM practitioners may be advocating for an integration of disparate modes while simultaneously reinforcing that their professionalism is defined most legitimately through biomedical markers. It is not just biomedical agents othering IM practitioners, but at times the practitioners themselves who participate in othering global

medicines' spiritual and cultural philosophies in favor of identifying their work within a Biomedical apparatus, which could be counter-productive to the attempt to elevate what exactly is unique or distinct about their approach to health care.

Before I turn to my final case for why IM does not automatically enact feminist resistance, I return here to my formulation of rhetoric as “ontological force” to convey the impact rhetoric has to build or dissolve feminist healthcare realities. In the cases given above, IM rhetoric has the capacity to persuade, mislead, and reproduce healthcare subjects who may not understand the full repercussions of their actions for people everywhere. It also has the capacity to align patients with patient-central healthcare and to offer gentler, more holistic means of health maintenance. IM rhetoric takes place at every rung of the IM ladder, including how IM practitioners speak to patients, how IM departments advertise their value and contribution, and how IM celebrities market the success of their approaches. But it is not just the discourse of humans that affect outcomes; the physical relief of an acupuncture visit, or the re-fashioning of a person's musculoskeletal fascia are also world building in the sense that physiological mechanisms and matter play a role in a patient's perception of the healthcare visit. If patients experience being seen, heard, and healed as holistic beings, then IM could very well enact feminist resistance for a patient who was otherwise rushed out of an MD's office for not having “symptoms.” In this case, matter played as much of an agentive role in influencing how we can name IM feminist or not. Aside from the physical matter of the body, institutional processes which have material repercussions for the planet and all its inhabitants are also implicated in the question of IM's feminist potential. In the final section, I show that IM processes affect the structure of an *international*, neoliberal economy, and therefore bares material consequences which deters intersectional, anti-colonial feminist progress.

2.4 IM's Global Effects as a Site of Developmentalist Feminism

IM is implicated in yet another barrier to a neat feminist resistance: its effects in a global context of developmentalist feminist rhetoric concerning women's health and autonomy. On a micro level, IM as an approach to healthcare has the capacity to colonize Indigenous healing modalities into biomedical epistemology and discourse, but at the macro level, IM also participates in modern colonization ("development") policy and rhetoric by normalizing developmentalist feminist values (e.g., rationality, individuality, bodily-control) in global contexts where such values are often unwelcome. This makes IM a dually-colonizing force that not only disadvantages women and others within countries that have access to IM, but even, by ripple effects, impacts those in places who do not even desire access to such forms of healthcare. Willard's conception of IM as feminist is inherently contingent on developmentalist feminist ideals of autonomy and self-control, which are not values that inherently protect Indigenous, anti-colonial, and even domestic intersectional feminist concerns. Rather than claiming IM as intrinsically feminist, we first need to deconstruct developmentalist feminist values associated with IM rhetoric, so that IM processes can begin to work toward addressing intersectional, anti-colonial feminist values, as well.

Willard argues early in her article that her analysis of IM rhetoric is not purely discursive but attends to the "material consequences" of IM rhetoric, and therefore, the effective changes within the healthcare system. Her conclusion is that these material changes are overwhelmingly positive, for all the reasons explored above, and therefore show the feminist potential of IM as a site of resistance. However, I hope to have shown that the ontological force, and therefore material outcomes, of IM rhetoric engender consequences that could be equally stifling to a feminist revision of healthcare. Sites of feminist resistance within IM include not just the patient, doctor, or IM discourse, but the IM practitioner themselves, and little scholarly attention has been paid to

how IM practitioners can advocate for change on their own behalf. It seems crucial that if IM practitioners are to identify with progressive values of feminism, that they actively seek (and have channels to make these requests) ways to make their practices more accessible, less definable purely through the reification of Science's legitimacy, and that IM practitioners genuinely have interest in not just the practical healing modality, or the status afforded them by working within Biomedicine, but in the philosophical and spiritual contexts these practices derive from, which often don't neatly fit into biomedical discourse or epistemology. Allowing an IM modality to merely rest upon the legitimacy of Biomedicine, advocating for no other forms of accessibility or reverence for distinct cultural origins of those practices, constitutes a passive participation in forms of Eurocentric colonization of medicine that began in the 15th century. Instead, feminist resistance enacted through IM practitioners might attend more closely to how the process of absorbing IM into Biomedicine has the ontological force to perpetuate global systemic and structural inequality for healthcare patients, as well as it, in part, disregards the legitimacy of Indigenous knowledges and approaches to healing outright.

IM thus contributes to and perpetuates the marginalization of many groups, especially Indigenous groups and women, on a dual front: by 1) prematurely claiming its own superficial revisions to a patriarchal medical encounter, as I've argued above, and 2) by perpetuating the role of IM within neoliberal capitalism itself, which is culpable for the colonization of Indigenous and other "developing" nations. To make the case for this latter and final point, I turn to Indigenous feminist scholars, Dian Million and Frédérique Apffel-Marglin, who argue that the increasingly likely extinction of Indigenous ways of being, especially for women, is directly tied to the advancement of "development" rhetoric and policy that carries out colonization through nation-state approved discourse; I deliberately cite the central projects of Million and Apffel-Marglin's

scholarship with significant detail, and without me summarizing them, in order to allow Indigenous perspectives to speak for themselves here.

In her book, *Therapeutic Nations: Healing in Age of Indigenous Human Rights*, Million sees “a present necessity to speak Indigenous trauma within the vortex of an internationally proffered human right to self-determination and a resulting humanitarian therapeutic” (7). Because Indigenous peoples have been subjected to a collective wounding, colonization, Million argues that “the ethos of this time is trauma” (2), and that healing itself will come with the rejection of “nation-state authority to grant them a right to a political self-determination that they have never relinquished” (3). Especially present for Million is the way that intersections of colonial oppression converge upon the Indigenous woman. She tragically notes, “The abject heart of colonialism and neocolonialism, and their practice of capitalism, is *gendered violence*” (177 emphasis original). For Million, “Gendered violence is perpetrated by individuals and polities in times when heteronormative order is threatened, and likewise when there is a threat to the power still invested in a racialized white male universal subject” (177). Million makes this case because she, and others, like Fries and Lupton, view neoliberalism as reaching “beyond economics to become a way of life. Neoliberalism is imbued with a powerful belief in the goodness of the market, in a claim that individual pursuits of self-interest will promote the public good. If the market knows best, then governments should give capitalism room to work” (17).

I’ve shown ways that the good IM patient takes responsibility for their own health, but this neoliberal pressure manifests differently for colonized subjects who are told by respective nation-states to take responsibility for their own wounded collective. This is the case despite the reality that colonizing forces themselves are mainly responsible for the ethos of trauma Million marks as a collective North American Indigenous experience, as well as the reality that North American

nation-states deliberately began outlawing Indigenous modes of ceremony and medicine in the 19th century (Robbins & Dewar). Neoliberal discourse teaches Indigenous women that self-determination is the means by which they heal, without their own culturally distinct forms of medicine, from the disproportionate amount of rape, assault, alcoholism, and incest that occurs in Indigenous groups only after colonization took place; self-determination, in this instance, is not about holding the state accountable for its role in these outcomes, but puts the unjust burden upon women as individuals. As Million puts it:

While the crisis is the ongoing effects of poverty and the continuing dissolution in communities in extreme marginalization from mainstream “freedoms,” they are posed with the need to “heal.” In US or Canadian societies where one self-manages, these behaviors are understood to be failures of will, of self-care, failure to self-manage one’s passions for food or for alcohol, drugs, or sex. As subjects of the medical diagnosis of addiction, of poor health, and of suspect willpower, Indigenous peoples are subjects of a concern for their ability to self-control, to be autonomous, to be happy, well-adjusted members of a free society where one monitors one’s own behaviors. (151)

The neoliberal rhetorical doctrine of taking individualistic, self-determined care for what is otherwise recognizable as nation-state induced illness, of course, is not limited to North America. In *Subversive Spiritualities*, Apffel-Marglin shows that the link between neoliberal self-determinism and women’s oppression is again tied to industrialized nation’s narratives regarding women’s health and individual autonomy—a narrative that in many parts of the southern globe is seen as unwelcome, even inane for its brute ontological severing of the individual from all that surrounds it. Regarding native Bolivian women, she elaborates:

The world for which women are being prepared is emphatically not that of their native communities, a world where the performance of rituals, festivals, and the like is central. They are being prepared to be individuals and citizens, with their own autonomous access to “resources,” decision making, services, education, their bodies, and so on. In other words, they are being prepared to relate autonomously to the market, to commodities, to productive resources, to reproductive resources, mainly to their bodies. The State uses a developmentalist feminist discourse to create individual female citizens. Such a discursive move is at once creative and destructive; the female individual citizen emerges from the destruction of the community and of her world. (132)

The primary means by which Indigenous Bolivian women are rhetorically initiated into the neoliberal subjectivity that Apffel-Marglin discusses is also related to women’s health issues and the promise of self-determination and bodily-control via female contraception. Apffel-Marglin caricatures this complicit subject: “The autonomous individual who controls her fertility acts with carefully planned intent. She determines the world according to her own needs” (147). By identifying the willing subject who maintains her dignity and decency through self-control, neoliberal rhetoric posits anyone else as abject others divorced from rational thought: “The modern bourgeois epistemology of individualism and its value of self-control transmute all those who do not live their lives in that fashion into deviant “others” who need to either be educated or failing that, coerced into the proper, normative behavior” (147). Apffel-Marglin also draws the parallel of the situation in Bolivia to racially charged, gendered oppression in the US; for this she cites Kathryn Addelson’s work on the rhetoric of Planned Parenthood, and family planning in general, which capitalizes on developmentalist feminism that would view, for example, the event of a Black teenage girl’s pregnancy as deviant, even if her community actively welcomes the pregnancy.

Surely, the feminist who values self-determination above comprehending her place in a global network of women reveals less about her ability to control her own body and more about her ability to make choices that control the bodies of less privileged women.

Interestingly for the case of IM, Apffel-Marglin marks the advent of a developmentalist feminism in direct opposition to discursive forces like biomedical classifications of women's emotional and mental instability. She notes, "Developmentalist feminism asserts women's rationality and individuality which professionalized bio-medicine and the new bourgeois order institutionalized in eighteenth-century revolutions in Europe and the United States had deprived them" (136). Paradoxically, a feminist movement designed to distinguish itself from the values of the patriarchy, reinscribed its own patriarchal values through less obviously gendered tenets of neoliberal efficacy, individualism, and rationality, which ultimately marks developmentalist feminism an active colonizing force all over the globe today. IM poised, as Willard does, as the radical alternative to a biomedical regime that once classified women as hysterics, is merely an extension of the myriad ways in which women's health and liberation is rhetorically pitted against an authoritative regime that IM does little to destabilize in the first instance. Willard's discussion of IM as a site of feminist resistance relies heavily on a developmentalist feminist philosophy which values, to her view unproblematically, a woman's right to control her own health. But as Indigenous feminist scholarship shows, this approach is highly limited when situated within a global context of women's rights.

Both Million and Apffel-Marglin cite the UN's role in classifying international standards of global health concerns, which inherently reinforce the neoliberal values of the most economically influential countries sitting at the head of UN treaties, policy, and relevant discourse. As I explicate in Chapter 3, the UN's offshoot, the World Health Organization (WHO) shows in

their *WHO Traditional Medicine Strategy 2013-2023* a direct acknowledgment of the potential that IM has to colonize Indigenous and “TCAM” (Traditional Complementary and Alternative Medicine) approaches to healthcare; however, the manual ultimately reinforces that the global exchange of health and healing epistemologies is not only inevitable, but is also the present and future of the global health economy. As WHO outlines “the need for a new strategy” in their 2013 manual, they cite five reasons which display common discursive markers of neoliberal values: 1) the continued uptake of IM globally, 2) the growing economic importance of TCAM, 3) the global nature of TCAM, 4) the regulation and accreditation of TCAM practitioners, and 5) recent advances in TCAM research and development. Million and Appfel-Marglin emphatically resist the authority invested in nation-state discourse, like the WHO TCAM strategy represents here, which tends to show little comprehension or reflection of the values of the Indigenous groups these scholars speak alongside. Thus, IM, an inevitably growing global health phenomenon, remains a highly contestable site of global feminist resistance, if it is one at all currently. Lupton concludes her section on CAM in *Medicine as Culture* with this rather somber observation:

CAM therapies thus do little to challenge the medical paradigm, for they are more concerned with practice and procedure than symbolic meaning. Indeed, they may be regarded as all the more insidious because they overtly offer an alternative to the prevailing model of health care while covertly legitimizing social inequality and championing individual responsibility and agency for health states. (134)

IM rhetoric, then, does not merely capitalize on strawman metaphors to portray themselves as the radical alternative to Biomedicine, as Willard argues. IM rhetoric also subtly identifies itself within biomedical discourse itself, persuading neoliberal subjects by ontological force to find identification between the worlds of standard and alternative forms of healthcare. IM rhetoric can

also be deliberately misleading about how radical of an alternative it is, making overly-optimistic IM rhetoric a strawman for what IM actually does in the world; the material consequences of IM rhetoric show clearly enough that too many processes commonly identified as shortcomings of Biomedicine are merely reproduced through even more subtle forms in IM. IM rhetoric therefore also carries the ontological force to continue building realities that either assist or further disadvantage groups most vulnerable to systemic healthcare disparity in the US. Before IM rhetoric and agents can enact feminist resistance, reform of IM rhetoric and processes would be required to account for their multi-dimensional, material-discursive effects of reproducing the cultural status, capital, and epistemic dominance of Biomedicine. This reform would enhance IM's ability to offer genuinely different approaches to healing—approaches that care for women everywhere.

3 Whose Choice is Integrative Medicine in America?

3.1 Introduction

In this chapter, I analyze an international and national strategic agenda concerned with development and implementation priorities for Integrative Medicine (IM), or, as the World Health Organization (WHO) refers to it: Traditional and Complementary Medicine (TCAM). I examine these manuals to show how priorities of IM implementation vary at multiple levels of local, national, and international consideration, and therefore, what effect each level of priority has upon the manifestation of other distinct levels. For instance, the two manuals, the WHO Traditional Medicine Strategy 2013-2023 and the National Institute of Health's (NIH) Strategic Plan 2016: Exploring the Science of Complementary and Integrative Health, show both similarities and crucial rhetorical divergences that are representative of, I argue, the NIH's¹² relative interpretation of what is valuable to implement from WHO's recommendations. This insight is crucial to the central project of this dissertation because the NIH's rhetorical divergences from WHO's priorities reveal why the US continues to perpetuate elitist forms of healthcare that constrain consumer and practitioner agency, especially of marginalized groups. This reality is all the more apparent when we consider that international models are successfully prioritizing making IM accessible through

¹² Attributing intentionality to the NIH is imprecise because this manual is published by the NCCIH (National Center for Complementary and Integrative Health); however, there could be conflicting values between the head or committees of NCCIH and heads or committees of NIH itself as well. For example, if the head of NCCIH was pro-training holistic doctors, this could still clash with the agenda of NIH if it valued its sub-specialization model of medical training. Who would win out in final revisions of this document on articulating the priorities of the agenda? We cannot know precisely, and therefore I do not intend to conflate all actors of the NCCIH with the NIH. But I do assume here that committees of the NIH would have made final calls on the publication of this important text as the higher-ranking entity, and therefore see those at the head of NIH committees as more immediately pertinent to assess the intentionality of than the NCCIH itself.

insurance, as well as they are taking greater care to mitigate the risks of cultural appropriation. At the local level, using the insight of my interviewees, I show that practitioner's experiences are heavily influenced by the NIH's divergence from WHO's priorities because their practices are not accessible to most patients, and because they place heavy emphasis on the biomedical validation of their practices, like the NIH does. These local priorities can advance a science of IM but also erase culturally distinct philosophies about the holistic value of a given practice, meaning that the NIH certainly affects how and if IM processes reflect substantive integration in the US.

As the 45th administration recently pulled the US out (2020) of WHO as a stakeholder because of, what the president viewed as, the US's superfluous involvement with and funding of WHO, it is clear these documents were, at the time, forged in relationship with one another, given that NIH's (2016) followed a few years after WHO's publication (2013), and the US was still a highly active Member State at that time. While it must be stated foremost here that the WHO manual is intended as general public health policy and the NIH manual is only intended as a guide for national research design itself, I focus on the NIH manual instead of the US' National Prevention Strategy (2011)—the national equivalent to WHO's general public health policy—because I argue the NIH manual, as a mainly scientific institution, has more leverage to appropriate and codify global medicines through the cultural capital of Biomedicine. The US National Prevention Strategy, furthermore, reiterates similar rhetoric about the need for “scientific rigor” and “scientific evidence-basis” to further its national recommendations, and those scientific recommendations would come from the National Institute of Health, so it is more immediately pertinent to analyze the direct source of scientific recommendations for IM progress.

Although the WHO and NIH manuals are distinct by category of intention, the institutional locations of WHO and NIH both perform different functions and therefore play distinct roles in

their ability to affect American policy on IM. For example, while WHO has the rhetorical agency to set a global standard for integration that individual countries may interpret and apply based on their idiosyncratic needs, the NIH has almost unparalleled power to define national IM research agendas, which means that Americans receive care through medical institutions that look to the NIH manual, rather than WHO's agenda, as a primary guideline. This reality affects how "holistic" of an interpretation U.S. patients are receiving of IM's uses and values because the NIH is primarily a scientific institution, whereas WHO has to equally regard international relations in conjunction with their recommendations to medical communities.

As an international document, the WHO manual is authored by an international board of interested parties, making this document inherently more sensitive to culturally distinct needs¹³. In contrast, the NIH manual, as a national document, replaces focus on socio-cultural relations within medical communities with the primacy of biomedical evaluation of IM practices. While WHO's manual gives much liberty to Member States to interpret its international recommendations to best fit the needs of individual countries, the divergence we see in the NIH manual from WHO's manual most problematically elides any focus on the protection of misappropriation of global medicines, an over-emphasis on the scientific validation of already legitimate practices, and perhaps most urgent: zero focus on universal healthcare coverage, which until implemented, I argue, makes the "choice" of IM in the US a merely performative gesture toward inclusion and diversity.

These elisions combine to overlook perhaps the most progressive gestures of WHO's manual, which also advocates, among other things, for continued negotiations of international

¹³ WHO recommendations are predominately influenced by the "big five" (Russia, US, China, UK, & France) and certainly tend to prioritize and reflect that values of "developed" nations, making this cultural-sensitivity still highly constrained.

regulation standards; a knowledge base which is not solely scientific; better global communication of the uses of IM/TCAM; and the avid promotion of “self-health care.” Certainly, at least superficially, the WHO manual makes more of an effort than the NIH’s manual to emphasize the role of patient choice and autonomy in knowing what health care works best for them, which I will discuss in detail later. The NIH’s manual, in contrast, consistently focuses on the ways in which scientific institutions can validate and measure the usefulness of IM, even going so far as to claim their authority will “lead to a greater understanding of whether, when, how, and for whom such practices can have substantial impact...” (22). This over-emphasis on the credibility and legitimacy of a scientific institution to designate what will make people well—especially when it comes to global medicines—is antithetical, perhaps structurally incompatible, to substantive integration.

While the majority of this chapter focuses on rhetorical analysis of the manuals, the interviews of real IM practitioners provide another dimension of evidence for the readings I perform; these interviews show what is at stake for real people in real settings, rather than me only showing hypothetical implications with rhetorical analysis of documents. I analyze the rhetoric of the NIH and WHO manuals as the ontological force this discourse has to constitute IM realities, demonstrating that far from being neutral vehicles that set out objective criteria for the successful implementation of IM, these manuals can inflict or relieve the medical systems of lived concrete realities, such as the disparity in medical treatment of BIPOC. These manuals have this agency by, for example, either further turning genuine attention toward resolving these disparities or by merely brushing past them with performative references of “meeting the needs of different populations” (NIH 28).

Words *matter*, in that they help engender the material reality that will follow their reception, and therefore scholarly attention need be paid to documents as influential as these, as

they have the ontological force to shape the priorities of one of the most expensive and over-loaded healthcare systems in the world. In what follows, I will review the overall strategic priorities of the manuals, and then I will move into three subsections which demonstrate what is at stake at each of the crucial rhetorical divergences I identify in the WHO and NIH manuals. I will close this chapter by examining how the manuals lend themselves (or not) to priorities which are in alignment with a central philosophy of IM, which is to consider the mind-body-soul of the patient as integral to healing, ultimately answering the question: is the NIH's strategy of IM implementation an act of substantive integration?

3.1.1 Overall Strategic Emphasis

This short section sets the ground for the over-arching comparison of priority in the WHO and NIH manuals in order to demonstrate what, crucially, is missing from NIH's priorities as it outlines the future of IM research. Upon superficial comparison, we see both expected divergences of policies designed for the nation or the globe, for research or for health policy generally, but omissions from the NIH manual point to a lack of consideration for the appropriative force Biomedicine has in the world currently. This section shows how this over-arching comparison sets up a closer inquiry into the three major sub-sections of this chapter, which focus on the three rhetorical divergences of the manuals I consider to be most urgent to review.

To start, the WHO manual is broken into five sections, the first of which is introductory material and mission statements, the second and third being reviews of global "progress" and "demand" for use of TCAM. The fourth section sets out the strategic objectives of WHO's policy toward TCAM for the next ten years, which includes the following: 1) build the knowledge base for active management of T&CM through appropriate national policies; 2) strengthen the quality

assurance, safety, proper use and effectiveness of T&CM by regulating products, practices, and practitioners; and 3) promote universal health coverage by integrating T&CM services into health care service delivery and self-health care (3). And the final section of the manual is a one-page summary of “how to implement” the strategic objectives.

Immediately from the table of contents, we see the emphasis of WHO’s manual concerns itself with the difficulties inherent to a global market for healthcare which constantly influences or even trades practices, regulation standards, and professional qualifications with other nations when it comes to global medicines; the authors of this manual certainly view the potential consequences of dysregulated practices across borders to be one of the greatest barriers preventing full integration of TCAM into the conventional system. Examples of these barriers include potential misinformation or mismatched expectations of patients as they cross borders for different forms of healthcare, the regulation of training and measurement of professional expertise, as well as the practical issues of which nations tend to, for example, reimburse for certain treatments over others. The reference to “appropriate national policies” includes these concerns but also one that is non-existent in the NIH’s manual: the potential misappropriation of Indigenous healing practices. Similarly, a heavy emphasis on the complexity of national variations in partial- to full- coverage of medical expenses, and the advocacy for universal health coverage in the WHO manual, is not mirrored as a priority or concern in the NIH manual. Instead, the central focus of the national US agenda seems to primarily be to scientifically validate global healing practices.

In distinction to the WHO manual’s organization, the table of contents of the NIH’s manual is broken into 7 sections, the first of which is also mission statements from the organization. The next 5 are “Objectives” entitled: 1) Advance Fundamental Science and Methods Development; 2) Improve Care for Hard-to-Manage Symptoms; 3) Foster Health Promotion and Disease

Prevention; 4) Enhance the Complementary and Integrative Health Research Workforce; and 5) Disseminate Objective Evidence-based Information on Complementary and Integrative Health Interventions. The final section is entitled “Scientific Priorities” and features subsections such as “non-pharmacologic management of pain” as well as “neurobiological effects and mechanisms.” While some of the Objectives seem broad in their orientation of priority, a trend of scientific priority emerges in the subsection descriptions, revealing what NIH committees consider important to know about any Objective.

For example, under Objective 3, Foster Health Promotion and Disease Prevention, the first sub-point reads: “Investigate mechanisms of action of complementary and integrative health approaches in health resilience and practices that improve health and prevent disease” (3). In this section, we see that “promoting health” and “preventing disease” should be understood and explained primarily through the biological mechanism that is detected through scientific research. Under Objective 2, Improve Care for Hard-to-Manage-Symptoms, the manual reads: “Develop and improve complementary health approaches and integrative treatment strategies for managing symptoms such as pain, anxiety, and depression” (3); the implication here being that through the scientific validation of complementary care, the institution has the authority to “develop” and “improve” already existing practices with millennia of anthropological evidence of effectiveness.

Interestingly, while all of NIH’s overall priorities discuss making scientific advances, WHO does not use the word “science” in their primary objectives, but routinely employs “knowledge base” as more widely construed to be a sufficient basis for moving ahead on strategic implementation of TCAM. This diction suggests WHO has a wider criterion for *who* can assert the legitimacy of a given practice, which is connected to their concern about appropriation of Traditional Knowledge holders. When keyword searched, the NIH manual returns zero hits for the

terms “appropriation,” “intellectual property,” and even “Indigenous knowledge,” which appear dozens of times in the WHO manual, indicating a clear omission of priority for the NIH. And as I indicated earlier, the reference to strategies about how to get more Americans insured for access to IM is not mentioned either in the NIH manual, though they make this rhetorical gesture toward potentially assisting Americans in closing disparity gaps: “NCCIH seeks to foster research to develop, test, and refine interventions and to find ways to adapt interventions to meet the needs of different populations, including those most vulnerable (e.g., disadvantaged children and youth—by virtue of poverty or other adversities, racial and ethnic minority populations)” (28). The authors provide no additional comment on how scientific research that validates or improves complementary practices will inherently translate to “meeting the needs” of “vulnerable populations.” In contrast to WHO, which makes universal healthcare its third overall priority, this difference is noteworthy.

From the over-arching emphasis of the manuals shown here, there are clearly different levels of prioritization inherent to an international committee versus a national one, a public health policy versus a research design agenda—this is to be expected. However, in what follows, I question whether the national agenda’s elision of certain major priorities within the WHO manual are mere coincidence, if not intentional elisions in exchange for the emphasis on Biomedicine as the logical form of validation for practices that originate in global medical communities. I also question whether these omissions are related to the purported objectivity of Biomedicine as sufficient grounds for medical professionals to not have to concern themselves with implicit bias or cultural entanglements, despite the harrowing reality that there has been no time in US history when BIPOC have been given adequate healthcare in comparison to their white counterparts. Next, I will review the three cases of rhetorical divergences of the two manuals I view to be in most

urgent need of scholarly attention, which include the absence of discourse concerning appropriation of Indigenous practices or universal healthcare coverage, and the over-emphasis of scientific validity of alternative medicine, in the respective manuals.

3.2 The Absence of Strategy Concerning Cultural Appropriation

Here I demonstrate what is at stake by omitting any mention of cultural appropriation in the NIH manual by borrowing the terms “paradigm appropriation” and “paradigm assimilation” from Daniel Hollenberg and Linda Muzzin in their article, “Epistemological challenges to Integrative Medicine: An anti-colonial perspective on the combination of complementary/alternative medicine with biomedicine.” Hollenberg and Muzzin deploy these terms to bring attention toward what they perceive to be the greatest challenge to integrative medicine model(s), which they argue alongside Shiva (1997), is that “the biomedical paradigm...is arguably the most widespread and powerful appropriative and assimilative force in the healthcare systems of the world” (51). Taking Biomedicine seriously as an appropriative force, I argue there are myriad forms and processes that appropriation in IM models can take, and I provide examples of these varying forms/processes, especially as they relate to the rhetorical gestures of the NIH manual concerning traditional Chinese medicine (TCM) and yoga, and later, as they are reflected in the experience of my interviewees at my own ethnographic site. I conclude this section arguing that deep integration of IM models will require the sincere attempts of biomedical professionals and institutions like the NIH to integrate education of, not just therapeutic techniques that are palatable to biomedical ethos, but the underlying worldviews or theoretical contexts from which these techniques derive. This process could begin by instating a review board within the NIH

whose responsibility it is to monitor and study how selections of technologies could contribute to cultural appropriation, or by having national consortiums of IM professionals present panels and workshops on best practices.

As Hollenberg and Muzzin mention in the introduction of their article, up until recently (2010), “a critical theoretical perspective has yet to be systemically applied to IM” (35), especially as it regards the epistemological and philosophical integration of healing modalities. Their article sets out to do the first: understand the epistemological challenges to IM. Largely ethnographic, their study reviewed the attitudes and every-day encounters of various Canadian IM sites, from which they gleaned direct insight into practical and much deeper incompatibilities of the IM models. The result of this study was their proposal that attention need be further paid to both *paradigmatic appropriation* and *paradigmatic assimilation* as it regards IM processes: “In paradigm appropriation, Biomedicine appropriates certain aspects of other healing systems or traditions without fully acknowledging the paradigmatic worldview from which the particular treatment aspect was taken” (48). They go on to explain that in addition to *appropriation*, *paradigmatic assimilation* can be recognized in IM as “an instance where the paradigm not only appropriates or takes over another entire healing paradigm, or system, but re-interprets it. The theoretical attributes and characteristics are eliminated, redefined, or given new names and meanings by the assimilating paradigm, just as the villages of colonized Indigenous territories were given new names by European settlers” (49). I borrow these definitions of appropriation and assimilation as they regard IM to inform rhetorical analysis of the NIH manual, which in sharp distinction to WHO’s, does not make mention of protecting “traditional knowledge,” “intellectual property,” or “Indigenous practices.”

The phenomenon of Indigenous practices being appropriated for capitalism is pervasive in the US, whether in the medical or commercial sector. For example, Sephora, the makeup mogul, was publicly rescinded in 2018 for its release of a “Starter Witch Kit,” which featured objects such as a bundle of white sage, a rose quartz crystal, and tarot cards—all of which have lengthy histories of sacred significance to various Indigenous practices. In response to the debut, a photoshopped image that displays relics of Christianity in the same packaging of the witch kit sent a forceful, viral message that reducing and commodifying spiritual practices is a violent act of colonization to communities of color especially. The recent plundering of white sage in America—a medicine traditional to Native American tribes—as well as the unethical mining of crystals, and the lack of regard for tarot as long-established tool of divination¹⁴, propelled Americans of all ethnicities to call for the successful cancelling of this product. Sephora later publicly apologized, claiming their intention was not to offend but “to create something that celebrates wellness, personal ceremony, and intention setting with a focus on using fragrance as a beauty ritual” (Shoemaker). Synthetic fragrances being extraneous to any of the given traditions these materials were appropriated from, this comment effectively reduced thousands of years of spiritual practices to a “beauty ritual.” However, this example is one that is easily accessible to critique of the public precisely because it

¹⁴ I use the terminology of “long-established tool” as a political statement that this project endorses, which is the questioning of the authority typically designating what constitutes legitimate or valid healing practices. If a tool has not been verified by “established” institutions, it makes that practice no less *automatically* valid than any other, because as this project shows, what gets selected into the criteria of established institutions is already, in part, a process of cultural appropriation and colonization of other ways of knowing the world. The NIH, and many others, would likely not agree that tarot is an established tool, but that is at least in part due to witchcraft and anything associated with it, like tarot, being violently expunged through the mass genocide of women, especially educated women or women who were healers, in patriarchal pursuits to privilege only what suited the advancements of colonization projects. Furthermore, tarot operates on a fundamentally distinct ontology of the world that positivism rejects. Tarot connects the reader to their own intuition, which is not measurable or verifiable through a positivist assumptions about nature (only what can be seen and measured is real). By using this terminology, I also reiterate the logical truth that science and technology is not currently capable, via its positivist assumptions and processes, of fully measuring or describing many aspects of reality which clearly exist, including what the nature of consciousness and intuition even is.

is a commercial product that could rapidly be tagged on social media, leading to its viral downfall. The attempts of biomedical practitioners to appropriate or integrate Indigenous medicines into Biomedicine is, I argue, far more difficult to track down and hold accountable by the general public, making ignoring this priority in the NIH's manual particularly evasive.

How IM practices get appropriated in a medical context is multi-faceted and often covert. For example, it could take the form of heads of biomedical departments choosing to allow acupuncture practitioners to practice needlework without usual complementary practices, like the smudging of mugwort to move Qi, ultimately reducing the complexity of traditional Chinese medicine (TCM) to only those components that currently have scientific evidence behind them. Or it could look like academic journals dedicated to TCAM knowledge, routinely framing the legitimacy and validation of Indigenous practices through the lens, and language, of scientific publications only. It could also manifest as the subtle pressure for IM practitioners to continue to fit their everyday speech with clients within the confines of scientific terminology itself, eliminating any mention of crucial components of healing theories that have no words or concepts in biomedical science(s). And in the case of the NIH, it can manifest as only concerning itself with researching IM practices that have already been subjected to intense westernization and popularization, as is the case of, importantly, only parts of TCM, or yoga. In what follows, I will concentrate especially on TCM and yoga as examples of appropriation in the priorities of the NIH manual, starting with the Indigenous practice(s) of TCM. In viewing TCM as an example of an Indigenous practice being appropriated, I borrow here also from Hollenberg and Muzzin the understanding of "Indigenous Medicine," which they define as the recognition of "its legitimacy as a formal knowledge system comprised of local medicines and healing knowledges, originating

from an Indigenous community, and/or country with an Indigenous population. Examples include traditional Chinese medicine, Ayurvedic medicine, and First Nations/Aboriginal Medicine” (35).

In the NIH manual, the components of TCM that are privileged are acupuncture and herb-based medicine. Noticeably, many features of TCM are absent from the strategic agenda on research, including moxibustion, tuina bodywork, the concept of differential diagnosis, or even the therapeutic relationship between doctor or patient. As the manual states, acupuncture and herbal medicine are also the aspects of TCM that are most recognizable to the public:

“Complementary” health approaches include mind and body interventions such as massage, acupuncture, yoga, and meditation, and natural products such as herbs, fish oil, melatonin, and probiotics. Many of these products and practices are in widespread use by the public, as shown by the 2012 National Health Interview Survey (NHIS), though most people who use complementary health approaches use them in conjunction with conventional health care. (5)

Acupuncture and herbal medication are not only quite familiar to the Western world now, but they are highly lucrative as well. In their analysis of total healthcare spending for 2012, the NIH estimates Americans spent roughly \$12.8 billion on “Nonvitamin, nonmineral natural products,” under which herbal supplements would fall, and another \$14.7 billion on “Complementary Practitioner Visits,” under which acupuncture would fall. Though we do not know how much revenue was generated for each individually, it is clear that both are in “widespread practice” according to the NIH, and that both are favored under top strategic priorities in the manual. However, we see very quickly that the NIH concerns itself with particular focus on the usefulness of these practices as measured through the body—at times, even more specifically, how these practices affect the human brain.

Under Top Scientific Priorities, the manual states the priority to “Examine innovative neural mechanisms by which candidate natural products such as cannabinoids and some Chinese Traditional Medicine herbs or patches, generate analgesic effects” (37). It then adds: “Determine and analyze the neural pathways by which acupuncture, acupoint-based stimulation interventions, or manual therapies such as massage, exert their analgesic effects or therapeutic effects on various physiological systems (e.g., immune system, vascular system, musculoskeletal system, or internal organs such as brain, heart, and gut) in animal models or human subjects” (37). While the next section of this chapter will deal heavily with the problematic phenomena of Neurocentrism—“the view that human experience and behavior can be best explained from the predominant or even exclusive perspective of the brain” (Lilienfeld & Satel)—here, I draw attention instead to the way in which the practices of herbal medicine and acupuncture are solely being understood through their physiological effects on the body, when TCM is often framed by its own practitioners as connected to a philosophy that supersedes the human body. For example, doctors Chen Keji and Xu Hao explain in their article, “The integration of traditional Chinese medicine and Western medicine,” that TCM is

one of the world’s oldest medical systems, having a history of several thousands of years. It is a system of healing based upon the Chinese philosophy of the correspondence between nature and human beings. Its theories refer to yin and yang, the Five Elements, zang-fu, channels-collaterals, qi, blood, body fluid, methods of diagnosis, the differentiation of symptom-complexes, etc. TCM has two main features: a holistic point of view and treatment according to a differentiation of syndromes. The therapeutic methods of TCM involve different approaches, such as acupuncture, moxibustion, tuina bodywork, herbal medicine, and qi gong, in order to allow the body to heal itself in a natural way. 225

The contrast we see between how Indigenous practitioners of TCM describe TCM is starkly distinct from the NIH's emphasis to understand the neural pathways or effects of TCM on physiological systems. Because there is no attention paid to anything beyond the physical body in the NIH manual as it regards TCM, this manual has the effect of reinforcing paradigmatic appropriation because it "appropriates certain aspects of other healing systems or traditions without fully acknowledging the paradigmatic worldview from which the particular treatment aspect was taken" (Hollenberg 48). Not only are some of the techniques mentioned above not mentioned in the manual, such as moxibustion or tuina bodywork, but there is also an absence of any reference to needing to understand the philosophical system that underlies acupuncture or herbal medicine in order to heal. In this case, techniques like acupuncture are being selectively isolated from their wider philosophies for their ability to lend themselves to scientific measurement, such as physiological effects in the body. Hollenberg and Muzzin, who interviewed multiple TCM practitioners in their study too, cite a study conducted by Mizrachi and Shuval (2005) who found that alternative practices may have gained legitimacy to the extent that their logic of practice resonated with Biomedicine or was reducible to biomedical logic and epistemology (49). Hollenberg and Muzzin deploy this claim in order to demonstrate what, according to their study, gets left out or re-interpreted by Biomedical logic:

For example, acupuncture, understood in TCM as stimulating the flow of Qi along the body's meridians to resolve Qi obstruction and to promote healing, becomes instead in biomedicine the stimulation of cells to release pain-relieving endorphins. Indigenous herbs that are locally viewed to have synergistic spiritual, psychoactive, and healing properties are biomedically reduced to having pharmacologically active ingredients. The healing and

social relationship between patient and healer: the perceived powerful effects of CAM such as homeopathy, spiritual healing, Reiki, and therapeutic touch, become mere placebo. (49)

For those who look at Indigenous healing practices as applying to anything beyond the physical human body, these re-interpretations of TCM through biomedical discourse commit acts of appropriation and assimilation. These moves necessarily flatten the integrative paradigm, as they promote a representation of IM that only mixes techniques, while never requiring biomedical practitioners to understand or learn from the philosophical views of Indigenous healers. This tendency to flatten or appropriate what is useful to know about a certain practice is certainly not limited to TCM in the manual but is transparent in the attempt to measure and classify what is useful about yoga, as well.

Under Objective 3, Foster Health Promotion and Disease Prevention, which depicts in the background several yogis practicing *asana*, or the physical postures of yoga (not to be confused with the totality of the yogic practice which includes beyond-physical components), the NIH manual makes a concession about its previous lack of attention to complementary health practices, stating:

The use of complementary health approaches to promote wellness is a relatively new research focus area for NCCIH, but wellness is a familiar concept to many people who use these approaches. In fact, national survey data indicate that more people use complementary approaches to promote health and wellness than to treat a specific illness. In the 2012 NHIS, 94 percent of respondents who practiced yoga and 89 percent of those who used natural product supplements said that they did so for reasons related to wellness; much smaller numbers used these approaches as a treatment. *Seventy-two percent of*

respondents who practiced yoga cited its focus on the whole person—mind, body, and spirit—as one of their reasons for using this practice. (22 emphasis mine)

In this passage, we see the admission from the NIH that it is perhaps the institution that is behind the knowledge curve of the public in understanding what works for them regarding preventative health and wellness. This is especially noticeable as American healthcare has long been criticized for its anti-prevention/anti-wellness emphasis, instead over-emphasizing lifesaving and emergency medicine once people are too sick to focus on prevention, as Andrew Weil, the “godfather” of American IM argues widely. With the example of yoga, we see that most surveyed practice for holistic reasons, rather than making yoga purely about their physical health or understanding the physical mechanisms of why it works for them. However, this evidence that almost 90 percent of both groups—yogis and herbalists—find these methods useful for their overall health, and that the NIH itself reports since 2012 yoga is the third most common complementary practice for adults and children, is not sufficient basis of evidence for the NIH to recognize its usefulness so far.

Immediately preceding this passage, the manual states “More research is needed to better understand how certain complementary health approaches can be useful in encouraging better self-care, improving a personal sense of well-being, and promoting a greater commitment to a healthy lifestyle” (22). It then goes on to say it will “focus on *methodologically rigorous evaluations that will lead to a greater understanding of whether, when, how, and for whom such practices can have substantial impact*, including an understanding of how a formative stage intervention can impact adult health and wellbeing” (22 emphasis mine). What this manual implies under Objective 3 is that through the validation of scientific study will we come to know why practices like yoga are useful and for whom. However, this claim implicitly devalues not just the individual in their innate

understanding of what brings them wellness or not, but also disregards the insight of yoga instructors to be credible authorities on what makes yoga a “useful” practice for humanity. The implication that the usefulness or value of yoga can be measured more accurately and validly through scientific experimentation than the actual embodied practice of yoga is antithetical to the idea that a yogi themselves can interpret what is most useful about the practice for them¹⁵— a core sentiment of IM modalities that is not recognized or acknowledged in this section.

Yoga, often translated from the ancient Sanskrit as the *union* of mind, body, and soul, does not implicitly value the experience or explanation of the physical mechanism of the body over the experience of the mind and soul. However, physical mechanisms are what the NIH is concerned with understanding; again, like the case of acupuncture and herbal supplements, the manual emphasizes the need to “Investigate top-down neural pathways underlying the effects of meditation, expectancy, placebo effects, and other mindfulness interventions (i.e., meditative yoga, tai chi, qi gong, hypnosis, and guided imagery), ranging from high-order brain functional regions to the peripheral tissues and organs such as immune cells, gut, muscles, bone, heart, and microbiome” (37). This priority commits similar acts of both appropriation and assimilation as it reduces the need to understand a philosophical or spiritual practice down to its physiological

¹⁵ I intentionally do not cite particular yogic philosophy creators because the history of yoga’s “founders” is extremely complex and often problematic as it regards the manipulation of authority. For example, almost all founders of yogic traditions are male, and yoga was originally only practiced and taught by men, which made this practice problematically gendered for most of its history; only men, in these philosophies, were capable of yogic enlightenment. Furthermore, throughout history, and even more recently, the status and superiority of male yoga gurus has been deleteriously taken advantage of, as is the case of Bikram Choudhury, and his trademark school of yoga, Bikram Yoga. Bikram fled the US in 2016 after creating a highly lucrative, cult-like following which resulted in dozens of lawsuits including sexual assault, rape, and the illegal copyrighting of yogic postures which existed for thousands of years. Finally, even ancient philosophies of yoga are so unrecognizable to current understandings of yoga, the usefulness of such a comparison is lacking. Patanjali, who is attributed with essentially inventing yoga, believed that the body was a grotesque vehicle the spirit should continually evolve to escape from, ultimately claiming that a true yogi will be able to, for example, transcend the body and walk on water; this philosophy has almost no place in modern American yoga studios where almost all attention is paid to physical postures instead of, for example, trance-like meditation, which is also considered yoga to Patanjali. I intentionally leave the interpretation of what is useful about yoga up to individuals who practice yoga.

effects, which is contrastive to what over 70% of the yogis interviewed for the study said about its usefulness: that it was practice for mind, body, and spirit. Science is not currently capable of analyzing the mind and spirit with the same rigor it can a physical body, and so the NIH's research focus appropriates and re-interprets the complexity of the usefulness of yoga down to physical processes, leaving behind crucial aspects of, for most yogis, a spiritual practice.

On the question: what can be done about the appropriation of yoga through scientific measurement, I argue that Biomedicine will never fully capture what there is to know that is useful about yoga unless Science expands its ontological view of the cosmos to include the animacy of a spirit or soul within a body. Biomedicine is an incredibly successful paradigm of comprehending the physical body, and I assert this approach to the body need not be threatened by deeper integration with spirituality because comprehending the body as a host of soul or spirit does not cancel out the necessity of biomedical principles—it merely complexifies and deepens our understanding of them. Until such a conception of patient-health is *substantively* integrated with biomedicine(s), smaller, local improvements could be made in the processes of scientific research to be less appropriative, such as expanding research trials to specifically measure the mental and emotional health of yogis, rather than mainly physiological effects. Again, sciences are better equipped to measure physical than abstract phenomena currently, which poses a genuine challenge to the rethinking of scientific trials, but strides in this direction could be taken because it would get closer to viewing yoga holistically. Additionally, more efforts toward substantive integration, I maintain, would require the communication of institutions like NIH with entities like Congress, which could capitalize on the evidence-basis for insurance for most Americans to have the option to practice yoga. The health benefits of yoga are clear to anyone who embodies the practice of yoga; scientific data is irrelevant to this experience, as it has been for thousands of years. However,

it would be useful to have scientific data in order to show, through generalizable figures, what yoga's capacity is for human health, and therefore, why it should be insured for Americans. The effect of this collaboration between scientific and legislative entities would be that more individuals could interpret the practice as it is meaningful for them, as well as it could engender more research on *other* culture's perceptions of yoga, rather than relying on a received definition from a highly specialized institution that is currently having the effect of appropriating yoga out of its spiritual context.

In distinction to the NIH manual's omission of the stakes of appropriation, the WHO manual figures the need to protect intellectual property of what they call "traditional knowledge holders." In the manual's section concerning Intellectual Property rights, the WHO/WIPO/WTO report on Intellectual Property rights states that reasons for protecting against appropriation include the following list:

recognize the holistic nature of TK and its intrinsic value; promote respect; meet the actual needs of TK holders and empower TK holders; promote conservation and preservation of TK; support customary practices and community cooperation; contribute to safeguarding TK; repress unfair and inequitable uses and preclude unauthorized IPRs; promote innovation and creativity, community development and legitimate trading activities; ensure that PIC and exchanges are based on mutually agreed terms, and promote EBS. (93 emphasis mine)

It is certainly questionable, then, why the NIH does not explicitly prioritize the significance embedded in honoring or disregarding the complex cultural origins of holistic global medicines, when it is an issue present for everyday IM practitioners.

3.2.1 Interviewees on Appropriation

As I mentioned in previous chapters, my fieldwork with IM practitioners provided yet another layer of insight based on the concrete experiences of these individuals. Though I knew it could be an uncomfortable topic to broach, I asked each interviewee what their perspective was on the potential of IM to appropriate other culture's healing philosophies or systems. Two directly answered that question with a yes, appropriation is certainly occurring. Jade, the mindfulness expert, said: "I think the dominant culture has appropriated things that have a very long history." She went on to explain, as a former CEO of a hospice-based hospital, that the medical system itself will not concern itself with negative repercussions of appropriation because the goal is only, "to keep beds filled and to make a profit." However, she also presented the case that she was unsure if mindfulness as a concept would ever have had the reach it did today in the West if it had not been intentionally designed as a "secular" practice by John Kabat-Zinn, the founder of Mindfulness-Based Stress Reduction (MBSR).

Robin, the traditional Chinese medicine specialist in acupuncture, also had this to say about appropriation: "I think the cultural piece of it that makes it {TCM} energy medicine is being sacrificed to make it more palatable to the Western Mind." Though she mentioned she was unsure how much the incompatibility of cultures is a result of outright appropriation or if it is also an effect of mistranslation of texts that are thousands of years old whilst the modern mind is doing the interpreting—this mistranslation meaning that perhaps ancient Chinese doctors shared a similar understanding and attention to the anatomical/physiological components of medicine as "Western" doctors do today, even in acupuncture theory. I found these nuanced perspectives about appropriation concretely revising my considerations of what constitutes true incompatibility or not when it comes to IM; however, I also continue to value the voice of Indigenous peoples who claim

their practices are being outright appropriated, and I believe the perspective of non-white practitioners should be privileged in this conversation given they have the most to lose from total appropriation of their practices to Biomedicine. The case of Native American and First Nations medicine is a prime example; I will include and discuss some of these perspectives in much greater detail in Chapter Four.

One final, salient case from my own ethnographic site that demonstrates political stakes to welcome or bar a particular practice based on its cultural significance, is the case of the original medical director of the center. One of my interviewees, Terry, explained to me that the original director of the center was a Native American doctor who was/is also publicly endorsed by Andrew Weil. Upon his arrival at the center, one of his first directives was that all practitioners learn Reiki, which is an Indigenous Japanese practice composed of tactile re-direction of energy in and around the body. This director was quickly excised as the head of the program and replaced with a psychiatrist that had less “woo woo,” as my interviewee put it, practices to prioritize. Though it is impossible to know exactly why this director was fired, we can see the imminent probability of a final way appropriation can manifest in the IM system(s) today, which is the power biomedical authority has to hire and fire persons with culturally inappropriate beliefs about healing, while that authority continues to claim to be an integrative center of medicine.

In this section, I have tried to show how sections of the NIH manual isolate practices of TCM and yoga from their wider philosophical contexts, performing acts of appropriation and assimilation by conveniently re-defining what is valuable to know about each through the logic and philosophy of Biomedicine. The result of the ontological force of this discourse is that philosophical systems are potentially being lost in favor of a dominant worldview expressed through Biomedical authority. In the case of TCM, divorcing techniques from their usual

complements and the underlying, holistic philosophy of healing, can be detrimental to treatment itself. Weil explains in his book, *Health and Healing*, that attempts of Biomedicine to reduce plant matter like Foxglove to active ingredients like digoxin (in pill form) has had historically tragic effects, killing numberless patients by giving them too strong of doses of a single compound that would otherwise be digested slowly and with many other compounds (and fibers) of the plant itself, making for safer consumption (104-105). In addition, many cultures view plant life as sacred medicine—spiritual in its own right. The process of reducing the spirit of a plant to a single compound can not only be dangerous but disregards the spiritual belief systems of others who have used plants in safer ways for much longer, as Weil points out (104-105). As we ask who has the agency to *choose* which practices get included in IM models, reviewing the many instances of cultural appropriation shows that this choice almost always trends in the Biomedical institution's favor.

I have also argued that the act of appropriation can lead to further authority being deferred to the institution itself, which is incompatible with a central core of IM philosophies: to place the whole patient, mind-body and spirit, as the central, innately knowing healing mechanism. This perspective that authority outside of, for example, the yogi, will inherently lead to a greater understanding of what its uses are, disregards the central notion that the yogi already has direct access to knowledge of well-being through the practice itself. Simply put: to divorce yoga from its spiritual, emotional, and mental effects is to not understand what makes yoga most useful to most people. The *choice* of whose worldview or philosophy will be represented in the guidelines of national research also seems to trend toward particularly reductive flavors of biomedical philosophy; this is the case despite the fact that biomedicine(s) is not monolithically reductive in all its philosophies, and that even within the reductive philosophies of biomedicine(s), there is no

monolithic agreed upon way to be reductive in research design. In Chapter Four, I will deal much more directly with the broader loss of the philosophical integrations we are experiencing in the movement toward IM, but for now, I turn to examine even more closely how an over-emphasis on scientific validation is a subcategorization of the current forms of appropriation. I show how the over-scientification of alternative medicine engenders particularly deleterious effects for the legitimacy of the already-existing systemic knowledge bases which holistic global practices are founded upon.

3.3 The Over-Emphasis on Scientific Validation of Global Medicines

In this section, I argue that the NIH manual's emphasis upon biomedical validation of IM practices elides any focus on the legibility of usefulness for extra-biological¹⁶ components of illness or diagnosis/treatment procedures. While the entire manual is designed as a strategy for designing IM research, this section shows how, rhetorically, the manual struggles to do more than reinforce the very values at the foundation of Biomedicine, making a particularly misleading presentation of the NIH's interest in IM generally, which is supposed to be a holistic health movement. I argue that the passages highlighted below have the dangerous capacity to reinforce the message to readers that illness, especially biopsychosocial illnesses like depression and anxiety, should be treated primarily as biological, even brain-based issues, which limits a patient

¹⁶ I say "extra-biological" instead of "non-biological" because the entire point of IM is to view all components of illness as mutually entangled. A social cause of depression is not non-biological because it will affect the person's biology inherently; it is, however, a different scale of focus, which could be considered not primarily biological, therefore, extra-biological.

from enacting their holistic capacity to intervene in the illness at several scales (social, psychological, biological).

I cover this section in two primary subsections: first, I show how the ethos of Biomedicine is argued by some to be fundamentally at odds with just one case of global medicine, TCM. In doing so, I highlight that an over-emphasis in the NIH manual on the need for new technology, finding singular biomarkers, and mass surveillance via biosensors lends itself to the dominance of biomedical institutions, which subtly control consumer choice through strategic neoliberal appeals to consumer agency. Then, in the next sub-section, I focus intensely on the prevalence of neurocentrism in the manual, manifesting as the persistent need to be able to explain all illnesses at the level of neurology; I argue this goal is fundamentally at odds with an agenda that is supposed to be enhancing the integration of modalities that have nothing to do with neurological intervention. I conclude this section by arguing that the NIH manual is far less concerned with holistic means of validation and legitimization of IM practices and instead promotes the political agenda of substantiating scientific measurement as a superior means of understanding illness—a rhetorical move that is lucrative and further-legitimizing for Biomedicine itself, not IM per se.

3.3.1 The Emphasis on Mass Surveillance, Biosensors, & other Technical Solutions

First, in order to understand how the overemphasis on scientific validation could be at odds with principles of IM, I examine here the view of Stella Quah, professor in the Health Services and Systems Research, Duke-NUS in Singapore. While my own view in this dissertation is that at least more democratic forms of integration are possible, Quah argues in her 2002 article, “Traditional healing systems and ethos of science,” that fundamentally “the traditional Chinese medicine ethos is incompatible with the ethos of science” (2008), because of her observation that

The traditional Chinese medicine norms on knowledge (regarding the body of conceptual knowledge inherited from the classics as final; and giving emphasis to empirical data that support it) and the traditional Chinese medicine norms on practice (giving priority to the unique over the common; emphasizing experiential knowledge; and promoting empathy) are in direct contrast with the ethos of science and the biomedical norm of “detached concern” (Fox, 1989, pp.85–87). (2008)

While Quah relies on an interpretation of biomedicine(s) that is very much situated in the philosophies of Western thinkers, she argues the hallmarks of the ethos of science include: 1) an inclination toward empirical evidence and the experimental method; 2) the norm “Primum non nocere—First, do no harm”; and 3) random allocation to avoid bias in clinical trials (2000-2001), and that these constituents of ethos of Biomedicine are well-documented with the endorsement of biomedical researchers¹⁷. She goes on to suggest, then, that in summary, these four markers of Biomedicine take precedence in the ethos of science as it relates to complications of integrating non-biomedical approaches to healing (in her case, Traditional Chinese Medicine): (a) the continued importance given to systematic, valid and reliable empirical evidence; (b) the endorsement of the norms embodied in the ethos of science; (c) a keen awareness of deviations from those norms; and (d) a serious concern about obstacles to the implementation of the ethos of science (2001).

This reading of the ethos of science, which mainly relies on controlled conditions of experimentation and the apparent-neutrality of the doctor, has been criticized from within scientific

¹⁷ Quah cites the following: Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996; Weiss, 1997; Varki, Kagnoff, & Insel, 1997; Chalmers, 1998a; Rosenberg, 1999; Weiss, Ginsburg, & Lowe, 1999; Shaneyfelt, Mayo-Smith, & Rothwangl, 1999; Day & Altman, 2000; Berger, 2001; Ionnidis, Haidich, & Lau, 2001; Lilford, Braunholtz, Edwards, & Stevens, 2001; Ross, 2001; DeAngelis et al., 2001; Foucar & Foucar, 2001; World Medical Association, 2001

fields, but also by poststructuralist feminist critiques of the 20th and 21st century, as well. Deborah Lupton, a sociologist who is both an insider and outsider to scientific discourse, notes in *Medicine as Culture* that, “Poststructuralist feminist scholars now claim that women’s experiences of the body cannot be separated from the discourses and practices which constitute them, that there is no ‘authentic’ body waiting to be released from the bounds of medicine” (27). In other words, some biomedical scholars, and some feminists, like the ethos of TCM as they are defined by Quah, demand attention be brought back to particularity of the patient *and* doctor, neither of which exist in a sterile vacuum of diagnosis where impartiality will take precedence over socially constructed perceptions of illness.

In contrast to the ethos of TCM, as briefly cited above, Quah suggests the ethos of science is fundamentally incompatible at the junctures of standardization of treatment and the role of the doctor. She argues that that ethos of TCM fundamentally relies on an empathic and personal connection between patient and practitioner, stating with the support of the 1997 Singapore Traditional Chinese Medicine Organizations Coordinating Committee: “Chinese medicine practitioner should be “kind-hearted” or benevolent and should treat the patient as a good parent treats his child” (2008), which is in contradistinction to the detached observer favored by the ethos of science. She also explains that experiential, cumulative knowledge, including relying on the senses such as looking, listening, smelling, inquiring, and palpating in TCM take precedence over the reliance on machines as the primary assessment tools for diagnosis. For example, trained by touch primarily, TCM practitioners can establish the hardness of an artery or the temperature of a certain area of the body indicating inflammation. This experiential knowledge that is capable of picking up on nuances body to body is replaced by the machine-based measurement which streamlines diagnosis and often misses minutia of patient-by-patient cases in biomedicine(s). And

finally, the privileging of the unique over the common is a fundamental roadblock in integrating the philosophies of TCM and Biomedicine, according to Quah. She states, “As explained to me by a traditional Chinese medicine practitioner with nearly 40 years of experience, ‘Each patient is unique in his personal history, his worries, his life. I cannot assume that the same combination of herbs I prescribed for another patient with similar symptoms will suit this patient. Perhaps even acupuncture may not suit him as well as it suits others who have the same affliction’” (2007).

At least for Quah, there is a nuance to diagnosis that TCM privileges over the starting point of Biomedicine, which is to assume every condition presents similarly in each patient and therefore treatment should also be standardized. While, yes, practiced biomedical practitioners learn through trial and error that the uniformity of diagnosis may be an illusion, the distinction here is that Western MDs like Christiane Northrup, Andrew Weil, and Lewis Mehl-Madrona, who are IM advocates, have all drawn attention in their books to the way their medical *training* reiterated this one-pill-fits-all methodology, which they are highly critical of. The distinction lies not in what doctors come to find through their careers, but in the initial training of doctors. While biomedical doctors will generally have to unlearn the standardization of medicine through practice, TCM practitioners are generally trained from the beginning to attend to the nuance of each patient.

In relation to the question, can substantive integration occur here, some agent along the chain will fundamentally have to alter how they practice medicine to integrate biomedicine(s) and TCM. For example, a Western doctor being trained in TCM as an integrative approach will either allow biomedical training to shape the way he prescribes herbs, starting from the baseline of standardized care, that one combination of herbs should hypothetically work on all patients for the same illness, just like the right anti-biotic will cure the right infection. Or, he will fundamentally switch to prescribing on a case by case basis, at which point he is no longer adhering to the ethos

of science as defined above. Substantive integration in this case would require that Western doctors be trained in the additional capacity to flexibly read patient symptoms based on experiential knowledge. In no sparse words, one TCM practitioner quoted in Hollenberg and Muzzin's study said "if you bring in 100 cancer patients and give them all the same formula, our scientific medical community will brand us almost murderers. Because if half those people die, they didn't get the proper diagnosis. They didn't get differential diagnosis" (45). Substantive integration would have to flow in this direction of adopting not just TCM practices but the underlying treatment philosophy because TCM doctors would already have the general sense of what treatments tend to cure what ailments, which implies the baseline of standardization of Biomedicine, but also the additional component of comfortably veering from the lesson plan, so to speak. Not everyone is as skeptical about whether this depth of integration is even possible, however, as Quah is; doctors Keji and Hao's article on the integration of TCM and, in their term, Western medicine, is one example of a far more optimistic view.

Keji and Hao explain in their introduction that "It is our dream that, in the future, diverse modalities—including TCM, Western medicine and possibly other variants—can work in conjunction with each other as part of a unified team rather than in competition. This integrated approach will ultimately lead to safer, faster and more effective health care" (1). Importantly, they acknowledge that within the profession "more and more people realize that each of the two medical traditions has its own merits and advise that the two systems should benefit from each other's strong points" (1). However, these doctors also maintain that the strength of TCM lies in two basic points: "TCM has two main features: a holistic point of view and treatment according to a differentiation of syndromes" (1). Like Quah, these doctors assume the most significant

contribution TCM can make to an integrative model is exactly this focus on the unique differentiation of symptoms, as well as viewing the patient holistically.

According to the discourse of the NIH manual, though, the emphasis on standardizing and streamlining care, usually through biological markers or advanced technology, continues to be its primary priority. The emphasis on holistic assessment, the flexible, personal experience of the doctor, and the reliance on the patient as an agent of their own healing is all but lost. Under Objective 1, Advance Fundamental Science and Methods Development, the authors suggest a turn toward mass-scale monitoring of the population will in effect streamline diagnosis. The manual reads:

b. Support development of novel technologies and instruments, including diagnostic methods, tools, and sensors. To carry out rigorous research on symptom management and functional changes, scientists need valid, reproducible ways to assess symptoms.

--Biosensors and Mobile Health: Rapid advances in technology and bioengineering are facilitating the development of increasingly sophisticated and versatile sensors. These sensors should enable improved reporting of symptoms and functional outcomes, as well as contribute to improved data capture. For example, wearable biosensors such as bracelets, patches, and caps can collect data on movement and physical activity, blood sugar levels, heart rates, and neural activity. (17 emphasis mine)

The first notable observation of this passage is that there is no explicit link made between the monitoring of biosensors and the enhanced understanding of the validity or usefulness of global medicines as holistic, patient-central healing modalities. The manual mentions “Studies that identify and validate objective endpoints or biomarkers, assess and measure adherence or treatment fidelity, or will otherwise strengthen the design of clinical trials of complementary health

approaches are particularly important” (17), but it does not explain how the wearing of biosensors inherently relates to enhanced agency of patients to understand or facilitate their own holistic health.

Poststructuralists like Michel Foucault, in his book *The Birth of Biopolitics*, were some of the first to theorize the “biopower” inherent to mass surveillance of health, which lends itself ultimately to the capital and control accrued by the state. Mass surveillance in Foucault’s theory does not tend to trend in the direction of patient agency but amasses critical data in the hands of state-controlled institutions who have their own state-preserving agendas at heart. Christopher Fries, in his 2008 article, “Governing the health of the hybrid self: Integrative medicine, neoliberalism, and the shifting biopolitics of subjectivity” applies this

Foucauldian perspective on the shifting specialization of medical knowledge to explore the manner in which integrative medicine is discursively represented by its biomedical architects so as to ensure good cultural fit with neoliberal strategies of governance amid the development of transnational global cultural flows in which human subjectivity has itself hybridized, provoking this reconfiguration of medical knowledge. (353)

In other words, these biomedical architects understand that the future is not in overtly dominating the control of health for its patients but lies in the subtle coercion of patients to surveil themselves, giving them the guise of neoliberal agency, subjectivity, even the “choice” of picking alternative medicines over conventional ones. By subtly monitoring and influencing consumer choices of the public through mass surveillance, the state preserves its image as offering choices, while ultimately only securing the capital that will keep the institution itself flourishing.

Aside from the reality that IM is being wielded as a neoliberal strategy to secure the foothold of the biomedical industry, making patients wear biosensors in order to streamline

diagnosis is antithetical to, for example, the ethos of TCM which relies on the doctor as the knowledgeable interpreter of the human condition, not biosensors. The attempt to reduce all patient's experiences into singular "biomarkers," which can then be streamlined for diagnosis and treatment, also elides the privileging of the unique patient valued by TCM. Furthermore, this type of data monitoring commits the logical fallacy of the attempt to integrate mind-body medicine into a system that values physically reportable data and technical solutions. Many IM practitioners, including my interviewees whom I will return to later, claim the entire premise of IM is to move away from technological solutions, or the need to continue inventing new objects outside of the body in order to accomplish healing. They insist, in fact, that all the mechanisms needed to understand and heal the body already exist in the relationship of a trained practitioner and an innately knowing patient. Nonetheless, this portion of the manual suggests biosensors "should enable improved reporting of symptoms and functional outcomes, as well as contribute to improved data capture"—this data, of course, being inherently empirical and eliding the psychosocial components of illness both as valuable to measure or as somehow integral to the origin of illness. Biosensors are not a tool capable of measuring subjective events currently, only physical ones, which means that the NIH's suggestions are again in contradistinction to the basic premise of integrative medicine: medicine that considers the mind-body-soul of the patient.

Perhaps anticipating the criticism of this reductive form of data capture, the very next bullet attempts to account for the elusiveness of psychosocial influence in illness, offering this alternative as a means to capture data that biosensors would not:

Patient-Reported Outcomes: Patient Reported Outcomes Measurement Information System (PROMIS) tools *are well suited* for use as endpoints in clinical studies on the effectiveness of treatment. Further refinement and testing of PROMIS and other *patient-*

reported outcome tools will lead to improved ways to assess pain, depression, anxiety, and other symptoms not easily measured with other diagnostics. (17 emphasis mine)

Out of curiosity for its effectiveness in capturing the “mental and social health of adults,” I visited the HealthMeasures website, founder of the PROMIS diagnostic tool. The site provides a link to “Try the PROMIS CAT demo,” upon which I entered the demonstration hoping to better understand how an online survey could capture the nuance of my individual mental health. Three questions frame which CAT (Computerized Adaptive Test) you may take: first, identify which category you’d like to explore (e.g. Anxiety, Depression, Satisfaction with Social Roles, Pain Behavior), then you enter your age, and your gender, for which there are only two choices: F or M. The categorization of illness is vague (what is “satisfaction with a social role”?) and implies that conditions like anxiety and pain, for example, are distinct categories which do not overlap, flattening the ontology of pain into physical and mental categories. The reference to age is a means to position you via your “report” against other age groups in the frequency that your symptoms arise, and the gender designation is clearly restrictive and serves the same function for the report. After randomly clicking on “depression,” I was asked several questions about how many times a week I felt hopeless, worthless, sad, etc.; the answers could be indicated on a 5 pt. Likert scale of never to always. After the questions, each answered with the middle option “sometimes,” I received my report which told me that my depression score was “worse” than 88% of the general population, 81% of people under the age of 35, and 86% of females; this was the entirety of the report.

I ask here whether PROMIS is “well suited” to “lead to improved ways to improve ways to assess pain, depression, anxiety, and other symptoms” as the manual claims. The attempt to quantify mental health through vague signifiers like “sometimes,” thereby ranking such subjective

testimony against others who have answered the test—not the entirety of the population experiencing symptoms—lacks rigor and objectivity. Presumably, this test would be administered as a pre- and post- test of a trial regarding complementary therapy, but it does nothing to control for extraneous factors that influence mental health over time and does not capture the complexity of comorbidities either; it does nothing to further our understanding of the nature of depression itself and indicates zero suggestions on how best to move forward in treating such illness. Assuming that a computer-based test can better assess what there is to know about mental illness than, for example, a trained psychotherapist or a TCM doctor who attends to individual needs of a mental health patient, is potentially negligent, especially when presented rhetorically as a rigorous form of measurement. The implication that policy can be made from a tool this reductive in its assessment capacity should concern the stewards of global medicines who take the individuality and the dynamism of psychosomatic pain seriously. The notion that we can reduce how illness presents in humanity down to singular biomarkers through mass analysis might be antithetical to the principle of IM, which values the individual patient's experience, and can therefore have deadly effects on vulnerable populations who assume the authority of scientific measurement as a baseline of truth, as I will show next.

3.3.2 The False Promises of Neurocentrism in IM Research

Returning to a familiar theme in the first section of this chapter, under the very next bullet of the Objective, Advance Fundamental Science and Methods Development, the manual states the need to understand pain, depression, and anxiety through advanced neurological science:

—Imaging and Neurotechnologies: Improved methods and tools are needed to understand the *neurological aspects of symptoms such as pain, depression, and anxiety*. Advances in

imaging and other neurotechnologies may provide an improved means of measuring and understanding *the neurologic circuits that underlie symptoms*. For example, electrophysiological recordings, single photon emission computed tomography (SPECT), positron emission tomography (PET), and *functional magnetic resonance imaging (fMRI)* show promise for advancing what is known about neurologic and other biologic factors associated with pain and other symptoms. With NCCIH's participation, some of these advances may be realized through the NIH B.R.A.I.N. (Brain Research through Advancing Innovative Neurotechnologies®) initiative. (17, emphasis mine)

The history of neuroscientific attempts to reduce psychosomatic events such as addiction, anxiety, and depression down to their neural correlates—or, to alter the diction slightly as in the paragraph above, “neurological circuits” or “neurological aspects”—is one heavily criticized by psychiatrists and psychologists, such as Lilienfeld & Satel in their 2013 book, *Brainwashed: The Seductive Appeal of Mindless Neuroscience*. The authors of *Brainwashed* are actually champions of neuroscience as a whole, yet they argue there is an appropriate time and place to apply the neuroscientific level of analysis, which today, increasingly, gets abused by powerful entities as a dominant way of understanding human behavior in general. Lilienfeld & Satel explain,

as a psychiatrist and a psychologist, we have followed the rise of popular neuroscience with mixed feelings. We're delighted to see laypeople interested in brain science, and we are excited by the promise of new neurophysiological discoveries. Yet we're dismayed that much of the media diet consists of 'vulgarized neuroscience' ...that offers facile and overly mechanistic explanations for complicated behaviors. (Introduction)

The seductive rhetorical force of the fMRI is one of the primary objects the *Brainwashed* authors focus upon as a persuasive tool routinely deployed by congress, media, and scientists to secure

funding for certain research or capitalist ventures, though the fMRI scans show blood oxygenation levels (BOLD) in the brain, which explain nothing mechanistically between the relationship of the brain to, say, addiction. In other words, the facile correlation between seeing brain activity and being able to explain complex human behavior like depression is far from straightforward or well understood by neuroscience, which in many ways, is still in its infancy as a field. The consequence of superficial reliance on neurological explanations of behavior leads to a logical fallacy the authors dub “neurocentrism” as I referenced in the former section; they state,

the brain is said to be the final scientific frontier, and rightly so, in our view. Yet in many quarters Brian-based explanations appear to be granted a kind of inherent superiority over all other ways of accounting for human behavior. We call this assumption ‘neurocentrism’—the view that human experience and behavior can be best explained from the predominant or even exclusive perspective of the brain.” (Introduction)

Psychiatrists and psychologists are not the only ones picking up on the logical fallacies that proliferate from the attempts to explain humanity through neuroscience alone. Recent articles like “This is Your Brain on Rhetoric: Research Directions for Neurorhetorics,” by rhetorician Jordynn Jack and Gregory Applebaum, a professor of psychiatry at Duke, and “fMRI in the Public Eye” authored by three neurology-ethics professors (Racine et al.), show that criticism of neurocentrism is widespread and multidisciplinary. Racine et al. theorize three neuro-fallacies, *neurorealism*, *neuroessentialism*, and *neuropolicy*, which Jack and Applebaum take up in their article to convey the dangers of neurology-as-rhetoric without substantiated scientific basis or purpose; I argue that all three fallacies these multidisciplinary authors highlight inherently apply to the NIH’s over-emphasis on the “need” for privileging the neurological mechanisms of pain, anxiety, and

depression in research agendas for IM, which can have devastating consequences for unwitting patients. I'll take the fallacies in turn.

Neurorealism, or the fallacy that allows neuroscientists to use metaphorical language that spatially locates specific functions in the brain, when no such concrete evidence exists (426), is a salient case in that of addiction studies, which to this day neuroscience has been unable to find the biological etiology for within the brain, despite millions of dollars and decades of research proposed to find it. Examples of the kind of diction that commit this fallacy in the former NIH passage includes words like “neurological aspects,” “neurological circuits,” and “biologic factors associated with,” all of which are common rhetorical choices used to indicate some lack of tangible location in the brain that would explain the mechanistic understanding of biochemistry. Yet, neuroscientists have used diction like this and the visuals of fMRI's to “sell” congress on further funding, and also to secure funding from the NIH itself for addiction research (Lilienfeld & Satel). If we were to approach addiction or depression from the modalities of IM, what would be important to address first?

In recent revisions to official National Institute for Drug Abuse (NIDA) discourse, Dr. Nora Volkow, the director of NIDA acknowledges that “the dominant theoretical framework in addiction science today is the *biopsychosocial framework*, which recognizes the complex interactions between biology, behavior, and environment,” yet she maintains that addiction is rightly called a “brain disease” (Volkow). If we look at depression, the NIH website does not claim it outright to be a brain-based disease, but states that medication (anti-depressants which alter brain chemistry), psychotherapy, and even electroconvulsive therapy and other “brain stimulation therapies” are generally used in treatment (“Depression”).

First, it should be noticeable here that “alternative” medicines are not even listed on NIH’s website as fundamental treatments for biopsychosocial illnesses, which reveals that the primacy of Biomedicine is still integral to the very public-facing structure of the NIH itself. Second, none of these treatments recommended by the NIH have lowered the number of cases of addiction, depression, or anxiety over the last several decades in the US. Instead, rates of all three have only increased in the age of neurocentric focus on the diagnosis and treatment of these illnesses, as shown in Duffy et al.’s twin study, “Trends in Mood and Anxiety Symptoms and Suicide-Related Outcomes Among U.S. Undergraduates, 2007–2018: Evidence From Two National Surveys.” In this study, the authors claim that among US college students assessed from the years 2007-2018, that “In both samples, rates of depression, anxiety, nonsuicidal self-injury, suicidal ideation, and suicide attempts markedly increased over the assessed years, with rates doubling over the period in many cases” (590). Because the NIH manual passage cited above is concerned with finding the neurological basis of and treatment for biopsychosocial illnesses, like depression and anxiety, it is unclear why the NIH would recommend the “alternative” side of IM, such as seeing an Ayurvedic practitioner, if they view the issue to be primarily located in the brain. By “neurorealising” biopsychosocial illnesses in the brain, without sufficient evidence of the success of this neurocentric paradigm, the NIH capriciously secures Biomedicine’s role as the primary authority on mind-body-soul pain.

Similar to neurorealism, *neuroessentialism* is the tendency to show “how fMRI research can be depicted as equating subjectivity and personal identity to the brain” (426); rather than conflating spatial locations of the brain with the predictability of human behaviors, this fallacy takes neurorealism a step further by equating BOLD with personality itself. The NIH’s website defines depression as a “persistent mood disorder,” which is arguably the equivalent of a

personality trait, especially if it lasts for years. A quick google search of “fmri scans for depression” will result in thousands of images that show BOLD patterns of depression, making the two, a persistent mood disorder and the brain, appear comprehensible through one another. Yet as I mentioned earlier, we are no closer to understanding how to *cure*, not treat, depression through intervention at the level of neurology as we were decades ago—the rates have only increased. The prior NIH paragraph I cited above claims that fMRIs “show promise for advancing what is known about neurologic and other biologic factors associated with pain and other symptoms,” yet it says little about what the word “associated” is a placeholder for in terms of whether it is the neurological source, or merely correlate, for example, of a mental disorder that has the capacity to redefine someone’s personality, like depression or anxiety. It also does not show how this intervention will substantiate or legitimize IM practices themselves. In fact, it only reinforces the need for scientific institutions to intervene at the level of neurology, which has little to do with any IM modality discussed in the NIH manual, and reduces the entire premise of IM, which is to approach healing holistically, to a biological issue.

Subsequently, we can see that based on fallacies such as neurorealism and neuroessentialism, *neuropolity*, or the “use of fMRI results to promote political and personal agendas” (426), may be both the most dangerous form of neuro-fallacy, as well as the one most urgent to view in the context of the NIH manual and its capacity to generate subsequent national policy. I argue that rhetorically, at least, the NIH manual is not concerned with strategizing holistic means to assess IM modalities, but instead focuses on the ways in which it can present interest in IM modalities as a means to further substantiate the legitimacy of Biomedicine and its assessment measures itself. The emphasis on how this entire section even regards IM is lost if the reader realizes every paragraph within the section describes means by which Biomedicine *already*

navigates and secures its claims to scientific objectivity within biomedical practices. There is no indication in this section that depicts an integrative approach to assessing the validity of IM practices, though the section claims to be about “Fostering Health Promotion and Disease Prevention” broadly. The section merely maps bioscientific medicine’s pre-existing tools to validate practices upon IM modalities, leaving the reader feeling that underlying biological, especially neurological, causes of disease are once again those of primary importance in illness intervention.

In the introduction to *Brainwashed*, the authors explain that while neurology has many contributions to make, “problems arise, however, when we ascribe too much importance to the brain-based explanations and not enough to psychological or social ones. Just as one obtains differing perspectives on the layout of a sprawling city while ascending in a skyscraper’s glass elevator, we can gather different insights into human behavior at different levels of analysis” (Introduction). They go on to show how this is especially the case and “is profoundly important in therapeutic intervention” :

A scientist trying to develop medication for Alzheimer’s disease will toil on the lower levels of the explanatory ladder, perhaps developing compounds aimed at preventing the formation of the amyloid plaques and neurofibrillary tangles endemic to the disease. A marriage counselor helping a distraught couple, though, must work on the psychological level. Efforts to understand the couple’s problems by subjecting their brains to fMRIs could be worse than useless because doing so would draw attention away from their thoughts, feelings, and actions toward each other—the level at which intervention would be most helpful. (Introduction)

In other words, not only is it *inaccurate* to propose rhetorically that neurology is the most important level of intervention as it regards psychosomatic events, but it is also negligent and could be deliberately harmful to deter patients from understanding their illnesses holistically—as a response to a holistic set of events, such as having a body (with a brain), knowing humans that affect you, or living in an environment that adversely affects you, as examples. In the case of addiction, some have argued that thousands of lives lost are purely the result of national narratives that over-emphasize medicating the brain as a solution (Hammer et al.), and we can see similar trends of criticism for the lives lost at the hands of medications targeting the brain for anxiety, depression, and somatic pain treated with opioids (Jones et al.). It's difficult to imagine how many people would still be here if their illness had been, not just explained to them holistically, but treated holistically, as well, which is what substantive integration of IM would achieve.

This NIH manual *is* policy and has the capacity to influence national legislation and further NIH policies that perpetuate a performative gesture toward substantive integration while only primarily maintaining bioscientific beliefs about the origins of and treatment for illness—that of neurological intervention in this case, which is not an intervention privileged in any IM modality in this manual. Most IM modalities focus on subtler, holistic interventions, such as combinations of body work, therapy, small adjustments to consumption (herbs), or the re-direction of electrical impulses in the central nervous system (acupuncture), making this manual's emphasis on mass surveillance, biosensors, and neurocentrism jarring to anyone who has deeply internalized the philosophy of IM.

3.3.3 Interviewees on the Invasiveness of Biomedicine

While all of my interviewees are all self-admittedly part of a research institution-based IM department because they are engaged by the research- or evidence-based aspects of their modalities, they all shared a view that IM interventions provide methods to work with illness that reduce the need for overly-invasive or technological interventions in the body. Terry's view is that "if the body didn't have all its own self-healing mechanisms already, we never would have made it to the technology of Western medicine in the first place." He notes that IM is about only "activating" already existing "healing mechanisms of the body," without need for intense invasion of the body, except in dire circumstances (life-saving medicine). Similarly, Robin, though certainly more comfortable herself with what she calls "Western" approaches to explanations of interventions—that of empirical evidence of efficacy over a spiritual narrative, for example—views "Western medicine as a completely different way to look at healing" because, in her words:

Allopathy looks forward and we look back. We have old practices that work when done well, and we need to train to do those well, but we don't need to invent anything else new. It's not technology based. It's like we are trying to distill down to the perfect route of individualized treatment, but they are over-complicating it with technology and always trying to come up with the next best thing. We trust the body to heal. We are at cross-purposes.

Jade, despite also expressing advocacy that everything she does is evidence-based and rooted in scientific literature, still shows a similar support for allowing the patient's mind and body, not machines or tests, to be the ultimate holder of wisdom when it comes to healing. She explained to me that even when a Mindfulness Based Stress Reduction (MBSR) patient turns to her to ask: but what do I do now? She refers them back to the "inherent wisdom that is their birthright," which

she herself attributes to Buddhist underpinnings of her own philosophical training. She is very careful to not give too much of her own Buddhist view away to patients to keep the environment “welcoming” to a Midwest rural audience, and she frames their ability to heal in “safer,” “secular” language, but ultimately, it is the patient she sees as the vessel of knowledge and technology, which she explicitly does not want to map her “dominant culture” perspective onto.

IM modalities are generally intended to put agency back in the body and mind of the patient to heal themselves with small helping tools, rather than teaching them, for example, that their brain alone—a site not accessible to their physical intervention—is the one that needs attention. Narratives like the ones above about the need for mass surveillance, biosensors, or neurocentric discoveries can strip patients of their agency to heal themselves by once again relying on the inaccessible authority of a neurologist or the medication produced by a pharmaceutical company to fix them. Substantive integration of IM modalities, on the other hand, would re-value the agency of the medical professional as an extension of their expertise within the medical system, but also as a whole person themselves with intuition, experience, and empathetic tendencies, extending the same dignity to each *whole* patient as knowledgeable, intuitive beings capable of healing themselves.

Jonathan, the director of the IM center, explained that one of the main exigencies for the rise of IM is that the model of extreme specialization in biomedicine(s) leaves too many patients without a path to healing because their illness tends to be a systemic issue, not an issue of a singular organ, for example. The director stated that “the Western model is to specialize, then sub-specialize, but we are realizing larger forces need to be kept at bay, and we need a doctor that looks at the whole system.” He also mentioned that “the Western model does not work for lifestyle-based disease because there is not one specific cure for one specific problem; no patient leaves my

office without multiple suggestions, psychologically, spiritually if it applies, physically, etc., about how to approach their healing.”

These dispositions toward a holistic, and patient-central, approach to healing are ones shared by many as central tenets of IM philosophy; however, in this section I have attempted to highlight how the policy in this manual does not carve a clear path toward holistic assessment and integration of IM practices in the first place, still primarily relying on scientific measures and technological solutions to do the work of assessing the legitimacy of well-established therapies. Hollenberg and Muzzin suggest that three significant processes are part of the dominance of the Biomedical paradigm: “1) devaluation of healing knowledges that are not biomedical, with the overall effect of this subjugation resulting in what has been called a biomedical ‘flatland’; 2) creation of a narrow epistemology of what counts as ‘evidence’ ; and 3) creation of a monolithic worldview that clashes with any other view” (36). The policy highlighted above, as my interviewee’s frustrations with invasive, technological solutions shows, is to some degree not only out of alignment with IM principles of valuing the holistic patient and doctor relationship, but is, I argue, all the more misleading for disguising a manual concerned with IM principles as another means by which to primarily promote the values of the established bioscientific community. The scientific objectivity this manual attempts to bring to IM via national research agenda is anything but neutral rhetoric.

3.4 The Absence of Strategy Concerning Pre-Existing Health Care Coverage

While the previous sections argue that policies which appropriate global medicines as merely another aspect of Biomedicine cannot be a genuine attempt at substantive integration, this

section reviews another performative fallacy of the NIH, as it attempts to shore up the disparities in medical treatment for underserved Americans. The manual makes only one curt reference to “meeting needs” of “vulnerable populations” but does less to explain how biomedical validation of IM practices will inherently close treatment disparity gaps for those worse affected by Biomedicine: BIPOC, trans* folks, women, and others. Unlike the WHO manual, which outlines entire sections on the need to establish universal health coverage, the NIH manual clearly has to respond to the reality of US healthcare legislation, which is one of the most contested issues in American democracy to date: to have universal healthcare or not? Because IM modalities are predominantly under- or non-insured in the US, in this section I argue that IM modalities are a cursory addition to the medical system if they are accessible only to the most financially and demographically privileged. Specifically, I make the case that the manual elides any important stratagem about how to practically “meet the needs” of diverse populations, if the ability to grant access to healthcare is a power vested in the US government.

As mentioned in the introduction, the WHO manual considers promoting universal healthcare coverage one of its top overall priorities for the 2013-2023 strategic implementation of TCAM. The WHO manual reminds its audience that “At the 65th World Health Assembly, the WHO Director-General stated that ‘universal health coverage is the best way to cement the gains made during the previous decade. It is the ultimate expression of fairness...’ (40). In addition, achieving universal health coverage (UHC) has been set as one of the overarching goals in WHO’s 12th General Programme of Work 2014–2019” (41). The manual then goes on at length describing the purpose, prospects of, and challenges to universal health care implementation (UHC); it gives examples from myriad Member States—though notably, no references to the US—in how they have approached UHC and what countries may learn from one another in how they are managing

to reimburse patients for fair access to these services. In distinct contrast, however, the NIH manual does not make a single reference to the objective of providing fair financial access to IM; instead, it makes a passing reference toward potential inclusion of recipients, though, it is questionable whether the passage acknowledges that health insurance is even a factor for who receives treatment. For the second strategy listed under Foster Health Promotion and Disease Prevention, the manual states this only excerpt on addressing diverse needs:

NCCIH seeks to foster research to develop, test, and refine interventions and to find ways to adapt interventions to *meet the needs of different populations*, including those most vulnerable (e.g., disadvantaged children and youth—by virtue of poverty or other adversities, *racial and ethnic minority populations*). The Center plans to foster research that examines the potential contributions of complementary approaches in promoting healthy behaviors and preventing diseases and disorders across the life course with a strong focus on developmental stage...(24 emphasis mine).

In the following bullet, we see that the NIH manual is implying intervening at developmental stages with IM to promote healthy lifestyles, with the example given of teaching children to meditate (24). The suggestion of promoting meditation in children is certainly productive; however, nowhere else in the manual is any reference to the complexity of medical disparity regarding race, ethnicity, or poverty further explored, strategized, or prioritized.

This omission points to the lack of centrality the NIH figures into the proposal of effective implementation of IM, clearly prioritizing scientific advancement in its stead; the issue here is not that Science is being relied on inherently, but how little attention is focused on anything aside from scientific goals. For example, it is important to note here that there has been no time in US history when BIPOC have had equal access to healthcare or insurance as their white counterparts. In a

2002 report commissioned by congress, Alan Nelson, the former president of the National Medical Association, explained the key findings of the study in his editorial “Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care.” The first two key findings state:

1. Racial and ethnic disparities in health care exist even when insurance status, income, age, and severity of conditions are comparable, and because death rates from cancer, heart disease, and diabetes are significantly higher in racial and ethnic minorities than in whites, these disparities are unacceptable; and
2. These differences in health care occur in the context of broader historic and contemporary social and economic inequality and persistent racial and ethnic discrimination in many sectors of American life. (666)

The very next finding goes on to state how the first two findings are the result of broadly disseminated actors of discrimination, including “health systems as a whole, health care providers, patients, and health care plan managers” (666), which we could reasonably expect US healthcare policymakers, such as the NIH, to consider, as this editorial is published by the NIH itself. Certainly, a lack of understanding of the severity of racial disparity is not foreign to the institution, yet, as an aspect of the “health care system as a whole” we see no explicit strategy to meet the needs of BIPOC, for example, who are dying from chronic diseases at alarming rates compared to their white counterparts in the US every day.

Chronic disease is a *crucial* consideration in this conversation; WHO has labeled chronic disease its top reason to explore the benefits of IM, precisely because bioscientific medicine has been globally unsuccessful at reversing trends in illnesses like cancer and heart disease—an opinion shared with the director of the IM center I interviewed at. The WHO manual explains: “Although there are many pressing social and economic issues that serve as an incentive for using

T&CAM, the predicted increase in *the global burden of chronic diseases* (WHO Global Status Report on noncommunicable diseases (NCDs), 2011) *is the most urgent reason* for developing and strengthening collaboration between conventional and T&CM health sectors” (40 emphasis mine). Until national discourse overtly privileges the direct protection and exploration of strategy for its underserved communities, making references to “finding ways to meet the needs” of diverse populations will do little to make concrete changes in healthcare disparities visible. Similarly, without any conversation between NIH and lawmakers about how to cover all Americans in healthcare coverage, the reference to making IM accessible to all is also performative. Perhaps the most troublesome component of these elisions is not just that they are dismissed as a priority, but that in their stead, we see heavy emphasis in the NIH manual that needing to educate the public about *scientific principles*, not giving them access to fair healthcare in the first place, is presented as the top communication barrier preventing substantive integration.

In the final overarching Objective of the NIH manual, Top Scientific Priorities, the manual explores top “communication strategies to enhance scientific literacy,” and states the following, which is worth quoting at length:

Introduction and Explanation of Need Surveys conducted in the United States and Europe reveal that many citizens do not have a firm grasp of basic scientific facts and concepts, nor do they have an understanding of the scientific process. *Without an understanding of the science of health*, many consumers will continue to value anecdotes over evidence, believe excessive claims made by supplement manufacturers or TV doctors touting the latest “miracle cure,” and potentially make unwise and unsafe decisions about their health. Those who do possess basic knowledge of the science of health have the capacity to obtain, process, and understand basic information about scientific research needed to make

appropriate decisions about their health. Given the current health policy and research emphasis on shared decision making with patients, *enhanced patient understanding of the science of health is also a system-level priority*. Health care professionals will bear a growing onus to explain and engage in dialogue with patients about treatment options. Promoting understanding of the science of health among a broad consumer base may ultimately make those discussions and decisions easier. (44 emphasis mine)

Making scientific literacy a priority in this country would fairly begin in the school system, but as robust data show us, again, access to quality education is not a guarantee for marginalized communities; Black students, for example, are less likely to finish high school, finish or even go to college, and Black students are less likely to remain in STEM fields than their white counterparts, all due in part to intentionally racist policymaking which has long predated the rise of popularity of IM in this country, as Richard Lewontin et al. explore in their 1984 book, *Not In Our Genes: Biology, Ideology, and Human Nature*. Women, especially of color, are also far more likely to face unique challenges by pursuing STEM, such as perceived attitudes that “they do not belong” based on their race and gender (Reyes 1). Though lack of quality education is not exclusive to racial or gendered minorities alone, the above quote doesn’t attempt to account for who may be less educated on “scientific principles” and why, but it assumes scientific literacy as the primary barrier between healthcare professionals and patients is worthy of focus. This makes little sense when we compare this point to any discussions about biomedicine(s)—the same observation would hold constant that less educated populations will struggle to show authority in conversation with a doctor about treatment options, but nothing about this is unique to discussing IM.

Promoting the agency of patients to be informed is important to patient-central care; however, this passage suggests not that the patient has knowledge to offer the doctor but that the

patient should be evaluated against the authority of a biomedical expert, which is antithetical to principles of IM. The manual frames the lack of knowledge patients have as *scientific* illiteracy, but the example of being duped by TV doctors points to a lack of literacy in rhetoric itself—a literacy more often taught in the Humanities than the sciences. The insinuation that now Americans are more likely to be duped by “anecdotes” or “miracle cures” also ignores the reality that false or misleading medical advertising has existed since the dawn of illness in the human race (Weil); again, nothing about this phenomenon is a unique result of the rise of IM or exclusive to scientific (il)literacy. Instead, the manual implies that being duped is the patient’s fault for not being scientifically literate, when it is the scientific expert who abuses rhetoric to persuade, sell, or meet prescription quotas. Another example of how Biomedicine controls whether the public reads a medical practice as reliable or not is that of Osteopaths and Chiropractors. Both of these professions were once considered “snake oil pushers” or “quacks” by the biomedical community, but over time both have made their way into the mainstream of American healthcare, with Osteopathy now being an official branch of medical hospitals across the US. Accordingly, to insinuate that only a patient is responsible for “unwise” or “unsafe” discretion about their health ignores the fact that an incalculable number of people have died throughout history from iatrogenesis—a Latinate word that, in Lewis Mehl-Madrona’s words, “allows us {doctors} to distance ourselves from the truth...” (30) that the cause of disease or death was the discretion of the biomedical professional themselves.

3.4.1 Interviewees on Education and Insurance

Interestingly, in contrast to the sentiment that it is patients who need to catch up to medical expert’s scientific literacy in order to discuss IM, one of my interviewees highlighted the need for

doctors within her medical system to be more educated on where IM should fall in the lines of defense and treatment. Robin explained to me: “It comes down to educating doctors on how to get patients into IM faster.” She raises this concern because of how often she receives patients who come to her exacerbated by being turned away from specialist after specialist, as she told me: “I get a lot of: you’re my last stop on this road,” or “I came to you because my doctor doesn’t know what else to do with me.” Initially, Robin, and others of the interviewees, largely viewed this issue to be the result of a lack of trust biomedical doctors have in IM practitioners; Terry even expressed that his primary frustration at his worksite was the lack of inter-department referrals, as well as the lack of agency he has to visit patients at the bedside in hospital—a privilege very few, though some, IM centers grant all IM practitioners. Terry explained he constantly wonders whether his authority or practice is even taken seriously by doctors since he does not have the same educational credentials; he also explained that he has been able to bring a range of motion back into patients bodies that could have been there years prior if he had been consulted in earlier stages of diagnosis, before expensive and further damaging surgeries occurred. Returning to Robin, she also finds that within a few sessions, even her most skeptical patients notice shifts in their body that could have occurred much sooner if acupuncture had been presented as an option earlier in their hospital visits. Though Robin finds, over the ten years she has worked there, an increasingly warm attitude from doctors on giving acupuncture a try, she argues the discussion of less invasive and expensive solutions should happen in conjunction with (or directly after) the initial triage of “standard care,” rather than being treated as a last resort, and this mainly comes down to the doctors’ knowledge and willingness to share this option with patients in the first place. Of course, even if referrals were prolific, there is the equally difficult barrier of lack of insurance coverage to surmise.

Though the hospital I interviewed at is in the top ten per-volume of clinical visits in the country's 70 IM research-based institutions, almost none of the IM modalities are covered by insurance, and even acupuncture, which, as an IM modality, has one of the single largest bedrocks of evidence for its effectiveness, has loopholes in appointment coding that prevents many patients from receiving coverage regardless. For example, Robin explained to me that if the reason for visiting the acupuncturist does not fall under only *six* (there are thousands of reasons to get acupuncture) diagnostic codes (e.g. neck pain, low back pain), the treatment is not covered. It is also not covered for anyone on Medicaid or Medicare regardless of the diagnostic code because acupuncture is not considered insurable federally, once again pointing to political barriers for the most underserved communities ever having access to these treatments. Robin said directly to me “the people who need it most do not have access to it.”

Jade, the mindfulness expert, also pointed out that in a decade of working there, she had only ever served two Black patients, one of which never completed treatment. Her modalities, Inner Family Systems, Mindfulness Based Stress Reduction (MBSR), and Rapid-Eye Desensitization Movement (REDM) are not covered by insurance, and her main clientele, as she said, are: “doctors, lawyers, professors, and rich ladies.” The lack of coverage here is also intriguing because aside from acupuncture, MBSR is one of the other most heavily evidence-based IM practices, with decades of research showing drastic effectiveness compared to the standard, cognitive behavioral therapy (CBT). Jade also has expertise in CBT and considers it much “slower”—literally the difference of years of time— than MBSR or REMD in patient recovery times. She expressed concern that, for example, in England, MBSR is the first line of (insurance-covered) defense for depression, and that evidence shows this to be highly effective, yet the US continues to deny insurance coverage for this well-reputed modality. Both Jade, Robin, and the

director of the center expressed their desire for insurance entities to get on board with covering their treatment modalities, making them accessible to more than the financially and demographically privileged.

Overall, the ontological force of the rhetoric in these the manual has the potential to mislead the public by insinuating that merely educating them about “the scientific process” will close all gaps in treatment disparity; this is because the primary barriers of people not having access to IM are contingent on social and political conditions which bar marginalized communities from education and healthcare in the first place. These passages are also misleading about the consequences of the rise in popularity of IM modalities, deliberately pitting the implicit safety and trustworthiness of the biomedical community against anyone experimenting with IM inside or outside of scientific scrutiny. This comparison reinforces a hierarchy of those with true knowledge and those who are ill-informed or easily duped. Ironically, the NIH passage above, as one of the only in the manual to suggest what the public needs to do to help integrate IM, falsely puts the onus on patients to be biomedically literate instead of emphasizing the need to give them fair access to education, insurance, and healthcare as a national priority. While, again, it is notable the NIH manual is foremost a national research agenda, this fact does not preclude the reality that the NIH is in constant conversation with entities like congress in order to, as an example, secure their own funding (Lilienfeld & Satel); if part of national research policy includes promoting communication between it and the general public, then it could certainly be an aspect of the policy to promote important conversations between lawmakers and national research institutions on covering Americans for IM services. After all, congress looks to the NIH about whether “alternative” practices should receive the recognition of federally sanctioned coverage, like the case of acupuncture. It is because of passages like this and those covered in this chapter, that I will

now close by arguing that in this manual, the rhetoric of “choice” for patients to benefit from IM is largely performative rather than substantial, and that the current instantiation of the NIH strategic manual for IM is not an example of substantive integrative medicine strategy.

3.5 Conclusion

There are several groups to consider when we ask who has the “choice” in the US to access, practice, or sanction IM practices. In the preceding, I have tried to show that these groups require deliberate protection and overt policy which would allow patients and healthcare providers to exercise genuine agency within the system. The first and foremost ethical consideration of integrating non-biomedical practices into the US would be to protect the knowledge and practices of practitioners who can easily be silenced or appropriated by the sheer force and reach of Biomedicine; if there is no national priority for preserving global medicines, these practitioners will have little choice about how their often-sacred practices will be re-interpreted by biomedical authorities, and therefore, how they are presented to the public as an option. While it could be positive to spread exposure to certain practices through the reach of Biomedicine, doing so through reductive interpretations of the practice’s significance could elide the possibility that Biomedicine could learn from the philosophies of IM modalities and not the other way around. In other words, the current strategy prevents substantive integration of world views by 1) cherry-picking modalities that fit the framework of legitimacy according to the NIH, and 2) by excluding components of practices the NIH is not legibly literate in themselves, such as the role of spirituality in healing.

Along similar lines of ethical urgency, racial, ethnic, and gendered intersections of positionality put some Americans at a grave disadvantage when it comes to access to IM healthcare. While BIPOC are those most affected by chronic disease death rates in this country, and the rest of the globe seems to be turning toward IM for answers to chronic disease, the NIH should be taking overt action to make IM healthcare available to exactly these disadvantaged demographics. Take meditation, as an example, which is a practice that has existed for thousands of years and was famously studied by Herbert Benson, a Harvard professor, in the 80's, showing that Himalayan Monks could raise their body temperature by meditation alone—this was the case even when wet cloths were placed over their skin in very cold settings. Prestigious institutions like Harvard and Duke continue to validate meditation's ability to reduce stress responses of the central nervous system, improve mood, even relieve depression and anxiety through research conducted in their own Integrative Medicine research departments today. Yet, in this manual, the NIH prioritizes finding the neural correlates of meditation over making sure disadvantaged Americans have access to meditation teachers. There is no clear reason articulated why finding neural correlates for the meditative state would automatically make Americans healthier; this rhetorical gesture merely reinforces the fact that resources will continue to be funneled toward scientific advancement rather than resolving treatment disparity, making the choice for disadvantaged Americans to access IM largely moot.

Both of the above issues are further exacerbated by the intense focus of the NIH to find “Objective, Evidence-based” validation for IM modalities, which tends to supplant the focus on any other aspect of IM that is valuable. A balanced, integrated set of priorities would reflect scientific advancement as a crucial pillar, as this is indeed one of the strengths that biomedicine(s) can bring to integrated medicine, but it would also reflect focus on protecting the dignity of these

practices as legitimate in their own right, as well as ensuring that Americans can even engage with IM through the medical system. Being able to engage with IM is not a choice contingent on Americans brushing up on their science skills, as this document posits, but a choice contingent on whether Americans want to roll the dice on paying out of pocket for multi-thousand dollar treatments or just staying sick. The priorities expressed in this manual make IM seem like a choice to the average American, but the reality of how IM gets adopted, and appropriated, through the neoliberal agenda of the medical industry suggests that this choice is only offered through the illusion of consumer agency—that agency always, ultimately, resulting in the security of Biomedicine’s status and the profit of the medical industry.

In the next chapter, I discuss what the loss of, not just practical, but potential philosophical integration could look like if the NIH continues down the current routes of prioritization. As I began to show in this chapter, there are those who oppose whether the ontologies of Biomedicine and all others can ever co-exist; however, rather than taking the perspective that biomedicine(s) and other global medicines are inherently incompatible, I argue that if a sufficient amount of attention and respect is given to the philosophical integration of IM modalities, which value the mind-body-soul as the central healing mechanism, significant steps toward substantive integration can occur in the US healthcare system(s). This advocacy mainly takes place in the elevation of status for hylozoist ontologies, which figure all of nature as animate, as well as the enhanced status of the “mind” and “emotion” component of the healing mechanism. Similarly, I argue for renewed commitment to studying the role of *belief* in healing, and the re-visiting of the “placebo effect,” not as an experimental control, but as substantial evidence that the mind-body-soul has the capacity to cure illness. Substantive integration will require that, at a minimum, disparate ontologies about the primacy of physicality (e.g. biomedicine) and beyond-physicality (e.g. global medicines which

privilege spirituality) can co-mingle, or reverently co-exist, to feed into a meta-ontology of healing.

4 Ontological Integrations: Hylozoism, Ritual, and Spirituality in Integrative Medicine

The eyes of the night were upon me, the eyes that come when the sun goes down and humans retire indoors. Science hides in the light of the library. When the doors close and light is extinguished, science is gone. Magic and nature enter through the crack in the door, seeping into the rational columns, flowing over the factual tomes that try to explain away their existence. There are eyes in the night which are denied existence by the modern scientific world. These eyes watch, assess, guide, cajole, and encourage. The spirits behind them lead through the darkness back to dawn.

Coyote Medicine, Lewis Mehl-Madrona

4.1 Introduction

The former chapters demonstrate that the challenges to substantive instantiations of integrative medicine (IM) are profound. Barriers range from the difficulty of integrating practical, physical components of medical care to the seemingly impossible task of blending widely varying epistemologies and ontologies/spiritualities about health. On the micro level, IM risks the capacity to dissolve distinct cultural healing modalities into a unified, hegemonic discursive-material apparatus, and at the macro level, biomedical interpretations of IM risk domination of a global health care market that eschews any concern for ways of life that don't resonate with a neoliberal economy. Some of the challenges to integration are more approachable than others. For example, acupuncture, which originated from traditional Chinese medicine (TCM) is perhaps the single most

common example of a traditional, Indigenous modality being practiced alongside biomedicine(s) with minimal complications. The foundation of this compatibility is that acupuncture can be anchored in concrete evidence of positive physiological effects which resonate with biomedical standards of research. Whether IM departments, which still depend on the biomedical verification of IM modalities, will ever diagnose and treat patients based on TCM's underlying philosophy of *qi*, or life force, in the body's meridians, however, is another question entirely.

While former chapters have outlined the challenges to integration, this chapter argues that the attempt to integrate seemingly incompatible philosophies, and ontologies, of global and other biomedical approaches to healthcare is possible to a certain degree. This goal is pertinent because most IM scholarship to date does not foray into the possibility of ontological integration, and therefore, little theorization has considered whether it would even assist making integration processes more substantive or not. It would be important for us to know whether, for example, biomedicine(s) and other global medicines are inherently incompatible at level of ontology, or if there is a means by which they can co-exist, complement, or merge to some degree. For these reasons, I maintain that the possibility of ontological integration need not mean the full dissolution of one ontology into another, but the recognition that multiple ontologies can inform and complement one another in a meta-ontology of healing approaches.

As mentioned previously, perhaps one of the most fundamental philosophical distinctions of Biomedicine from holistic global medicines is that Biomedicine tends to view the body as an isolated agent from its surroundings, responsible mainly on a biological level for the physical mechanism that both made the body sick and that brings it back to health. In contrast, many global medicines tend to have the features of viewing human illness holistically—as the confluence of factors both inside and outside of the body. Holistic global medicines, in contrast to Biomedicine,

also tend to originate in spiritual philosophies that view the human being as integrated, at the level of consciousness or life force, with all matter of the universe. Or, in other words, holistic global medicines tend to view all of nature as agentic, as imbued with a life force, and therefore, implicated as agentic factors within human health.

I pause here in the introduction to acknowledge the constraints inherent to discussing something like a life force or consciousness in a transnational context. In using the terms “consciousness” and “hylozoism,” which is the belief that all matter is agentic, I never mean for them to subsume distinct cultural nuances about how nature is conceived as animate, and that critical IM scholarship will continue to question how the language of (especially English-spoken) research has the capacity to appropriate importantly different meanings culture to culture. This chapter draws on scholarship that uses the terms “consciousness” and also “hylozoism”; however, these terms, even when they display family resemblances to belief systems which view some aspect of nature as animate or agentic, shouldn’t be collapsed or subsumed into Western, English concepts. This holds true even for the terms “agentic,” “animate,” and “spirit/soul,” all of which are used in this chapter to gesture toward the concepts that bring life to Indigenous and other global medical ontologies, never fully arriving at that destination of neat translation. The case of all these terms, including “consciousness” and “hylozoism,” demonstrate a larger challenge to ontological integration, and IM research in general, which is the how to bridge discourses when we understand that language is not simply translatable in a 1:1 ratio, but that each language is an ontological force that constitutes our conceptions of reality in ways we cannot always consciously recognize. Any attempt at translation, and any method through which such a project ensues, will result in cross-cultural understandings as well as losses.

The conception of many global medical ontologies that all matter is agentic does not merely mean acknowledging, for example, that water can carry pathogens that then invade the body and make a human sick, which is a narrative biomedical epistemology is highly compatible with. Instead, figuring in the animacy of nature might include, in many Indigenous traditions, viewing plant life matter as sacred, imbued with a life force or consciousness of some kind, and capable of giving its own advice from its own spirit to a human being that is suffering illness. The concept that plant life carries an animacy or consciousness of its own that can exchange its perspective with humans is one that initially seems incompatible with Biomedicine, as to this date scientific explanations of consciousness are highly limited and tend to focus on proving consciousness is a uniquely brain-bound, human, trait. In this chapter, however, I make a case for why Biomedicine should reconsider its compatibility with global medical ontologies that figure in the animacy of nature, and that enduring strengths of holistic global medicines and biomedicine(s) are not lost in such an integration.

IM practitioners are already demonstrating such substantively integrated possibilities; the best case scenario of IM is when practitioners are trained extensively to engage with and blend not just the healing modalities but healing philosophies of any culture, if that approach is shown to bring about healing. And while they may be a minority, there are practitioners currently deploying, what I argue is, a more substantively integrated example of IM. Biomedicine is not threatened in this proposal because it still brings all of its strengths forward to the medical encounter, and this approach to IM would also generate an enhanced reverence and deeper listening to distinctive cultural approaches to health that are currently being colonized out of IM processes. If IM agents intend to engage with global medicines with appropriate understanding and training, they cannot just appropriate what works from those medicines that fit in with a neoliberal, capitalist healthcare

infrastructure; they must also integrate what the obvious strengths and advancements of those medicines' *ontologies* have been for thousands of years. Viewing a sick human being as integrated with the animacy and agency of their environment should not upset or destabilize the strengths of biomedicine(s); it enhances our comprehension of how the biological is situated and attuned (or out of attunement) within a network of human and non-human agents.

In what follows, I first show that a family resemblance to hylozoism, or the belief that all matter is to some degree agentive, is a common underlying ontology of many global and Indigenous approaches to healing, making modern Biomedical notions about the severance of the body (or the human experience) from the rest of nature the anomaly. The question of whether biomedical ontology is compatible with hylozoism, I argue, is directly tied to whether Biomedical Science can also expand its parameters to study and classify a first person, subjective phenomenon, consciousness, because many cultures, and many scholars, suggest consciousness and a spiritual life force could find significant theoretical overlap. If consciousness is an effect of being decidedly human, as much neuroscientific research aims to prove, then a hylozoist ontology seems unlikely; but for an increasing number of philosophers of cognitive science, a notion of reality where consciousness emerges from the activity of cell's constituents seems more likely, making all of nature a candidate for consciousness. The case of consciousness demonstrates microcosmically that scientific ontology is being asked to stretch to consider data it couldn't as a primarily reductive and physical epistemology, which may lend itself to the integration of hylozoist ontology(s) after all.

After establishing how important the debate about what is imbued with life force or not is, I provide examples of global medical philosophies that embody family resemblances to hylozoist ontologies, in order to demonstrate further that biomedical ontology is a modern anomaly.

Historically speaking, biomedical ontology, at times, also relied on hylozoist notions of nature as well, meaning that any conception of biomedicine(s) and other global medicines as being fundamentally incompatible at the ontological level is an artificial dichotomous construction. Because of this, I further explore how language, rather than assuming some fundamental incompatibility about biomedical and other global approaches to healthcare, presents challenges to ontological integration. Language, as a means of ontological force that constitutes and comprehends reality, can play a crucial role in bridging disparate ontologies that may otherwise appear irreconcilable, but it presents as many difficulties as it does solutions.

One of the best case scenarios of bridging discourses, in my estimation, is that working toward the translation of transnational languages will inherently expose and encourage biomedical agents and English speakers to view reality from other cultures' perspectives, and therefore, ontologies. One example of how we could approach this education for English speakers is if the World Health Organization commissioned a committee to develop a master-index of terms and concepts which are near-equivalents, because WHO has the resources to do so. At the same time, some cultures may justifiably not want to participate in the formalization of nation-state discourse on healing, especially because many would argue WHO is a colonizing force itself. Any route we can imagine pursuing such an ambitious project through would inherently encounter setbacks, yet various scholars continue to argue translating discourses of healing is one way forward toward more ethical integrations.

For Biomedicine to account more substantively for the philosophical strengths of many global medicines, its practitioners should re-open to the possibility of engaging the IM encounter as a form of agential realist ritual that is predicated upon hylozoism. Re-opening, in this context, means that self-reflection on the part of IM practitioners is not sufficient grounds for them to

assume they are practicing IM ethically; re-opening means carrying that self-awareness through to material, concrete practices which could alter oppressive and appropriating dynamics. Examples of this includes IM practitioners actively educating themselves on the philosophical underpinnings of their work and sharing that philosophy with clients, allowing clients to decide for themselves how to integrate that information; another example would be research design that re-opens to the consideration of extra-biological factors of the body, such as the environment, mind, or even ancestral traditions or practices a given patient resonates with. This could include trials that measure the efficacy of the role of the healing environment, mind, emotion, and intention in healing, not as an experimental control (placebo) but as the primary research object of measurement itself. Perhaps soon, an academic or professional conference, like the Academic Consortium of Integrative Medicine and Health, could feature entire panels, workshops, or keynote speakers dedicated to directly addressing the ethical limitations of appropriating non-scientific ontologies out of IM discourse.

To make this case for Biomedicine's re-opening, I turn once more to Frédérique Apffel-Marglin, who defines *ritual*, in *Subversive Spiritualities*, as "actions by which humans, non-humans, and other-than-humans intra-act, and mutually weave each other into an achieved continuity, into an achieved livable and regenerated world" (163). By reading ritual practices through Barad's agential realism, Apffel-Marglin imagines an ontology that blends global medicines and cosmologies with conceptions of nature informed by the hardest of positivist sciences: physics. Apffel-Marglin advances a theory that the world is comprised of the intra-action of ritual, and therefore, more specifically, I argue that if we can imagine the IM medical encounter as ritualistic intra-action of human, non-human, and other-than-human agents, we preserve what

is true about our biology from biomedicine(s), while also situating the health care visit within an intricately textured encounter of healing possibilities.

The healing ceremony, or ritual, which builds cultural significance, the engaged presence of all agents, and personal meaning from the moment of illness, is a great strength of many global medicines. This is because a ceremony or ritual curated with the awareness of the intra-action of all possible agents capitalizes on the capacity of the human mind to build belief, intention, and trust in the act of healing itself. The power of the human mind and emotion to bring about healing is yet another feature Biomedicine tends to brush off as placebo. But most holistic global medicines comprehend how powerful, how integral, the role of belief, trust, and intention is to healing. It is the positive, even welcoming, relationship between the spirit of the patient and the spirit of their illness that determines the healing outcome, as Lewis Mehl-Madrona, Native American M.D., psychiatrist, and IM specialist would say. The power of ceremony, ritual, and the spirits of everyone and *everything* implicated in the healing encounter, as well as his expertise in biomedicine(s), are the basis of Mehl-Madrona's integrated approach to healthcare, which he calls (also the title of his book) *Coyote Medicine*. I draw on this author to demonstrate what a substantive approach to IM might look like, highlighting that the enhancement of holistic global medical knowledge does need to come at the expense of biomedical knowledge, or vice-versa. In this conception of healing, modalities co-flourish and work symbiotically, without devaluing diverse global ontologies about health and wellness.

4.2 Hylozoism and the Hard Problem of Consciousness

The question of whether ontological integration is possible between biomedicine(s) and other global medicines is directly contingent upon the question of who or what in this universe is imbued with consciousness, or, a life force of kinds. Recognizing the innate link between spiritual life force and consciousness, Fahlberg and Fahlberg, in their article, “Exploring Spirituality and Consciousness with an Expanded Science,” attempt “a dialogue in health education/promotion concerning the relationship between consciousness and spirituality” (274). The authors posit that “a possible relationship between consciousness and spirituality may offer an opportunity to address spirituality in a generic, universal fashion” (274), thereby translating their concern of whether “the investigation of the spirituality/ consciousness relationship can be scientific and based on experience rather than religious or pedantic dogma” (274). In relationship to IM, the question of whether consciousness—which these authors suggest may be the same content we call “spirit”—will ever lend itself to scientific scrutiny is salient, as one of the most distinct commonalities of holistic global medicines is that they tend to view the existence of all nature as imbued with a life force of kinds. Hylozoism, the doctrine that all matter is to some degree agentive or alive, is an ancient philosophy, and for many, a spirituality, that has traces in each human-dwelling continent. In *Subversive Spiritualities*, Apffel-Marglin defines it as such: “Hylozoism is characterized by a non-dualist metaphysics in which humans, the non-human, and other-than-human such as angels, spirits, devils, and even the divinity itself were not ontologically separate” (30). She explains further that even within hylozoism, many offshoots existed: “some hylozoists were animist, viewing all matter as alive; others may not have thought of matter as alive but as able to move itself, that is, as having agency” (30).

What should be compelling to the possibility of ontological integration in IM is that hylozoism was never exclusive to Eastern, Western, Northern or Southern healing ontologies. This is the case even though today family resemblances to hylozoism are far more characteristic of most Indigenous and other global medicines/spiritualities than they are of Biomedicine. Aristotle, however, was a notable animist, and Apffel-Marglin identifies that aspects of the European Renaissance movements, occult philosophers, and peasant practices of Europe were also hylozoist (30). She goes on to show that persecution of witches (especially women who were healers and therefore knowledgeable about hylozoism and plant life especially), as well as the industrial-agricultural revolutions, all developed simultaneously to suppress a collective imagination about the animacy of nature, making hylozoists the “abject other” (Apffel-Marglin 31) of the natural philosophers and scientists of the 17th century. The closest biomedical ontology got to revisiting a notion of a universal life force after this time was the Victorian preoccupation with biological vitalism¹⁸, yet, the mid-nineteenth century was also when scientific medicine based on the mechanical and reductive laws of chemistry and physics began to mostly overturn such loyalties. This overview of the history of Biomedicine shows us that it is far from a new or geographically unique concept that plants, animals, even rocks and rivers are imbued with a life force. This also means that any construction of biomedical ontology as inherently incompatible with hylozoism results in an artificial dichotomy because the ontological legacy that precedes modern instantiations of biomedicine(s) was, at times, and for some, indeed based on the doctrines of animate nature or vital, universal forces, as well.

¹⁸ Articulating a comprehensive analysis of the rise and fall of popularity in the various derivations of vitalist theories is beyond the scope of this chapter, but for critical work on this subject that consider vitalism’s socio-political context, see Allen’s article “Mechanism, vitalism and organicism in late nineteenth and twentieth-century biology: the importance of historical context.”

As Fahlberg and Fahlberg note, a universal consciousness, or hylozoism, breaks with what many still call “Western” legacies of medicine, which scholars attribute to the contributions of figures like Hippocrates, Galileo, and Descartes. This break happens precisely because a universal spirit or consciousness challenges the epistemology of the modern scientific method itself. Biomedical ontology¹⁹ that underpins the scientific method, then, is worth reviewing for its central doctrines, in order to reassess how modern biomedical and other global medical ontologies could potentially clash or merge. Stella Quah, in her case for why Biomedicine and TCM are not ontologically compatible, explains that “The root of the ethos of science is found in the mission of the ancient Greek physicians: to do no harm and to collect detailed empirical evidence on the nature and progress of their patients’ illness” (2001). Jayakrishna Nayak, however, locates the advent of biomedical ontology in Galileo’s contributions: “Current biomedical or modern medical ontology is post-Galilean. Galileo introduced experimentation and observation. The ontologic first base was thus laid—premise—that faith was not to be relied upon for gaining knowledge, but that human reason and senses were the sole reliable sources of knowledge; demonstrable, verifiable, and quantifiable phenomena alone should be accepted as true knowledge” (17). Regardless of whether we trace the origins of biomedical ontology to the Greeks or Italians, most scholars agree that Renee Descartes’ conception of mind-body dualism is perhaps the most characteristic feature of *modern* biomedicine(s). Janet McKee, in her hallmark essay, “Holistic Health and the Critique

¹⁹ For a more comprehensive breakdown of biomedical ontology, see Baronov’s article “Biomedicine: An Ontological Dissection.” The author argues we fundamentally cannot understand biomedical ontology unless we dissect it in three dimensions: Biomedicine as a scientific enterprise, as a symbolic-cultural expression, as well as an expression of social power. While this breakdown is critical to comprehending the multidimensionality of any ontology, the author does not acknowledge that the “Western” medical tradition ever borrowed or appropriated knowledge from other locations, which is problematic to his configuration of social power because that crucial component of history is missing from his analysis, making Biomedicine sound like a purely, albeit problematically, European-derivative enterprise. It also reduces biomedical ontology to mostly our modern comprehension of it as reductionist and mechanistic, which also elides any focus on more multi-faceted instantiations of biomedical ontology (like when it included variations of vitalism).

of Western Medicine,” states, “Western medicine tends to adhere to the positivist view of science reflected in the Cartesian mind-body dualism. Positivist medical science focuses its study on that part of the individual that can be objectively observed—the body—which it tends to view as a machine acted upon by external, mechanical forces as it is subjected to the mechanistic, random laws of an impartial ‘Nature’ (775). As McKee articulates it, the adherence to Cartesian dualism leads biomedicine to reductively search for explanations of life that cannot be attributed to anything but the assemblage of self-contained parts:

reductionist Western medicine is largely concerned with the analytical breakdown of the body into smaller and smaller parts, as it attempts to isolate the single smallest biochemical factor as the cause of disease...With the introduction of the doctrine of specific etiology (each disease is caused by a specific cause) and the germ theory (disease is caused by a specific germ), the cause of much disease was reduced to a single factor: attack of the body by an external pathogen. (776)

Surely in such a conception of nature there would be no necessity for a life force to animate the assemblage of parts; the mere arrangement of pieces would accomplish the existence of what we might call life.

An intrinsically pertinent question in the debate of a life force that either precedes or emerges from the assemblage of parts, especially as it relates to health, is the mystery of consciousness. The dominant direction of neuroscientific research on consciousness to date aims to prove the uniquely human and brain-bound nature of consciousness, which David Chalmers, and Australian philosopher and cognitive scientist, famously articulates as “the hard problem of consciousness.” The hard problem of consciousness and “The task of a science of consciousness,” according to Chalmers, is “to systematically integrate two key classes of data into a scientific

framework: third-person data, or data about behavior and brain processes, and first-person data, or data about subjective experience” (1). In other words, a science of consciousness would be capable of explaining the phenomenon of subjective experience in objective terms and vice versa. As Chalmers states, “many think that we might wholly explain the phenomena of subjective experience in terms of processes in the brain” (4), which reproduces the notion that Biomedicine only has room for consciousness that is explicable in terms of reductive, mechanical brain-parts, not hylozoism.

No amount of reverse engineering the brain has led thus far to an objective neurological explanation of consciousness, but compelling studies are demonstrating that sophisticated forms of communication between entities without brains are likely candidates for what we might consider conscious; these studies prove the complex communication between trees and the mycelium that form massive networks (or, the “wood-wide-web”) within the roots of trees²⁰. Trees have been shown to not only send communication throughout the forest floor about environmental threats like invading pests, but they even protect and nourish their own offspring by sending nutrients to their “children” when they are dying. What this suggests for a small but growing minority of philosophers and neuroscientists, including Chalmers, is that consciousness, in fact, precedes the human body as a fundamental feature of the fabric of the universe, like gravity. This view of the cosmos, *panpsychism*, Chalmers states as “the thesis that some fundamental physical entities have mental states” (Panpsychism 246). If panpsychism is true, this would mean that for humans the brain merely acts as a complex material interface for consciousness in order to experience a

²⁰ Peter Wohlleben published *The Hidden Life of Trees: What the Feel, How they Communicate*, which has generated enlivened debates and academic research on the potential of non-human consciousness. For example, a Harvard University blog entitled “Exploring The Underground Network of Trees – The Nervous System of the Forest” explains that “scientists are starting to uncover that trees have their own sort of nervous system that is capable of facilitating tree communication, memory and learning.”

sophisticated, human subjectivity. Everything else, all else that exists, says panpsychic theories, is also conscious, just maybe to a lesser degree or of a different kind; this is how the novel neuroscientific term “panpsychism” makes its striking similarity to ancient notions of a hylozoist reality.

The hard problem of consciousness is relevant to the distinction between biomedical and global medical ontologies because it demonstrates a microcosmic tension within biomedicine(s) with implications for the macrocosm of Biomedicine’s ontology. If Biomedicine relies primarily on principles of being able to reduce nature to its most fundamental laws, and only counts what can be measured and verified through such physical laws as “real,” then consciousness, or life force, is hardly a candidate for scientific truth at all²¹. The modern scientific method is inadequate to account for phenomena like consciousness, which means at some point, either consciousness will be reduced to mechanical parts of a body, or the scientific method and its underlying ontology will expand to accept a more complex worldview, like hylozoism or panpsychism. At least for now, the concept that such a force extends even to animals, many of which have brains, or even to plants or water, which do not have brains, seems highly implausible to a biomedical worldview, making the ontological integration of many global medical and biomedical ontologies a stalemate. But how common is the belief in healing systems that all of nature is imbued with a life force, and that healing comes as a direct result of the acknowledgement and engagement with the life force of our environments?

²¹ Daniel Dennett, known for writing books with audacious titles like “Consciousness Explained,” is famous for claiming that consciousness isn’t real at all; “It’s the brain’s ‘user illusion’ of itself”. Many who respond to Dennett have rejected this claim outright on the grounds that they experience their own consciousness as, well, real enough, and that everyone seems to agree about that point: we are all having a shared conscious experience, which means it can’t just be about our individual brain’s illusion.

In what follows, I review myriad cultural approaches to healing to demonstrate how many global medicines share family resemblances of a spiritual life force or consciousness that Biomedicine is currently incapable of explaining. It is an inherent limitation that I deal so briefly with a multitude of healing ontologies because I risk flattening the ontologies of these complex cultural practices into thumbnail sketches. I assume here as a researcher that each healing modality I address is more complex and multifaceted than the scope of this chapter can articulate. Rather than attempting a comprehensive analysis of global healing ontologies, which I lack the ethos to do anyhow, I gather these widely varying, yet familiar, views about the cosmos, to show that Biomedicine's sterile, mechanical approach to distinguishing the human body from the rest of animate life is in fact an anomaly in global healing ontologies.

4.2.1 Traditional Chinese Medicine

Traditional Chinese medicine (TCM) is not only one of the oldest living systems of medicine, but it is one of the most common systems of medicine that biomedicine is currently working to integrate with. The National Institute of Health (NIH) is currently striving to empirically validate the integration of herbal supplements, tai chi, qi gong, and acupuncture, which all derive from the rich, complex legacy of TCM. Most scholars agree that TCM is based on three principal doctrines: the five elements (or wu-hsing) of nature (wind, water, air, fire, and metal), ying-yang, and *Qi*. Each of these doctrines contribute to a worldview that conceives the human experience holistically, as well as situated within nature's "vital effects." The principle of yin-yang, which is the balance of two fundamental, complementary kinds of energy, constitutes all of nature. It is said that health, in TCM, is the "result from an appropriate balance of yin and yang in the body, an imbalance of which may lead to a variety of diseases" (Keji & Hao 226). The five

elements (wood, wind, fire, metal, and earth), then, according to Quah, “may be taken as an elaboration of the ying yang idea but actually adds the important concept of rotation, i.e., that things succeed one another as the Five Agents take their turns” (2002). And *Qi* is “the basic substance from which the cosmos was made...very minute particles in continuous motion, the deep spring and the motive force in the transformation of things” (Tiquia 35); it represents the link between the body and the universe (Sivin,15); and it is responsible for activating and maintaining all of the physiological functions of the body (Keji & Hao 226). These three doctrines combine to give us a conception of health that sees humanity, and therefore human health issues, as an extension of the same vital forces the rest of the cosmos is composed of. A disruption or blockage of *Qi*, or an imbalance of the five elements or ying-yang in the body cause health issues, and the longer they are ignored at the level of subtle energy, the more seriously they manifest in the physical substrate of life as dis-ease of energy.

4.2.2 Reiki

Reiki, also based on TCM’s doctrine of *Qi*, is a modality of tactile healing formalized by Dr. Mikao Usui, “a Japanese monk and a Christian who attempted to bring to the world the hands on healing method used by Buddha and by Christ in their healing practices” (Neil-Anderson & Ameling 2). The term “reiki,” which holistic nurses Neil-Anderson and Ameling translate to “*universal energy*” or “*life force*,²²” is believed to connect that universal energy to the body’s own

²² Translations certainly vary. Because “reiki” is a derivative of TCM, reiki also shares similarities with the term “qi” or “chi,” as well. Keji and Hao, for example, define “qi” as “animating force that gives us our capacity to move, think, feel and work” (226), and Quah quotes Tiquia’s definition of “qi” as “the basic substance from which the cosmos was made...very minute particles in continuous motion, the deep spring and the motive force in the transformation of things” (2002).

self-healing mechanisms. Neil-Anderson and Ameling explain that “Reiki's holistic approach views an individual within a context involving a dynamic interconnectedness of all aspects of an individual's life and environment, unlike Western biomedical practices that tend to focus on parts of an individual and view symptom phenomena independently without a historical social context” (4). These nurses, familiar with both biomedicine and reiki, also note that for many seeking healthcare, their only encounters of touch within biomedicine are the cold, metallic poking, prodding, and invasive procedures that leave patients feeling disembodied or objectified as bodies. Reiki practitioners, by understanding the patient as a holistic being, recognize that soothing, healing touch is crucial to the mental and emotional health of anyone suffering physical ailments.

4.2.3 Ayurveda

Ayurveda, alongside TCM, is the other oldest, systematic approach to holistic wellness that remains highly influential all over the globe today—the physical practice (asana) of yoga probably being the most popular derivative. True to its name, the philosophy of Ayurveda emanates from philosophy of the Vedas, which Nayak identifies as the belief that “Humans are intertwined with, and eternally in debt of Nature—a strong ecological basis for human life and consequently health” (18). Citing further influences from slightly less ancient Indian texts, the Upanishads and the Bhagavad Geeta, Nayak adds to the basic principles of Ayurveda that “Mankind forms an intricate interactive link with all life forms; all living beings are one” and that “humans are projected as fundamentally souls, which have bodies and minds” (18). Here, again, we see that human health is figured holistically, and also as an extension of creation made, fundamentally, of the same stuff. It also shares striking similarities to TCM. Patwardhan et al. show that both TCM and Ayurveda rely on herbal remedies, over 50% of which are apparently the same across the two systems (466).

The authors also explain that Ayurveda is based upon five elements, except TCM's "metal" is replaced by "ether"; it is also based upon the balancing of complementary life forces, though in this case it is three, and those forces are pitta (fire), khappa (water + earth), and vata (air+ether) (466). Patwardhan et al. point out that Ayurveda is not as commonly accepted as TCM in biomedicine, but they suggest its uses and effects are equally valuable and verifiable through the same procedures that made TCM more "globally acceptable." This position, however, obviously disregards that TCM and Ayurveda cannot be systematically verified for their philosophical underpinnings by a biomedical ontology that views the body as separate, not just from its own mind, but from nature itself.

4.2.4 Homeopathy

Homeopathy, in contrast to what homeopaths refer to as allopathy (biomedicine), is based on the principle that *like cures like*—a distinct contrast from allopathy, which assumes illness is something to get rid of or battle against, like biomedical germ theories. Homeopathy, which was formalized by German medic, Samuel Hahnemann, in the 18th century, establishes that "a division has been set up between the conscious personality and the vital force, which is conceptualized as a dynamic, energetic pattern, grounded in a deeper – or more 'subtle' – level of consciousness" (Scott 206). Homeopaths fundamentally believe that "illness is a protective bodily response to social or environmental stress" (Scott 207), showing that, again, illness is the result of holistic, even unconscious factors, and therefore, the remedies prepared for a patient work with these unconscious, intelligent forces that *make* the body sick in order to draw conscious-awareness to factors causing ill health. Feminist sociologist Anne Scott argues in "Homoeopathy as a feminist form of medicine" that homeopathy enacts feminist resistance by challenging the ontological

dualisms of biomedicine, including the mind/body, male/female, and reason/nature splits, precisely because it dissolves any barrier between the human body and its natural environment/social contacts, all of which are comprised of the same vital life force. Rather than attacking the body with foreign tools, trying to rid the body of sickness, homeopathy imagines healthcare through *welcoming* illness' own intelligence, as it has the capacity to reflect an "external" environment within the body itself.

4.2.5 Maori Healing Practices

Maori perspectives on health and healing are invariably holistic and spiritual, Mark & Lyons conclude in their study, "Maori healers' views on wellbeing: The importance of mind, body, spirit, family and land." The authors explain that "Maori spiritual healers view ill health as resulting from factors such as emotional blockages, unsettled ancestral grievances, curses originating in the whakapapa [genealogy], and imbalances between physical and spiritual dimensions" (1757). Maori healers also attribute their spirituality to inter-connection with the land and signs from a personified nature itself—these signs are called "tohu." At least according to this study, Maori healers saw land itself as something to heal as well as to be healed from. One Maori healer explained it like this: "...healing to me is...a holistic thing because you're working on everything...you're working on the land that they were on, where, wherever they come from to the land that they've tramped as they went through" (1760). Interestingly, upon asking Maori healers whether they experienced healing as a matter of mind, body, and soul, several healers mentioned that the concept of "mind" was irrelevant to healing before colonization: "going back to the concept of the mind, body, and soul...that's more of a colonisational concept...do you know, in our time, there was never a mental. We never had a mental problem, Maori. We were physical and

spiritual all the way. There was no need for mental, until the white man came” (1760). Rather than bothering with, what this healer called, a bridge between body and spirit with “a lot of rubbish along the way” (the mental/mind), this healer sees her purpose only as reuniting the physical body with wairua (spirit). When we look back from here to perspectives of TCM, Reiki, and Homeopathy, it is interesting to note these modalities also focus primarily on connecting a spiritual life force to the human body directly, and no intervention at the level of mind/mental faculties is required to bring about healing.

4.2.6 Yoruba Healing Practices

Yoruba traditions of healing are not currently a priority of integration in the US healthcare system, but according to Oyelakin Richard Taye, the pressure to integrate Yoruba traditions with biomedicine is a pressing threat to their way of life. Because Yoruba medicine functions a lot like Homeopathy, where the belief is that like cures like, Taye makes this claim about the distinction of “Western” and Yoruba medicine: “while Western medicine is only occupied with one function; getting rid of the symptoms, African medicine performs three distinct functions: (1) Getting rid of the symptoms, (2) Identifying and removing the causes of the illness, and (3) Maintaining a holistic balance (including spiritual) in the patient. With this, it becomes evident why African medicine is wider, deeper and more complex than the Western one” (75). Taye also argues explicitly that appeals to integration should cease and desist in exchange for a sense of “co-recognition” of disparate healing modalities, especially because Yoruba medicine is, according to many in their culture, far more complex than “Western” medicine. Taye explains that the reason Yoruba medicine, aside from its herbal components, cannot easily be empirically validated and is often misconstrued as “magical, mythical, secretive, and unscientific” is because “orthodox doctors are

not prepared to be initiated” into the spiritual knowledge required to heal holistically (79). Another interesting claim the author makes is that attention to the holistic patient—spirituality included—is what “ultimately distinguishes Yoruba traditional healing from other modes of healings" (74); however, as I have shown, variations of holistic, spiritual healing is not an anomaly in global healing modalities, but is in fact the norm for many global healing traditions. In regard to a life force that imbues all of nature, and whether Yoruba medicine also operates on this principle, Taye cites Mbiti stating “The point here is that for Africans, the whole of existence is a religious phenomenon; man is deeply religious being living in a religious universe” (74). The Yoruba goddess, Oshun, for example, is the protector of rivers and sacred water, which is essential for their healing and cleansing rituals.

4.2.7 Aymara Healing Practices

In *Subversive Spiritualities*, Apffel-Marglin argues that contemporary Andean communities resist the biologization and medicalization of their bodies because such processes “hide the political and economic agenda embedded within those practices” (143)—processes which rely on the strict, yet arbitrary, separation of “politics (society), religion (God), and nature (Science)” (143). Instead, she notes, Aymara spiritualities insist “The body was not discrete, enclosed by the skin and separate from the outside, the larger cosmos, both human and non-human. It was open and fluid” (142). In order to demonstrate this principle with lived experience, Apffel-Marglin cites the fertility prayers of a young couple:

Holy Earth Pachamama receive us then, nurture us then, protect us then, as we are your children we want your protection, we need your care . . . Holy earth Pachamama may our waters from inside [us] also nourish your body . . . These waters that before birth already

ran in our body, these waters which we kept for you, we offer to you . . . May our waters be good, to have strong children, good children. (141)

Apffel-Marglin then explains what this prayer signifies about an ontology that biomedicine is not currently capable of integrating:

The red and white waters that run inside as well as outside the couple's body, those waters which existed before birth in "our" body, conjure up a world where the unitary materiality of the biological body makes no sense at all. Pachamama is the womb in which the seeds of all life reside and from which they generate/regenerate. So before birth, these waters already ran in generate/regenerate. So before birth, these waters already ran in this couple's "body," Pachamama. (141)

What this Aymara conception of spirituality and health reminds us, again, is that life force, in this case in the form of red and white waters, is not contained by biomedical discourse, nor is it syphoned off in biological conceptions of the "real." Health, according to Aymara peoples, is about being fluid and open with the life force of their environment and recognizing the self in nature.

4.2.8 Native American & First Nations Healing Practices

There are, of course, too many distinct Native American and First Nation cultures to reduce their beliefs about health and wellness into a single paragraph, but Lewis Mehl-Madrona recounts in his book, *Coyote Medicine*: "Tribes are different. Stories vary. My training has primarily been in Lakota and Cherokee approaches to healing, but the key elements of a Native American approach remain consistent from tribe to tribe—the view of the suffering person as being simultaneously matter, spirit, psyche; a member of both a social and an ecological system; a cell in the body of God" (246). Again, the emphasis on signs from nature or spirit, which are one in

Native American cosmology, is significant to the traditions Mehl-Madrona expounds upon here: “Our traditional medicine system has always stressed the soul’s processes are seen as being reflected in the outworld. A fire is burning on the mountain. A person is in agony. An awareness comes which dissipates the agony—and rain comes to quench the fire. These events are seen as related” (248). Indigenous scholar and author of *Therapeutic Nations*, Dian Million, cites grievances based on a similar philosophy of Canada’s First Nations, as they gathered to forcefully critique UN interventions in Indigenous ways of life; specifically, she quotes Haodenosaunee Oren Lyons saying “I do not see a delegation for the four footed. I see no seat for the eagles. We forget and we consider ourselves superior, but we are after all a mere part of the Creation” (16). That is, entities like the UN do not accurately reflect First Nation values, despite investing in bureaucratic means of resolving colonization aftermath, because “The United Nations recognized no polity that was not anthropocentric” (Million, 16). The animation, the spirit, of all life, including its land and animals, are integral to Indigenous spiritualities in North America, as well.

4.3 Understanding Healing through Language & Ritual

Given the examples above, it is clear that myriad cultures tend to view health as inherently entangled with a life force that extends well beyond an individual’s body, making Biomedicine, which tends to attribute ill health to physical factors, an exception. This exception should be all the more mystifying for IM precisely because entities like the NIH or the local hospital I interviewed claim that the goal of IM is to address a patient holistically—as a matter of mind, body, spirit, and perhaps, we may call it, spirit-matter (environment) itself. But as I have shown in Chapter Three, the rhetorical gesture of acknowledging a soul or spirit within healing is

predominantly performative the higher up official discourse about IM goes. If healthcare patients take IM discourse at surface value, they should not expect to find the ontological divide between Biomedicine and global medicines, because IM rhetoric so often claims to include the ontological view that something like a spirit or soul animates the human life form. Clearly, IM often claims to integrate itself ontologically with its alternative counterparts, yet, in action, appropriation and assimilation of spirit into more biomedically-friendly discourse is the norm. Language thus constrains perceptions about healing holistically, but it is also the means by which some scholars argue that ontological divisions about healing can be integrated beyond superficial rhetoric. This section both builds upon and complicates the notion that bridging ontologies is a mere matter of word choice.

The implications that derive from whether we could bridge ontologies by finding mutual discourses are, of course, convoluted. Because language constitutes the realities we can even conceive of, merging the discourses of various ontologies is complicated, as the example of the Maori not having a word (before colonization) for “mind” demonstrates. Merging discourses with complex medical systems like TCM or Ayurveda is also daunting and remains to be seen whether it is even possible. Nayakrishna summarizes this point with concrete examples: “For instance, *dosha* as the fundamental process of biological organization, in health and in disease, cannot be accurately represented by any formal term of Modern Biology or Biomedical Physiology. The Ayurvedic term *Shodhana* (literally “purification”), a fundamental Ayurvedic process of “cleansing” the body for maintenance of health and removing “harmful accumulants,” has no biochemical or pharmacologic equivalent” (19). Nayakrishna also shows this difficulty lies in the reverse scenario, as well: “Conversely, classical botanical terms such as *alkaloids* and *active ingredients* are inapplicable for study of herbs from an Ayurvedic perspective, since Ayurveda

prescribes whole plants and polyherbal formulations” (19). In the case of Ayurveda, it is even more accurate to think of what biomedicine calls the human “body,” as a human “being,” which Nayakrishna explains in this crucial articulation: “Ayurveda’s humans, so to speak, are therefore, sentient *phenomena*, an interactive blend of supracorporal functions and gross structure composed of matter” (19 emphasis original).

Though the vocabularies differ in this case, on-going research demonstrates that this phenomenological view of the human is compatible with the laws of physics, as Karen Barad has argued extensively in *Meeting the Universe Halfway*. By viewing the intra-action of all matter as constantly co-constituting nature through agential entanglement, Barad, both a Humanist and physicist, conceives of a reality in which existence is phenomenological, and agency is the emergent effect of all constituents. This view is compatible with the most rigorous of sciences that underpin biomedical ontology, as Barad’s conception of agential realism holds true in studies like the famous double-slit experiment. Ayurveda’s conception of the human *being* rather than *body* is both accurate to laws of physics and to principles of holistic health, yet it threatens nothing about the truth of certain biological interventions (e.g., if I have a severe bacterial infection, antibiotics will kill them off, but this is still explainable through the phenomenon of ill-health that arises from the intra-action of agents including bacteria, matter which was infected with the bacteria, and my body, etc.). Similarly, even though alkaloids are irrelevant to Ayurvedic diagnosis, Ayurvedic practitioners prescribing whole plants does not cancel out the existence of alkaloids or the ability to explain plant matter through biochemistry. The biochemistry is real, and so is the plant’s ability to heal when administered holistically. What these examples of Ayurvedic compatibility with biomedical ontology show is the potential for integration. It shows us that conceiving of health, healing, even the human body (or *being*) holistically, is perhaps not as ontologically distinct from

the strengths of biomedicine as we might initially anticipate. It also shows that lack of matching discourse does not inherently mean that these ontologies cannot find common ground. And even still, the conception of the biological has its place in this more holistic worldview—it just doesn't dominate the picture.

While the case above shows potential, in some instances of integration, finding mutual discourse cannot even be considered before attitudes which deem certain approaches to healthcare as culturally inferior are revised. One example that comes to mind is Maori and Yoruba emphasis on family curses, or Native American notions of being possessed by angry spirits. The concept of sickness coming from a spiritual force that has ill-will or intentional reason to curse a human being defies classic biomedical diagnosis, which relies on physical, present indicators—those indicators certainly coming from the patient's body itself, not an external, and intentionally vengeful, spiritual force. Taye and Waldron, in their separate cases for the need to move toward something like co-recognition or integration of biomedicine and African-derivative traditional medicines, both highlight how crucial the role of curses from spiritual entities or even ancestors themselves are to this worldview.

As I explained above, Taye suggests Biomedicine doesn't need to concern itself with the spiritual aspects of Yoruban medicines because biomedical doctors are "not prepared to be initiated" into this esoteric dimension. Waldron, like Taye, argues that to some degree "opportunities for syncretism between both health systems need to continue to develop and evolve" (52), but the author cites the refusal of biomedicine to acknowledge ancestral and spiritual elements of African-derivative medicines as less about the fundamental incompatibility of ontologies or discourse and more about the intentional and systematic oppression of ways of being that colonial powers deemed inferior. Her paper "considers how the established power, hegemony

and status of Western medicine peripheralized the health traditions and practices of African peoples of the diaspora by reproducing and sustaining hierarchies of knowledge that position Indigenous health knowledges (and in particular African health knowledge) on the lowest rung” (53). At least for Waldron, it’s not necessarily that Biomedicine couldn’t begin to integrate a more complex ontology, and therefore discourse, of consciousness and spirituality into medicine, but that “When the health system presents Euro-Western health approaches as standard and universal, the consequence is the denunciation, devaluation and marginalization of the cultural belief systems and traditions that shape the health ideologies of culturally and racially diverse groups” (54). Waldron also extends her analysis to include the effects of African diaspora on the American population, stating the healing methods of many present-day African American communities are “an amalgamation of classical European medicine of an earlier day, European folklore, African cultural traditions and ideologies from modern-day scientific medicine, tenets of fundamentalist Christianity, elements of vodun or the voodoo religions of the West Indies, Native American healing traditions and magic” (56). Even in the US, the biomedical system surely suppresses the existence of a healing space that would resonate with anyone deeply committed or connected to healing philosophies derivative of African diaspora. Given that there were points in European history where beliefs about illness were also predicated upon possession or spiritual intervention, we can see that as long as those who were part of an academic or cultural elite identified with such causal explanations, they were part of a standard discourse, but today, because materiality and physicality is privileged in biomedical explanations, supernatural explanations have been othered as unmodern.

If IM is prepared to declare that illness is connected to health of our spirit or soul, as so much IM’s public facing discourse claims, then it would be nonsensical to immediately reject any

notion that complex, non-measurable instantiations of consciousness, like ancestral spirits, could also exist. My purpose here is not to claim that Biomedicine has to accept the concept of ancestral curses or trickster spirits outright, but that it would be inane to claim IM is interested in health beyond what Biomedicine can currently measure or observe, a soul/spirit, while simultaneously claiming to know for sure that spiritual curses or intervention are illogical. Epistemological wariness should be welcome, in my estimation; it simply needs to be reconsidered within the potential hypocrisies of such a skepticism, as well. Research on consciousness, as I stated earlier, is still in its infancy, which means that we don't currently have objective data about what can or cannot be conscious, have will, have agency and intention to affect the health of an individual. When it comes to whether Biomedicine could ever integrate an ontology (and discourse) of spiritual or conscious intervention of non-physical entities, I would argue Biomedicine is simply not epistemologically equipped to verify this case either way at the moment, and therefore, we also lack a discourse that could explain the scientific mechanisms by which spirits may conjure.

What Fahlberg and Fahlberg imply in their work is that before we can develop a discourse that bridges scientific principles with consciousness or spirit, sciences have to first expand or alter their criterion or methods to allow first person data to count as "real." In the meantime, however, biomedical ontologies could remain open and intellectually curious of hylozoist notions of reality, precisely because Biomedicine can't prove that the existence of other-than-human forms of consciousness are false. In some places of IM processes, bridging discourses may be sufficient to find mutual value, as is the case with biological plant matter, and in other cases still, like spirits and ancestral curses, searching for the words to bridge worldviews is barely a start. In these cases, first overtly racist attitudes about what can even be considered as scientific matter would need to be revised, and second, a science of consciousness would at least begin to develop a conception of

reality that acknowledges the existence of non-physical forms of consciousness/spirit. Or, at least, a “co-recognition,” as Taye puts it, of allowing ontologies of the spirit world and the physical to co-exist would be enough for IM, but this co-recognition would need to be intellectually open and curious.

As the examples above show, bridging ontologies as a matter of finding substantial translations of discourses, though in some cases is possible, is still not as straight-forward as simple transcription. Socio-cultural barriers prevent an insular cultural elite from imagining the truth of other ways of being, so simply translating vocabularies across transnational power dynamics would be difficult enough. But because English, the colonizer’s language, is the most common language for IM scholarship to translate toward, to do so without even further acts of colonization seems more implausible. As discourse is assimilated into biomedicine, the terminology of a practice is re-inscribed through, first, biomedically-technical jargon, and second, will also eventually be a matter of standardizing these words in the most widely demanded and spoken language in the world, English(es). At times, even scholars who publish in post-colonial nations either do not recognize the inherent implication of colonization in these IM processes, or they simply view the assimilation of discourse as a necessary step to bridge multicultural healing modalities. For example, Patwardhan et al., all scholars from a university in India, argue their case for why “India needs to identify the extent to which Ayurvedic therapeutics is safe and effective so that it could get wide global acceptance” (466). The primary means by which these scholars assert that Ayurveda should “gain global acceptance” is through the verification of “Western science”:

The increasing use of traditional therapies demands more scientifically sound evidence for the principles behind therapies and for effectiveness of medicines. Recent advancements

in the analytical and biological sciences, along with innovations in genomics and proteomics can play an important role in validation of these therapies. Western scientific community views traditional medicines cautiously and stresses the concerns related to research, development and quality. (465)

Here, the authors assume that verifying medical qualities of Ayurvedic herbs is a process that needs, not for Western minds to learn from non-biomedical perceptions or languages of plant life, but the seal of “Western,” scientific approval. Would breaking Ayurvedic herbs down into their English biochemical components help Ayurveda achieve the global status these authors clearly believe it deserves? At least if all IM processes continue as usual, the certainty of such an outcome is high, but at what cost? The translation of Vedic-derivative or any non-English languages into modern, Standard Englishes will surely result in the loss of important contextual nuance that would identify the discourse of a healing approach within a broader ontology of beliefs about healing as well—in fact, this an inherent challenge to all IM scholarship in general, including this dissertation, because of the innate constraints of the demand for scholarship written in English. For all the reasons I outline in this section, I argue that the preservation of the languages from which global medical ontologies derive should be prioritized at all times in the pursuit for mutual discourse, especially as this would require those who take English as their first language for granted to recognize the ontological force, the world-building, that can only come from learning how others speak, listen, and experience that world.

For at least one scholar, Apffel-Marglin, “alphabetic consciousness” is also the means by which we displace attention upon the sounds and signs of nature. Though I do not reproduce the notion that some languages are inherently or essentially more capable of bringing us closer to nature than others, I do note the crucial distinction between being able to describe wind through

anthropocentric language and, say, sitting in meditation and allowing the wind *to speak to you*, as Mehl-Madrona writes about several times in *Coyote Medicine*. Apffel-Marglin writes that “In the pacha, an oral and aural world, all speak. The sounds as well as the sight of animals, wind, rustling plants, rushing water, thunder, all communicate with the humans. These are intimately known and become signs [*señas*] that speak about the coming weather and other events” (160). In other words, the development of language between humans also displaces an ability to understand the “language” of nature’s direct messages, and therefore, she reconceives of ritual as the agential-realist intra-action of all of nature’s agents: “I take rituals (I will keep this term to cover all the others since it gestures toward its Sanskrit roots²³) not in the sense commonly given to the word of repeated patterned actions, but rather as actions by which humans, non-humans, and other-than-humans intra-act, and mutually weave each other into an achieved continuity, into an achieved livable and regenerated world” (163). Next, I take up Apffel-Marglin’s re-conception of ritual as commensurate with Barad’s agential realism to reconceive of the IM healing encounter ontologically, so that we can begin to imagine transcending the many limitations and forms of oppression that IM processes tend to reproduce.

²³ Apffel Marglin explains the roots of this word as such: “In the making of this continuity, the *ritus*, according to Silburn’s translation of the Vedic hymns, play an essential role. The Sanskrit word *ritu* is made of the root *ri* and the suffix *-tu*, the latter making it an action word. The substantive *rita* is most often translated as “cosmic order,” such order being understood as simultaneously in time and space. The Sanskrit *ritu* is etymologically related to the Latin *ritus*, meaning rite or ritual. Rituals, ceremonies, and festivals are actions that create continuity in the sense of weaving or reweaving livable common worlds” (163).

4.4 The IM Encounter as Agential Realist Ritual

The IM encounter is most ethically approached through the acknowledgement of a non-anthropocentric entanglement of agents, all of which play crucial roles in the existence, diagnosis, and treatment of health issues. For this reason, I argue that IM encounters enacted in ways commensurate to Apffel-Marglin's conception of (Barad's) agential realist *ritual* is at least one way that IM processes can become more substantive. Reconceiving of the IM encounter through agential realist ritual also implicates my conception of rhetoric as ontological force because it reminds us that the IM encounter, based on its material practices and discourse, has the capacity to generate a reality where patients find deeply personal, holistic meaning in their illness. Further forms of substantive IM processes would also result from integrating biomedical practices with an ontology that bares family resemblances to hylozoism, which happens to underpin most global medicines currently being figured into American healthcare systems. As I began this chapter demonstrating, hylozoism is not a belief that is possessed or owned by any given culture, or hemisphere, but one that spans through most of human existence through many variations. Hylozoism is the feature of global medical ontologies that Eurocentric sciences eventually rejected and refused to re-adopt precisely because it would mean that nature was no longer a faceless resource to be exploited, making technical and industrial revolutions possible. Hylozoism is therefore also not a religion or a specific cultural practice that originates on one point of the globe that can then be appropriated by Euro-descendant cultures; it is a conception of the universe shared by widely diverse cultures and can be observed by any sentient human being who attunes themselves within the networks of nature. Apffel-Marglin reminds us that because hylozoism is the nature of reality,

The livable world must be constantly re woven for its fabric gets frayed or even unraveled in the very process of the rhythmic actions of the collectivities; because of this, rituals must be constantly reiterated. It is attending to this fraying, this unraveling, that I name regeneration. The world is enacted, the world is performed, the world is made through intra-actions. (161)

Ritual, like hylozoism, is not bound to any specific cultural practice but is implicated by the very nature of human beings as meaning-making entities, and the meaning around illness that is constantly frayed and re-woven is no exception.

Biomedicine is full of rituals—rituals of hierarchy, of sterilization, of chronological events in screening, diagnosis, and treatment, in the formalities of communicating options, and authority, to patients. Lewis Mehl-Madrona, Native American M.D., shamanic healer, and author of the *Coyote Medicine* series, notes that “Modern medicine has become such a procedure- and prescription- driven enterprise, it is a shame but not a surprise that it ignores ceremony in its treatments. It is incredible, however, that modern psychotherapy also ignores it, given how powerfully our psyches respond to ritual” (238). What the rituals of Biomedicine tend to lack, then, is the acknowledgement that a patient’s existence lying in an austere hospital bed, actually remains inter-connected with an environment that is so dynamic and sentient that the very forces of nature are also available to assist the healing encounter.

Biomedical encounters tend to strip patients from the natural world, insisting that cold, sterilized machines and countless tests or procedures are their only means of gaining clarity or meaning around illness. They are too often told their bodies, or the drugs we put inside them, are solely responsible for making a full recovery. Emotional and spiritual meaning of the event of sickness is sacrificed for the logic of pathogen invasion or the relentless growth of cells. IM

departments claim, rhetorically at least, to be the solution to the faceless rituals of Biomedicine—that they allow patients to conceive of their illnesses holistically, even spiritually. However, even if this adjustment is currently happening in American hospitals, it is certainly only a fraction of the most privileged Americans who are accessing it. And even then, the IM encounter has the tendency to reproduce the very limitations of biomedical rituals by continuing to eschew the role of hylozoism within healing.

Reconceiving of the IM encounter through Apffel-Marglin’s agential realist ritual, and therefore, hylozoism, transcends many of the limitations currently characterizing IM. Before I detail the particulars of this argument, however, I briefly recall the historical context through which hylozoist notions of reality were violently suppressed in the first instance. Biomedicine did not simply rise to be the standard of healthcare today on the basis of superior logic and technology, but because its cultural-elite stakeholders were successful in the intentional and violent suppression of other forms of holistic medicine. The case of global colonization of Indigenous healing methods is the primary example of this dissertation, but looking to domestic affairs in the US paints an even more detailed picture of how one of the world’s most militarily and economically dominant countries was able to snuff out holistic approaches in the 19th and 20th century on its own shores. In his article “Biomedicine: An Ontological Dissection,” Baronov argues “The US system of biomedicine that evolved through the first half of the twentieth century was, therefore, as much the product of social exclusion and elite privilege as it was of advances in bacteriology and immunology” (246). This social exclusion was accomplished by early twentieth-century “reforms” that were “designed to solidify biomedicine’s privileged stature vis-a-vis alternative medical practices in the US and to shrink the pool of competitor physicians by closing the few existing opportunities for aspiring women, African-American, and working-class

physicians” (Baronov 246). Furthermore, Garland Allen argues in his case for the importance of historical context with terms “vitalism” and “mechanism,” that the turn toward “mechanistic” biology was part of a campaign “particularly aimed at combating the reintroduction of more holistic, non-mechanical approaches into the life sciences (organicism, vitalism)” (261). Historically, holistic ontologies of healing have always been around, but they were calculated as a threat to national, racial, and economic dominance, and therefore rhetorically and bureaucratically weaponized as illogical or unreliable healthcare for the masses.

Reconceiving IM as commensurate with agential realist ritual does not just begin to re-open the world to healing possibilities that were suppressed for the sake of power, but such a reconceptualization resists a representationalist ontology through which rituals have been figured as superfluous symbolism. Indeed, Apffel-Marglin claims that “Anthropology’s commonly held view of rituals as symbolic action misses the point” (164). It misses the point because ritual, and for many cultures, elaborate ceremony, builds upon distinct features of a hylozoist reality that come together to produce healing encounters. Mehl-Madrona shares that “People need ceremony. It’s not enough just to think about life or healing. Ceremony creates the magic that allows healing to happen. It doesn’t much matter which ceremony, as long as both the healer and the supplicants believe in it” (193), and that therefore “It is through ritual that we address the nonphysical energies which surround us, nurture us, protect us, enliven us, and instruct us. It is the simplest way of formally requesting help with our problems” (231). In other words, ritual brings an *embodied* dimension to the calling upon of agential realist constituents in the healing encounter, which is decidedly more than representation. As the case of Aymara rituals for fertility also demonstrates, the extension of red and white waters from Earth to woman are not metaphorical—they are literal extensions of the life force within and outside of her body, just as human existence relies on the

same water both in their veins and in the nearest river. By building this robust emotional and spiritual belonging to and extension of the environment, human beings would logically be less likely to pollute, exploit, and deplete the resources of it because that would mean directly poisoning and depleting our own body's resources.

Of course, the absence of hylozoist discourses underpinning modern, industrialized forms of medicine (and therefore, the collective imagination about illness) contributes to this exact dynamic: environments affected by industries which treat land, not as a spiritual extension of self, but a spiritless resource to be exploited. The absence of hylozoism from ontologies commonly accepted in “developed” or industrial nations also underpins reckless neoliberal, capitalist expansion, and therefore, the colonization of Indigenous peoples. By re-conceiving the role of the medical system through hylozoism, the colonization of other ways of being becomes inexcusable. The results of how “developed” nations treat the land, and therefore, people who actually attempt to live in harmony with the land²⁴, is undeniable. The cases of disease that derive from roughly a third of humanity (from “developed” nations) treating the rest of Earth like a spiritless resource, earth, air, and water included, are too many to recount here, but the principle is plain: treating the Earth as lifeless by poisoning and exploiting it means poisoning and exploiting human bodies too, and no paradigm of healthcare will be successful until it integrates this fundamental ontology at the basis of its logical design.

²⁴ I don't mean to imply an artificial dichotomy between Indigenous people and those from industrialized nations in terms of their capacity to exploit the land; some Indigenous peoples also depleted their environments through unsustainable practices, such as the Mayans, but at least currently in 2021, industrialized nations are responsible for the vast majority of exploitation and depletion of the land's resources. Some Indigenous groups have few choices but at times to even join these exploitative industries precisely because colonization processes have taken the land, and therefore alternative jobs, away from these groups.

Another crucial component of representationalism that agential realist ritual rejects are the subject-object divisions that characterize biomedical ontology. In Chapter 2, I argued that IM cannot enact feminist resistance unless it transcends these divisions for all women, and marginalized groups, everywhere. The combination of agential realism and ritual effectively transcend these divisions by making subject and object co-constituents of reality, rather than one being capable of objectively perceiving the truth of the other. The Male gaze no longer defines the Feminine healthcare experience. The Subject of biomedicine no longer has the objective truth about the Object of a patient or disease. The Body of the patient is not the prime or only level of intervention but is considered as entangled with a self-conscious Emotional and Spiritual Mind. And Reason no longer dominates Nature through its God-trick of removed observation. Instead, all components of the healing encounter entangle to create the effect of agency which only emerges from the intra-action of its constituents. Doctor's advice is one constituent, but so is the emotional or spiritual experience of the patient, and so is the plant life which shares its medicinal properties with the physical body and intangible mind or soul of a patient. In this conception of the healing encounter, health is not an outcome that the hospital apparatus bestows upon an otherwise helpless body of a patient; rather, health is the outcome of reverent acknowledgement of the agency of every component of the healing encounter, including those less commonly considered by biomedical ontology: anything beyond the human body, such as consciousness itself.

The power of belief, trust, and intention (all features of, at least, human-based consciousness) is yet another constituent of the healing encounter that is enhanced by healthcare conceived through agential realist ritual, which Biomedicine tends to eschew as a mere fluke. In modern biomedical ontology, physical factors of health function the same every time, or they are not "real." No amount of belief or trust or faith should affect whether a pill will lower a patient's

blood pressure, for example, and that is the objectivity of materiality (divorced from non-physical factors like mind and emotion) Biomedicine ideally strives for. In fact, belief and trust in healing is used in Biomedicine as the control against which the efficacy of *real* medicine is measured: placebo. But as Mehl-Madrona puts it, “The placebo effect is sacred and powerful” (239). What many global medicines (and at some points in history, biomedical) ontologies assume is that the best healthcare derives from a relationship of belief and trust between patient and caregiver, between a patient’s consciousness/spirit and their body’s illness as a messenger for warning signals of imbalance that went off long ago. One of the great strengths of ritualistic or ceremonious medicine is that it capitalizes upon this innate understanding of human nature that belief, trust, and intention literally shifts the manifestation of body’s matter, as placebo trials have been demonstrating since their inception. By building layers of intention-setting, meaning-making, emotional and spiritual investment in the health outcome, ritualistic or ceremonious medicine heals with the assistance of a patient’s (and often the ritual leader’s and sometimes helpers’) own consciousness, belief, and intention. The body responds to this amplified intention with physical mechanisms, but viewing these processes as unrelated is simply inane from the perspective of agential realist ritual because consciousness would itself be an agentic factor in the healing outcome. Mehl-Madrona elaborates:

Trust is implicit, deep faith that leaves no room for doubt or skepticism. “I believe this will work” is not trust’s end point; rather, trust’s starting point is “I *know* this will work.” Ritual helps human beings with trust. The powerful sensual appeal of ritual prayer, song, and dance allows us to forget our skeptical worldview for the moment. We remember that we belong to the earth, as much as any rabbit or deer. Even our movements, our footsteps, honor the earth. Through ritual, the earth honors us back. We are changed by a power that

is not our own, an energy that transcends and understands us and engulfs us in its blessing.
(241)

Biomedicine tends to create the conditions for patients to divorce the role of their emotions and spirit from the body that Mehl-Madrona, an MD himself, would otherwise celebrate the integration of; they are told that if their illness cannot be explained and resolved mechanistically that it doesn't exist: "we couldn't find anything, you can go home now." This diagnosis wouldn't suffice in this ritualistic sense of the IM encounter; at a minimum, the patient would be re-addressed for the emotional and mental components of suffering they are experiencing at the level of consciousness, especially because disharmony at the mental-emotional level is a prime ingredient to illness in many holistic global medicines. For Mehl-Madrona, at least, he believes that the direct amount we are in disharmony with our environment and ourselves, the correlation to illness is imminent: "When we are in harmony with the earth, our cells are in harmony within us. Harmony is the music of healing. Disharmony produces cellular degeneration, viral infection, and disease—AIDS, cancer, and so on" (241).

Approaching healthcare through agential realist ritual also implies that the reductive features of biomedical ontology and research design detailed above are not simply flaws or inaccuracies to be overcome. There is no possible denial that what biomedicine(s) does, it does best. There is no systematic medicine on the planet as capable of responding emergently with life-saving procedures or medications as modern biomedicine(s), which proves how functionally real and efficaciously reliable the advances of "reductive" medicine have been historically. An agential realist or hylozoist ontology, however, does not threaten this reality; it situates the strengths of physical intervention in a more complex web of factors, all of which ultimately play a role in health outcomes. Whether we too have souls or spirits, we most certainly have bodies, and those bodies

are subject to the physical laws that biomedical ontology masters in the example of heart and lung transplant surgery. Yet, replacing a human's heart with another explains nothing about the emotional, mental, and spiritual factors that contributed to a person's heart failure, nor does it allude to what will become of the patient once their heart has been replaced. For this, we need a more complex ontology— an ontology that provides holistic meaning, which ritualistic medicine conceived through hylozoism and agential realism provides.

In this worldview, nothing about the biological effectiveness of antibiotics, as an example, is doubted, yet it asks the question that biomedicine tends not to: but *why* did the body present the condition or weakness in the immune system to contract illness in the first place? Biomedicine tends to start at the point of physical illness, portraying physical mechanisms alone as *causal*, but a conception of health through agential realist ritual asks a richer, more holistic question. Mehl-Madrona calls his hybrid, integrative approach to healthcare “Coyote Medicine,” in part as a reflection of his own healing journey around his hybrid (half-white, half-Native American) identity. Perhaps the most generous aspect of Mehl-Madrona's philosophy is not just that he includes the animacy of all of nature in his healing approach, but that he rejects the notion that healing spiritualities of any particular culture can be “owned” or gate-kept by a single nationality. He extends his ceremonies to all, finding “Native American medicine to be effective for people from all walks of life, whether administered in urban milieus or the Sonoran Desert of Arizona” (248). He also closes his book on this note, after sharing at length his own experiences with racism and cultural appropriation in the medical system in *Coyote Medicine*:

I believe Native American spirituality is a gift to us from North America herself. It is the natural spiritual path for those who live on this continent. Native American people have been the preservers of this spiritual path for centuries, but they do not own it. No one can

own a spiritual path. The proper response to the current interest in Native American spirituality is to correctly transmit this spiritual path to all who wish to learn it. This ensures both its preservation, its accuracy, and its authenticity. (247)

This disposition of sharing ceremony or ritual is also advocated for by Indigenous witch, author, and influencer, Juliet Diaz, who argues that the mental impetus to “gatekeep” spirituality is a product of a colonizer’s mentality in the first instance, as she explains through her social media platforms. In her book, *Plant Witchery*, she explains it like this:

I myself am an Indigenous witch, but I am not taking from Native American culture or practices and mixing it into a ‘new’ path and calling it my own. A Plant Witch would never do this, for a Plant Witch respects the identity of others. The practice I am introducing you to here is one that belongs to all the children of the Earth. There are no set rules, no right or wrong ways to practice Plant Witchery. It is meant for you to mold and adjust to fit who you are as an individual. (6)

Diaz also speaks out especially about the colonization of Indigenous medicines and plants, and therefore, she implies that resisting the gatekeeping of spiritualities in general and allowing the cultural appropriation or colonization of healing modalities are never synonymous. Issues of how to integrate substantively without further acts of colonization must be an ongoing part of the practice for anyone invested in IM, as they contemplate the intricacies of how appropriation can manifest at the infinitely plural and particular sites of integration.

What Mehl-Madrona intentionally embodies in his hybrid healing philosophy, and why I reference his work at length in closing this chapter, is the possibility of substantive cooperation, including ontological integrations. Today, Mehl-Madrona is a widely-known and respected integrative practitioner, combining his practices of family and geriatric medicine, psychiatry,

neuropsychology, and Lakota and Cherokee-derivative forms of shamanic healing. In 2020, he offered courses such as the “Two-Eyed Counseling: Discovering Indigenous Practices for Social and Emotional Wellbeing,” which was originally designed “as a means to give Indigenous epistemology and knowledge equal status to mainstream scientific perspectives and knowledge,” according to his website. He states there too, in true coyote fashion, that the program is designed foremost “for practitioners who provide counseling in Indigenous communities,” but it is also “open to those providing counseling in other communities who want to see how Indigenous practices could enrich their work,” and even for “those from other fields who wish to attend for theoretical reasons.”

It is my estimation that this hybrid conception of ontological, and therefore substantive, integration that Mehl-Madrona embodies in his work is far more likely if IM practitioners, regardless of their race, gender, or other identity markers can conceive of the IM encounter through agential realist ritual, which implies family resemblances to a hylozoist ontology of reality. The potential of this ontological recalibration would be a start toward re-directing the ontological force that IM rhetoric and practices have to not just appropriate techniques, but instead to learn from the deep wisdom that forged those techniques. It would also force biomedical agents to reconsider the primacy or centrality of the body and the role of consciousness in medical diagnosis, which lends itself to more holistic care-taking, as well as the possibility of actually recognizing the self in nature—the Earth requires this basic recognition from us now.

This conception of healing wouldn’t dismiss IM practitioners of the life-long practice of remaining self-reflexive about the intersections of their privilege, which requires sensitivity and self-revising for any capacity they have to appropriate or colonize Indigenous healing modalities. And even if we can reconceive the IM encounter together ontologically, this is in some ways a

lofty aspiration that will not translate easily to the practicality of day-to-day encounters and training of current IM practitioners. The lack of regulation on how IM practitioners get certified gives even less of a window of opportunity for them to be uniformly educated on the need to reconceive their practices through ontological or cultural appropriation concerns. Furthermore, if we could educate everyone within the medical system, including biomedical doctors, on the importance of this reconceptualization and cultural sensitivity, there are still many layers of bureaucratic and political challenges IM processes face to enact revolutionarily ethical healthcare. While ontological integrations of IM approaches is possible, as I hope to have shown in this chapter, it is only one fraction of the considerations necessary that could make IM processes substantive. In closing this dissertation, I'd like to make a final case in the coda for the rationales of why integration should or should not continue, and that there may even be a middle way, a hybrid proposal of what integration should aim to accomplish. Perhaps what is needed is not the absolute dissolving of all ontologies and modalities into one approach, but in the words of Oyelakin Richard Taye, a "co-recognition" of approaches that never fully merge nor reject one another's contributions, instead learning to reverently co-exist.

5 Coda: To Integrate or to Reverently Co-exist?

I remember being a child in Germany, watching American tv channels like MTV where I saw female popstars wearing low cut jeans that bared their pierced and bedazzled belly buttons. When I asked my mother how old I'd have to be to get the same piercing, she gently but firmly asked me to never puncture this part of my body because it would interfere with the most central energy meridians of the human body, according to traditional Chinese medicine. As a German American (military) family having been stationed in Japan, the US, and Germany until this point, my mother's knowledge of what I only understood as "Eastern" healing philosophies shocked me. This was perhaps one of my first memories of being exposed to "alternative" philosophies of medicine, and not only was this event profound enough to scare me away from ever piercing my navel, but it initiated my life-long fascination with energy medicine, which I am now a practitioner and still- student of today.

After this moment, my mother began to regularly expose my sisters and I to non-religious spirituality, taking us to spirit fairs where we received psychic readings of the ancestors that hovered around us for guidance; to my surprise, again, the psychic, having never met us, listed off family names she had no other ability to be aware of. My mother and I stared in awe as she wrote the name "Thomas," which is my deceased paternal grandfather, and "Jakob," which is the last name of my mother's maternal line. I remember trying to logically make sense of what was happening—that my mother must have told her something—but how could she have? We had just arrived at this random event we had only decided on attending that day, and we had walked up to the booth together. When she drew my "soul portrait," she sketched the animal spirits that most closely resonated with my spirit, including the horse, wolf, cat, butterfly, and hummingbird, all of

which signified I would be a highly independent and ambitious spirit that moved a lot, transformed and adapted quickly, and would likely end up in positions of leadership that dealt with education or the passing on of “mystical” or “ancient wisdoms.” She was right about all of that. My mother also allowed us to pick our first Equilibrium Bottle from Aura-Soma, which is a system based on color, crystal, and plant energies, before I was a teenager, and I recall dabbing the pungent turquoise and magenta liquid on my wrists before ever being conscious that this was a practice that my soon-to-be-American peers would scoff at.

It seemed that growing up in Germany, even though they too have a standard medical system, there was so much more emphasis on holistic wellness that clearly shaped me as a child. My mother’s own training as an esthetician in Germany was highly influenced by integrative philosophies, and the scents of her massage room alone were so tranquil it was almost as if I could smell the wisdom of her approach to wellness in the oils and plant essences she lovingly adorned us with. Before I knew to even doubt the logic of any form of medicine, I knew that holistic approaches to wellness felt safe and right in my body. Today, I continue to act on this embodied instinct as I am not only writing my dissertation on the subject, but I am a certified yoga and meditation teacher, I practice regression therapy which relies on the (consensual) alteration of conscious states, and also have experience in reiki medicine, which makes the debate to integrate or not deeply autobiographical for me. As a result, my subjectivity as a researcher is anything but neutral, and so I reflect in this coda on how my identity intertwines with final rationales for what I’ve gathered are the strongest cases integration should or should not continue.

5.1 To Not Integrate

The reasons not to integrate are straight-forward: the erasure and dominance of ways of life that don't resonate with violent, international colonial infrastructures. Even within attempts to integrate, a clear hierarchy is imminent because of similarly racist, colonial attitudes of "uncivilized" medicine involving witchcraft or spirits of African healing approaches, as opposed to Chinese systems, which tend to be seen as more logically and pragmatically transferable to Biomedicine. IM processes are unequivocally responsible for perpetuating racist, colonial attitudes about the legitimacy of "developed" nations' healing modalities over any other, and this is true even if many agents within the IM system have explicit commitments against such attitudes. Aside from this reality contributing to the cultural and literal genocide of Indigenous people, this attitude also tends to result in the exploitation of the Earth itself as a resource, which further sickens humanity, precisely because the rejection of Indigenous healing ontologies usually also means the rejection of hylozoism in general.

IM could also, in opposition to being the ontological solution to biomedicine's nature/culture, subject/object, and mind/body divides, simply create a new form of ontological reification where the metaphysical level of intervention is essentialized and privileged over the material, echoing hundreds of years of Euro-centric philosophy which problematically displaced emphasis of the "realness" of nature for the superior abstract cognition of man. Anne Scott, who has been exploring the critical ramifications of holistic medicine, especially for women, for decades argues in "Paradoxes of Holism," that "In each of these approaches to holistic medicine, the bioreductionist dualism within mainstream biomedicine can be replaced with other means of grounding social oppression" (142). She also cites the example that Nazi Germany championed a

“holistic” approach to medicine, showing that clearly, holistic medicine is as much about who practices it, and for what ideological goals, as it is about what it is.

Another manifestation of how the emphasis on holism supplants emphasis on materiality, is the reproduction of biopower, and appropriation of the mind, through the advocacy of the “good,” self-surveilling IM patient. Emphasis on personal responsibility and culpability for illness is crucial to holistic healing, yet if it replaces emphasis on the system as a whole in contributing to that illness, nothing fundamentally changes about the current oppressive dynamics Biomedicine reproduces. For this reason, we cannot assume trading Biomedicine out for holism is sufficiently socially liberatory; instead, health practitioners need to maintain rigorous self-reflexiveness and continue to advocate for concrete changes regarding how medical discourse is responsible for reproducing social inequality (Scott 144). Scott closes “Paradoxes of Holism” arguing, “It seems that anti-oppressive health practitioners cannot avoid the messy and difficult task of addressing social, political and ethical issues within their clinical practice” (144).

As a researcher, I went into this project assuming my own subjectivity would align with causes to not integrate the most, precisely because of my personal commitment to cultural sensitivity and social justice. This inherently influenced the way I asked questions to my interviewees, as well as how I interpreted their contributions. I could continuously feel the pull from my interviewees to be recognized and legitimated for their work, while I kept pressing back to question the nature of their work in the first instance. The more I spoke to these human *beings*, however, especially one who had given up a position as a 6-figure hospice CEO to pursue IM because of the sheer healing power she had witnessed in her own life path, the less prodding my disposition came. Jade told me “all my friends think I’m crazy for giving up my salary and security” in order to practice a Buddhist-derivative therapy, but she also told me she has never felt

more fulfilled or content in her life purpose. Robin also told me that even though she thought the majority of how IM functions as an institution is problematic, that she deeply loved her work and could feel the impact she was making with clients who had never been treated like “whole people.”

As I absorbed the peace in their voices about their personal place within the system, I could feel myself interrogating less and listening more to how these individuals were striving to make their own counter-cultural contributions, even when they were hesitant to name them as such. Though my pool of interviewees was small and limited, the more I spoke to them as individuals, the more the complexity of their humanity became apparent: these are healers constrained by a system they cannot control the design of, and their ultimate goal is to make people well. It was so clear from each person I spoke to that the wellness of their patients, and their belief in the power of holistic global medicines, were their driving factors for exploring IM. After hearing several accounts of how appreciative (and healed) patients of IM can be, a significant portion of my initial resistance to formal, hospital-based IM departments dissolved. And yet, in other ways, even based on the answers of the interviews themselves and exposing myself especially to the perspectives of non-white individuals who see IM processes differently, my initial skepticism of the system remains entrenched. I reflect this conflicted tone throughout the dissertation, including the design of this coda—to integrate or not—in part as a reflection of how I myself continue to weigh and re-balance the incredible possibilities and the tragic outcomes of IM processes.

5.2 To Integrate

The best reasons to continue integrating global ontologies and epistemologies of medicine is that the automatic refusal to consider other ways of healing as legitimate reproduces racist and

colonialist attitudes. If IM aims to resolve the oppressive dynamics of a biomedical encounter, it cannot do so in good faith unless it substantively and reverently attempts to learn from the worldviews of the forms of medicine it integrates. Furthermore, the idea that biomedicine(s) are distinct or fully separate from other global medicines is, in part, a socially constructed dichotomy that eschews the complex history of integration that took place prior to ever being named as an integrative paradigm. Biomedicine has appropriated global medicines from the point of colonization forward, though for most of Biomedicine's history, this has meant appropriating Indigenous knowledge without giving acknowledgement of doing so. Today, from a pragmatic perspective, it is impossible to keep medical systems separate in an increasingly globalized world. In fact, many see integration as a form of honoring the global diversity in any given country so that options are available that are familiar to distinct cultural approaches.

It may even be important for IM to continue distinctly because diseases and illness are not “culture-free,” as Baranov argues in his dissection of biomedical ontology. While biomedical ontology tends to view disease as universal—as in, it would affect everyone the same way—Baranov, explains “culture-bound syndromes are as much the rule as the exception” (241). What this means is that local, sophisticated forms of knowledge about particular illnesses derive from direct ties to land and cultures as much as they do a human's biology. For example, Amy Massey and Ray Kirk show that “Kaupapa Māori research is affirming the genuine need to seek traditional knowledge as a way of understanding and as a basis for creative solution finding to the health crisis facing Māori today” (5). Having this knowledge in a global context could once again deepen IM's ability to work sensitively with culturally-specific conceptions and manifestations of illness, rather than assuming the biodiversity of the planet is reducible to a single diagnosis.

Calls for further integration are also coming from diverse places on the globe, though certainly there is nuance to each argument. Some scholars of Indigenous studies, as well as scholars outside the US and Europe, are also arguing for increased integration, as well as that some studies show Indigenous groups' willingness to understand the options that biomedicine(s) provides alongside their traditional medicines. I've cited several such authors who argue, ultimately, that integration is in fact an important goal to the egalitarian future of healthcare, including Hao & Keji, Taye, and Waldron. Waldron articulates what is at stake because thus far integration has "merely meant the appropriation of Indigenous health remedies, knowledge, and methods by Western medicine" (66): "In an era of increasing globalization, transnational migration, cultural diversity and blurred cultural divisions, it is crucial that the health system take a more prominent role in forging links between African Indigenous health and Western medicine in ways that do not compromise either faction" (66). For some, further integration is the means by which we could eventually achieve the subversion of biomedical dominance, while others, like Hao & Keji, more simply view integration as the means by which we "marry the best of both worlds."

One example of this marriage includes studies like Calvet-Mir et al.'s in "Is there a divide between local medicinal knowledge and Western medicine? A case study among native Amazonians in Bolivia" which, according to these authors, "have found that the Tsimane' conceptualize local and Western medicine as two independent domains of knowledge, although they mix pharmaceutical and plant treatments in their daily practice" (9); the authors "have also found that local practitioners and doctors show willingness to cooperate so people could benefit from both medical systems simultaneously" (9). Based on this example, we can imagine thousands of studies for each culturally-specific site to understand more deeply what the needs and desires of individual groups are. The best forms of research that can deepen our knowledge here are not

of the modernist anthropological notions that scholars from “developed” nations can objectively go observe the needs and wants of Indigenous populations. Instead, this kind of research requires the analytical deconstruction of the subjectivity, bias, and privilege involved in performing such research. It requires the acknowledgement of the limitations of translating Indigenous knowledges into the colonizer’s language, English, which will always equate, to some degree, in cultural loss. And it requires deeply persistent attempts to continue to listen, with the help of translators, to the concerns of Indigenous groups. Massey and Kirk’s work is interested specifically in the difficulties that arise in robust transnational TCAM research; they embody the reverent attitude that “Maintaining research credibility is not just about integrity in research processes and proper selection of methodology. It is also about the taonga, the gift, of participants’ stories” (13). What the studies of Maori and Tsimane' above evidence is that in an increasingly global world, according to the Indigenous participants in these studies, some also have increasingly complex goals: both to modernize and engage with advanced scientific knowledge, but also to preserve what is local and unique about their own way of life.

Perhaps a final and all-encompassing case for the continuity of IM is that Indigenous ways of life have increasingly been recognized as the most sustainable examples of life we have on the planet to date. For this reason, the more that industrialized and “developed” nations can learn from and listen to these ways of being, the better chance we have at sustaining the planet upon which we could practice such cooperation in the first place. Dian Million observes in *Therapeutic Nations* that “...Indigenous cultures may represent the only living models for different economic and social systems on the planet, ways of life that have the power to challenge capital cultures, even when they are not pure or untouched by capitalism” (161). However, Million’s expression here is not one of rose-colored glasses about multicultural, neoliberal pursuits. Million warns “to not hold out

that a dominant ‘culture’ will magically transform if we educate its consumers on our ‘difference’” (161). Million maintains that, at least for Canada’s First Nations, “We ourselves must take our ‘cultures’ out of multicultural uses— to seriously see the active epistemologies they are that inform life and governing in particular places” (161). The case of Canada’s First Nations is a crucial consideration in the debate to integrate or not, because not only was colonial violence the cause of inter-generational trauma First Nations are still recovering from, but part of this process was in fact the illegalization of First Nation and other Indigenous medicines and healing practices. A self-reflexive IM scholar needs to ask why nations like the ones Million identifies should even look to integrate forms of medicine that reproduce the very forms of cultural extinction that they are still recovering from? It is certainly not the responsibility of groups worst affected by colonization to educate the rest of humanity about how to live more ethically, and so the paradox continues on: to integrate to practice multi-cultural reverence or not?

5.3 Closing Thoughts

In closing this dissertation, I argue that full integration of all the world’s medicine is an impossible, even unethical, goal, because it implies that the dissolution of bio- and cultural-diversity into a unified ontology of reality is preferable. Instead, rather than rejecting the attempt to integrate multiple approaches to healthcare or advocate to fully merge them, I, and many others in IM scholarship, maintain that a kind of middle ground, a reverent co-existence, is most needed, given the ethical concerns that IM engenders. Calvet-Mir et al. claim that “...local medicinal knowledge should not be fully integrated into science, nor should the reverse occur. Both are complementary, not replaceable. Both have value in their own right and need to be recognized as

such, giving both equal weights” (9). Taye argues for a similarly hybrid stance, though certainly distinguishes their contribution by emphasizing that Yoruba and “Western” medicine are not merely equals but that Yoruba medicine is in fact “more complex” than Western medicine. Therefore, Taye argues “that an attempt should be made by the Yoruba traditional healers and herbalists to make some important aspects of the Yoruba medicine empirically demonstratable and verifiable, and that the main purpose of the felt need for development in Yoruba medicine should not be with a view to integrate it with any other form of medicine, as some have argued” (84); this stance is what Taye refers to as “co-recognition.” I am not in a position to declare which systems of medicine are “the most complex,” nor whether each healing system is equally valuable or efficacious as any other, like the claims made above. What I can assert is that a reverent co-existence within IM acknowledges that life is more complex than biology alone, and therefore, the best medicine will be too.

Even when we consider the work of Chapter Four, where I demonstrate the possibility of ontological integration, I do not suggest that biomedicine’s sophisticated ontology of physical reality needs to be canceled or deleted outright, but more that it complements and should remain informed by hylozoist ontologies, somewhat like a puzzle piece that inter-locks crucially inter-dependent theories of physicality and beyond-physicality. Though biomedical ontology tends to reify problematic dichotomies about subjecthood and objecthood for the socio-cultural dimension of reality, the impetus to divorce researcher from research object has led to the discovery of “impartial” physical laws that have the capacity to save the life of physical bodies instantaneously (e.g., a heart defibrillator or an epi-pen). And yet, life is more complex than Biomedicine. The biological is just a layer or dimension of reality that fits snugly in a wider, more complex view of the cosmos; the principle is the same when we look at the distinction between quantum and

classical physics. Both explanations of nature are true and real, yet they address distinct dimensions of reality, and therefore do not function in each other's domains. Still, they complement each other beautifully to feed into a meta-ontology of the cosmos. Integrative medicine should strive for such a meta-ontology, where collaboration and complementary is possible, but is also not the means by which we uncritically erase other ways of being or knowing the world.

As a researcher who embodies several intersections of socio-cultural privilege, I conclude here by considering here how my white skin, fluency in German and English, and the mind of a daughter raised by a German American family reproduces my own perception of the flaws and strengths of IM as a whole. I'd like to clarify that critical reflection as a scholarly practice requires much more than the self-reflexivity of this coda. Critical reflection also implies that our work is open to criticism; that we cannot, in fact, merely unravel the privileges and biases of our work because we self-reflected through those same blinders. Critical reflection therefore also implicates the process of deeply listening to and allowing other scholarship to inform, critique, or even re-imagine our ideas. In the case of this research, further critical reflection could have come in the opportunity of IM practitioners critiquing my reading of their insights, or by enlarging the scope of this research to include patient perspectives, which could easily destabilize the insights that I, or the IM practitioners I interviewed, gathered. The feedback of my chairs in this writing process was another example of how my work was subjected to such crucial criticism that at times I struggled to identify myself; I asked my chairs explicitly to read my work for the risk of appropriating others' ideas, and I revised my work based on those potential cautions of my scholarly community. One case was adding a paragraph in my fourth chapter that framed the risk involved in the slippage of deploying terms for "consciousness" or "spirit," which clearly will vary

culture to culture; there were several other nuanced cases like this my own mentors helped me address. Aside from being open to criticism and revision of our thinking, critical reflection is also about embodied action and follow through beyond an intellectualizing of subjectivity. I consider critical reflection a life-long embodied practice—especially the practice of being open to revising my thoughts and actions based on the insight of others. Robust critical reflection certainly requires community.

Further observations I made upon reflection of my subjectivity as a researcher included that I could see how honestly and casually my interviewees responded to my question about the potential IM has for cultural appropriation, most likely because I am also white. I also believe my interviewees felt they could divulge a generous amount of complaints about “the system,” knowing that I was an holistic practitioner myself; they likely saw me as an ally, since most of my questions were about how we could improve the system for them. Upon reflection after the interviews, I realized that I could have asked more questions about possibilities rather than trying to apprehend injustice where it stood, and that this choice of questions likely reflected my own cautiousness of my subjectivity rather than taking it for granted. Furthermore, I think that I lean toward a perspective of IM processes that advocates for co-existence rather than full integration or separation because I haven’t been affected by losses of my culture. Because I was born in Japan, have family in Germany, and mostly lived in the US, my sense of having no true “home base” certainly affects how I personally identify with the fluidity of cultural exchanges, though I only mean to do so with reverence and self-reflexiveness about appropriation.

As the daughter of a soldier and a healer, I feel my disposition in this research further torn down the ribbons of my soul family’s DNA. On the one hand, I personally advocate for whatever engenders the most healing (and the least amount of harm) for the planet and all its stewards

because I was raised in an international family that recognized the beauty of all cultures. It also helped that I was raised by a holistic healer who could put facial clients, including me as her test-rabbit, to sleep instantly with her angelic touch. At the same time, I am painfully aware of the role my own family, including the American and German generations before me, played in re-instating the dominance of colonial and genocidal forces on the planet, and find myself, since childhood, wanting to distinguish my contribution as a force of uniting, not dividing—a force of healing, not fighting.

At least one of my great grandfathers was enlisted in the Nazi army, though whether he joined to save his own life or to take others I will never know. I remember how stoically he sat in the corner of any room when we'd visit, and that I was too afraid to talk to him because his eyes seemed so distant, like he had seen too much of the world. He never had much to say but he shared with my father on his deathbed that the American POW camp he was in was the most humane, and so he was okay with my father taking my mother to the US. My father, although clearly implicated in US colonial imperialism as a military officer, always impressed upon my sisters and I that his joining the military was about the defense of values that saved his mother's life when US troops rolled into Hanau, Germany as WWII was ending. I recall my grandmother sharing with me that as the tanks rolled into her little German town that day, this would be the first time she saw a Black man in person, as he and other Americans suited up in their camo bdu's smiled and threw candy to the starving children. She saw them as American heroes—which likely impacted my father—and just before her passing, showed her life-long gratitude to US ideals by naming her beloved yellow canary Obama.

My dad's father, an American soldier occupying the area to ensure the dissolution of Nazi forces, met his mother, a German secretary, and bore five children who straddled American-

German identities. As a young man of 20 years old, though he never got to meet his American father nor had been to the US, he decided to leave Germany to answer the call of John F. Kennedy: “ask not what your country can do for you, but what you can do for your country.” Despite being trained as a warrior, he never owned a gun, never advocated for violence, and always insisted my sisters and I educate ourselves as global citizens rather than national loyalists. Education and diplomacy should take precedence so that war doesn’t have to, he insisted. Selfless service, for him, was about the defense of those he loved so that they may be freer to serve the world with integrity, intelligence, and fairness, and for my mother, service simply meant offering the energy of kindness and healing to anyone, regardless of their race, gender, sexuality, or ability, as I had the privilege to witness my entire life. As I consider these aspects of my identity and how they shape my perspective of IM processes, I am positive that the wariness to balance my personal contribution of a message about unification and cooperation, without speaking for others, is the primary tension that characterizes the sincerely imperfect offering of this dissertation. And so, I close, not with an academic argument, but with an ancient non-religious prayer for the planet and all her children:

May all beings have happiness and the causes of happiness.

May all beings be free from suffering and the causes of suffering.

May all beings rejoice in the well-being of others.

May all beings live in peace, free from greed and hatred.

The Buddhist Metta Prayer

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