

THE PENNSYLVANIA STATE UNIVERSITY  
SCHREYER HONORS COLLEGE

DEPARTMENT OF PHILOSOPHY

THE ARTFULNESS IN MEDICAL PRACTICE

DANIEL ESSLINGER  
SPRING 2010

A thesis  
submitted in partial fulfillment  
of the requirements  
for baccalaureate degrees  
in Pre-medicine and Philosophy  
with honors in Philosophy

Reviewed and approved\* by the following:

Vincent Colapietro  
Liberal Arts Research Professor of Philosophy  
Thesis Supervisor, Honors Advisor

John Christman  
Associate Professor of Philosophy, Political Science, and  
Women's Studies  
Faculty Reader

\* Signatures are on file in the Schreyer Honors College.

## ABSTRACT

The medical field operates in a unique space. Building upon millennia of social practices, contemporary medicine has an interesting relationship with both the ancient ideas and the concepts characteristic of the modern era. Indeed, current medical practice is often defined both as an art and a science. This work investigates the meaning of that distinction. The ancient understanding of *techne* offers much insight into the foundations of medicine and its contemporary manifestations. Against this understanding, the model of the modern natural sciences presents a radically different perspective. I argue that, through the Ancient Greek conception of division, a more full understanding of medicine is possible. This idea of division sheds light onto the status of health and illness and the necessary principles of practices involving them.

## ACKNOWLEDGEMENTS

I would like to thank Dr. Vincent Colapietro for his persistent support and guidance in this project. Additionally, my conversations with Jafar Al-Mondhiry and Logan Harper provided me with important insight into this problem. Kelly Murphy's attention to grammatical detail made this work possible. I would also like to thank my parents and my closest friends for their advice and confidence in my work. Finally, the Penn State Department of Philosophy and the College of Liberal Arts supported my work financially, and for that I am very grateful.

## TABLE OF CONTENTS

Introduction	Page 1
Techne in Ancient Greece	Page 3
Medicine as Techne	Page 8
Hippocratic Understanding of Techne	Page 9
The Problem of Modern Medical Science	Page 12
Gadamer and the Equilibrium of Health	Page 14
Medicine as Irreducibly Artful	Page 19
Distinction of Disease and Health	Page 21
Disease and Illness as Human Constructions	Page 24
Conclusion	Page 27

## INTRODUCTION

In his lecture for Tedmed in October 2009, Dr. David Agus, a professor of medicine at the University of Southern California, offered a promising insight into the future treatment of cancer. In this talk, he argued that further research into the proteomics and genomics will be dramatically beneficial to the field of oncology. Instead of traditional chemotherapy and radiation treatments, he suggests that cross-disciplinary approaches to cancer should be implemented if the fight against cancer is going to progress. Seemingly important to his argument, Agus characterizes a radical shift that he believes is imminent in medicine. Technology, he believes, will allow him and his contemporaries to transcend the previous paradigm of medicine. He says, “Hopefully, we will be able to go from being the *art of medicine*, more to the *science of medicine* [emphasis added].”<sup>1</sup> That is, whatever previously characterized medicine fell into the category of an art, and that characterization should be changing such that medicine will soon be better understood as a science. This incites certain questions: What exactly is happening in the medical field that warrants such a radical shift in perspective? And how are we to comprehend these terms ‘art’ and ‘science’ and the changes in medicine that they specify?

The answers to these questions are fundamental to medical practitioner’s understanding of their field. The doctor’s role in contemporary society is being challenged and provoked with such inquiries. While Western medicine has undoubtedly changed significantly through the ever-increasing domain of the natural sciences, it remains unclear how the actual status of the practice itself has changed. Is there

---

<sup>1</sup> David Agus M.D., “A New Strategy in the War on Cancer,” TED Partner Series Talks, [http://www.ted.com/talks/david\\_agus\\_a\\_new\\_strategy\\_in\\_the\\_war\\_on\\_cancer.html](http://www.ted.com/talks/david_agus_a_new_strategy_in_the_war_on_cancer.html).

something that separates medicine from being the science of medicine? To answer this, a robust understanding of the purposes of the practice is necessary. The self-conception of medicine informs the doctor of how to act, what to know, and even how to know it. And, in an important sense, this knowledge defines the medical discipline. It is a pre-requisite; it is the knowledge that offers a person entrance into the medical profession. But, what is this knowledge that doctors possess? If Socrates were to converse with a physician, what domain would Socrates admit that the physician really *knows*?

In this work, I will attempt to develop a response to Socrates' request. Though medicine's abilities and treatments are constantly undergoing modification, the treatment of ill persons has a meaningful practice in every culture. Everyone, in their own way, comes into contact with a medical tradition and the practitioners of that tradition. Whether that tradition consists of a Western, ayurvedic, or traditional Chinese medical doctor, peoples look to medically-trained individuals when they face an illness, and, for each culture, this experience is uniquely meaningful. Although contemporary Western medicine with its scientization and technological advancement is quite different from the shamans of ancient times, something in these practices remains the same. So much so, that both practices might be called a medical practice. In this project, I hope to elicit the essential traits of medicine and characterize what exactly an *art of medicine* and a *science of medicine* could mean.

To begin this inquiry, I will analyze the Ancient Greek understanding of technical knowledge and its application to the practice of medicine. The Ancient Greek distinction between types of knowledge offers something definitive about a field like medicine. Indeed, the modern terms 'art' and 'science' have inherited much from the ancient idea of

technical knowledge, though they are importantly different from it. To the Ancient Greeks, it seems that medicine is best labeled as a *techne*, a craft, as opposed to other domains of knowledge. Additionally, this characterization as a *techne* both limits and enables the purposes of medicine. Indeed, medicine was a notably important *techne* in the ancient world.

But, as I will show, this foundation is more complicated. Although Hippocrates convincingly argued for medicine's classification as a *techne*, the medical practice has peculiar situation, a situation that Hans-Georg Gadamer classifies as "the enigma of health." The relationship between medical practices and health is not so simply described; rather, the unique and fluid status of health creates an interesting space in which the physician and the patient can participate in healing. Medical practice is importantly defined by its exceptions to the concept of *techne*. Indeed, these exceptions create an interesting problem for contemporary medicine; they resist the technological framework. And, I will argue, the ancient sciences are invaluable in describing the true character of medicine, an essence that is further articulated by its status as a human construction. The physician's task of returning health to patients does not primarily consist of treating physical bodies, but rather human agents in their wholeness.

#### TECHNE IN ANCIENT GREECE

In search for the essence of medicine, I first turn to the culture and wisdom of the Ancient Greeks. In their society, the medical practice held an important social function, a function not dissimilar from contemporary medicine. Indeed, the Ancient Greek medical discipline has left a significant impression on the whole tradition of Western medicine. One only needs to think of modern doctors' commitment to the Hippocratic Oath as an

example of this legacy. Still, one does not even need to look beyond the works of the two great philosophical authors of Ancient Greece for an understanding of medicine's place in that society. Both Plato and Aristotle often discuss medicine and its implications in their works. The medical discipline offered Plato and Aristotle a service of social significance, a service worthy of both time and discussion. Werner Jaeger comments the following on Plato's intellectual involvement with the medical practice:

Plato speaks of doctors and medicine in such high terms that, even if the early medical literature of Greece were entirely lost, we should need no further evidence to infer that, during the late fifth and fourth centuries before Christ, the social and intellectual prestige of the Greek medical profession was very high indeed. Plato thinks of the doctor as the representative of a highly specialized and refined department of knowledge...<sup>2</sup>

As Jaeger highlights, in the Ancient Greek world, medicine was a firmly developed discipline, and Plato understood that the practice of medicine occupies a distinct field of "highly specialized and refined" knowledge. This sphere of knowledge is materialized in the action of the medical doctor. Through the physician's effort, this knowledge is applied to yield practical results. If it is successful, the health of the patient is altered through the doctor's treatment, a treatment which is the application of his knowledge of the illness. This insight of the doctor is a technical knowledge, a type of knowledge only learned through the introduction into a practice. It seems straightforward that this type of knowledge extends to contemporary medicine as well. Though his treatments might be very different from the ancient practitioners, the modern physician still seems to characterize his knowledge as technical. But what does this characterization

---

<sup>2</sup> Werner Jaeger, *Paideia: The Ideals of Greek Culture*. Vol III, trans. Gilbert Highet. (Oxford: Oxford University Press, 1967), 3.



really say about the medical discipline? How is medical knowledge, as a technical knowledge, separate from other types of knowledge and wisdom?

Here, I find the ancient definition to be extremely helpful. In their own distinct way, both Plato and Aristotle offer a grounding of technical knowledge and distinguish it from other forms of knowledge. Indeed, the idea of a knowledge specific to a technical practice is mentioned often in the Platonic dialogues. While Plato often employs technical knowledge and its distance from the philosopher's knowledge to elicit the nature of the Good, technical knowledge nevertheless occupies an important space in his works. Specifically, in *The Sophist*, Plato distinguishes the different types of knowledge. The discussion begins with the characters Theaetetus and his visitor who are engaged in a conversation about the expertise of an angler:

Visitor: ... Tell me, shall we take [the angler] to be an expert at something, or a nonexpert with another sort of capacity?

Theaetetus: He's definitely not a non-expert.

Visitor: But expertise as a whole falls pretty much into two types.

Theaetetus: How?

Visitor: There's farming, or any sort of caring for any mortal body; and there's caring for things that are put together or fabricated, which we call equipment; there's imitation. The right thing would be to call all those things by a single name.

Theaetetus: How? What name?

Visitor: When you bring anything into being that wasn't in being before, we say you're a producer and that thing you've brought into being is produced.<sup>3</sup>

In this passage, Theaetetus's visitor suggests that a person has a specific capacity. This capacity, crucial for technical knowledge, is the capacity to become an expert at something. The angler had the capacity to develop technical knowledge, and that capacity actualized itself in the acquisition of learning how to catch fish. Likewise, a doctor is

---

<sup>3</sup> Plato, *Sophist*, in *Plato: Complete Works*, trans. Nicholas P. White, ed. John M. Cooper (Indianapolis: Hackett Publishing Company Inc., 1997), 219a-b.

born with the same capacity: the ability to achieve expertise in some field. But, unlike the angler, the doctor's capacity develops into skill through his medical education and training.

However, the angler's knowledge and that of the doctor are not only different domains of knowledge, but also fall into different categories of knowledge. Plato continues the above passage by suggesting that the two main types of expertise should be: production and acquisition. In both types, something is produced; however, the characteristics of each type enable a distinction between the two. The angler's expertise falls into the category of acquisition, because the angler simply takes the fish from nature. Nothing is produced in the activity of catching fish. Rather, through the angler's expertise, the fish are artfully relocated to another place. Medicine, however, is not merely a form of relocation; the doctor does not simply acquire something from nature.

Indeed, the doctor's role is more complicated. It seems Plato wants to classify it as a production. Here, a production is distinguished from acquisition, because production creates a thing that is not found in nature. In his craft, an artisan forms an original product. Likewise, Plato says medicine indeed forms a product. While medicine can easily be labeled as a "caring for the mortal body," one of the productive expertise listed in the passage, it is unclear what exactly medicine produces. What might a productive expertise entail?

To help provide a better grounding of this idea, Aristotle offers a more concrete grounding of technical knowledge or a professional's expertise. In Book IV of *Nicomachean Ethics*, Aristotle distinguishes between the forms of rational knowledge. Following Plato, he uses the word *techne* to describe technical knowledge. In translating

techne into modern vernacular, the term craft as well as – interestingly – both science and art are often used. And, like Plato, Aristotle identifies techne as the production of something. It is a knowledge that delimits a profession; as such, it defines the practitioner. In the following passage, Aristotle offers a description of the requirements of a techne: “Every craft (techne) is concerned with coming to be, and the exercise of the craft is the study of how something that admits of being and not being comes to be, something whose principle is in the producer and not in the product. For a craft is not concerned with things that are come to be by necessity; nor with things that are by nature, since these have their principles in themselves.”<sup>4</sup>

Here, Aristotle’s distinction between things whose principle is the producer and things whose principle is the product parallels Plato’s analysis of production and acquisition. A techne is solely concerned with the production of something, a becoming, that is done by humans for human goals. Acquisition is concerned with things, whose principle is in the product; these are things that *are* by nature. While acquisition is concerned with the natural object, techne (production) is concerned with the expert who can produce something.

This technical knowledge of the expert is further described by its distinction from practical knowledge (phronesis) and theoretical knowledge (episteme). The first and strongest division is the scientific status of the type of knowledge. Techne and phronesis are labeled as non-scientific rational knowledge, while episteme warrants the title of science. For both techne and phronesis, Aristotle identifies that they are forms of knowledge concerned with something other than itself. Techne is primarily concerned

---

<sup>4</sup> Aristotle, *Nicomachean Ethics*, trans. Terence Irwin, Second Edition (Indianapolis: Hackett Publishing Company Inc., 1999), 1140a.

with the producer of a thing, while phronesis concerns itself with moral action. The important difference between these two is that a person with phronesis knowledge does not know how to make anything. Rather, practical knowledge offers one the moral know-how to behave well.

The remaining type of knowledge, episteme is the only type concerned solely with itself; this is the defining characteristic of Greek science. In this sense, scientific pursuits are only interested in the increase of knowledge. Science is knowledge for knowledge's own sake. While techne can produce something to benefit man's physical situation, episteme can produce further knowledge of a subject. For Aristotle, techne, phronesis, and episteme are arguably strongly distinguished forms of knowledge.<sup>5</sup> These distinctions become helpful in characterizing the medical practice.

#### MEDICINE AS A TECHNE

Given Aristotle's articulation of the requisites of techne, we have a better understanding of the question: Does medicine truly fall into the category of a techne? In the previous passage from Plato, medicine seems to be classified as a production expertise. Indeed, the medical profession undeniably seems techne-like. The physician is concerned with a specific field of specialized knowledge: the knowledge of the body. Thus, when he truly performs medicine, the physician uses his technical knowledge to benefit mankind. For this reason, medical knowledge cannot be characterized as a phronesis or episteme. The doctor, with his many years of medical training, does not offer his patient any moral advice, nor does he offer the patient knowledge for knowledge's own sake. Medicine is concerned with a becoming, which is enacted by the

---

<sup>5</sup> Joseph Dunne, *Back to the Rough Ground: 'Phronesis' and 'Techne' in Modern Philosophy and Aristotle* (Notre Dame: University of Notre Dame Press, 1993), 238-274.

physician for human purposes; it is knowledge whose purpose is outside itself. Simply put, medicine is meant for healing people.

Yet medical knowledge is peculiar. Medicine does not behave exactly like Aristotle's description of *techne* or like Plato's idea of a productive expertise. Even in Ancient Greece, medicine was not unquestionably labeled a *techne*. Indeed, it was argued that medicine is not really a becoming or production. Again, we return to the question: What does medicine produce? It seems the ultimate goal of medicine is an increase in health of the patient, but it is not exactly clear how this occurs. The shoe-maker actively produces shoes from raw materials, but the physician's treatments seem to have a character that escapes this framework. The patient's health, the ultimate goal of the medical knowledge, cannot be produced like a pair of shoes may be. From here, it seems like the identification of medicine as a *techne* might be seriously questioned.

#### HIPPOCRATIC UNDERSTANDING OF TECHNE

David Roochnik, in his book *Of Art and Wisdom: Plato's Understanding of Techne*, offers important insight into this millennia-old debate. Roochnik approaches this issue through the lens of the Hippocratic corpus, specifically the work aptly translated as "On Techne" or "Of Art." In this piece, the author presents a series of substantive arguments against 'the critic,' a rhetorician arguing against understanding medicine as a *techne*. These arguments were of obvious importance to the physicians of Ancient Greece. Though medical practice was highly developed at the time, the author of the Hippocratic Corpus found it necessary to argue that medicine should indeed be its own discipline; that is, medicine deserves a classification as its own *techne*. Being a *techne* meant the practice possessed a particular purpose and usefulness.

In this age of ‘the Greek enlightenment,’ when the notion of a genuine ‘professional’ was developing, the very word ‘techne’ had become a prized appellation that could confer credibility on a subject and its practitioner. It is precisely such credibility at which the Hippocratic writings seem to aim. The physicians were eager to promote their developing ‘science,’ to put it on firm epistemic grounds.<sup>6</sup>

It was therefore important that medicine enjoyed this status. In “On Techne”, the author defends medicine’s claim to techne. Interestingly, this was done by arguing against an imagined critic, who prevents contrary evidence. Indeed, this false critic presents the intriguing argument. He begins with the analogy of the builder. The builder, through his identification with the practice of building, is bound to specific requirements. That is, to be called a builder, one must obviously know how to build things and indeed perform such actions. In this techne of building, there is reliability to it. If a person tries to build a house and fails to do so, he does not deserve the title of “builder.” Indeed, he cannot be called so. Builders, as builders, will always build buildings. To reiterate, the definition of techne seems reliable in that sense.

Medicine is more complicated. It is fundamental that to the practice of healing that it does not function like an exact production as building does. In the medical profession, the physician often fails at “producing” health. If he does so, his status as a physician is not compromised. This seems most obvious. With a terminally ill person, the physician still acts as a physician; he applies the same technical knowledge in interactions with that patient as with his other patients. Furthermore, a physician will ultimately fail in producing health in all his patients. Unlike the person who, in failing to build a house, did not act as a builder, the physician acts in the same manner towards

---

<sup>6</sup> David Roochnik, *Of Art and Wisdom: Plato’s Understanding of Techne*, (University Park, PA: The Pennsylvania State University Press), 43.

those patients who recover and those patients who do not. In both cases, the physician incorporates the same technical expertise in his actions.

If this is true for medicine, does it fit the *techne* mold? Roochnik argues that medicine does. While the reliability that separates the art of building from the medical *techne* is not insignificant, Roochnik shows – through Plato and Hippocrates – that there are two senses of *techne* here. While the building *techne* is precise and reliable, the medical *techne* is less precise and resembles an art. Roochnik summarizes the Hippocratic response to the critic’s charges.

[T]he medical *techne* systematically generalizes what is correctly stumbled upon in pretechnical experience. In doing so, the technical physician, unlike the layman, can give a general account, a *logos* or explanation, why a specific treatment works for a particular disease. This is, of course, what makes a *techne* teachable. ... The second reason is equally important. The author insists medicine should not be judged by an excessive standard of precision, one achievable *only* by a form of reasoning that sharply breaks with the messiness of ordinary life.<sup>7</sup>

The author of “On *Techne*” admits that medicine does not exactly fit the definition of *techne*. But, he believes, the definition of *techne* – not the medical practice – that is faulty. The profession of medicine plays an important role when it “systematically generalizes,” and this function makes medicine a *techne*. Through this generalization, it can offer society a more reliable method of healing the body; that is, medical practice is more dependable than stumbling upon treatment. Indeed, all *technes* might be understood as systematically generalizing something found in everyday experience. Certainly, everyone has some knowledge of health and bodily functions. But, through offering this generalization, medicine develops a knowledge that is unique to the profession, and this knowledge is validly called a *techne*.

---

<sup>7</sup> Roochnik, 48.

The author's second argument against the critic's definition of *techne* is the lack of an account of what Roochnik calls "the messiness of ordinary life." This messiness is the complexity of human practices and values. *Techne* is understood to benefit humans and to serve their goals, a purpose that immediately becomes "messy" when it confronts human life. The Hippocratic author and Roochnik believe that a definition of *techne* must consider the real (messy) situation of human beings, and, in doing so, it must admit the obvious: medicine is a *techne*.

#### THE PROBLEM OF MODERN MEDICAL SCIENCE

Roochnik's points here are quite clear. Medicine, though it is interestingly different from other types of production, nonetheless is a *techne*. Through one's experience with the medical profession, one must admit that medical knowledge is indeed a form of technical knowledge. Medicine is a craft, a profession that uses a technical knowledge to assist human goals and purpose. Given this definition of medicine, what is learned about the practice? To return to Aristotle, if medicine is indeed a *techne*, then it cannot be *phronesis* or *episteme*. Medical knowledge cannot offer ethical or scientific knowledge. But what of the *art of medicine* and *science of medicine* distinction that Dr. Agus employed in his lecture? If medicine is a *techne*, why does Dr. Agus use those terms to describe his practice?

As previously mentioned, *techne* can be defined as either an applied art or an applied science. However, the modern era has dramatically changed the idea of technical knowledge. Dr. Agus's conception of the modern term 'science' does not refer to a *techne* or to an *episteme*, as described above. Rather, the modern scientific revolution has changed technical knowledge such that a technical practice is now understood through



the research that supports the actual practice. Technical practices become technologies. The production that was characteristic of *techne* now relies on the insights of science. To solve human problems, a technician uses scientific principles and ideas to exploit nature.

While the Ancient Greek idea of *techne* and the modern attitude of technology seem quite similar and indeed our modern concept has grown out of the tradition handed down from the Greeks, there is an irreducibly important difference. As Heidegger writes, “And yet, the revealing that holds sway throughout modern technology does not unfold into a bringing-forth in the sense of *poiesis*. The revealing that rules in modern technology is a challenging, which puts to nature the unreasonable demand that it supply energy which can be extracted and stored as such.”<sup>8</sup> Modern technology is characterized by this challenging of nature; the technologist’s work begs nature to conform to his demands. In modern medical sciences, the physician as a technologist challenges nature to create health.

Dr. Agus’s talk asks that medicine further embraces the technological perspective. Indeed, the application of modern science has undoubtedly offered much to the practice of medicine. Utilizations of the modern understanding of the body have created unprecedented forms of healing. As Dr. Agus points out, the possibilities for new medicines seem ever imminent with continued medical research. However, there is something that pushes against understanding of medicine as a technology. Although medical science, as an application of the biological and physical sciences, has achieved so much success, something is present in the practice of medicine that resists this change. Dr. Agus refers to this character as the *art of medicine*. That is, something in medicine

---

<sup>8</sup> Martin Heidegger, *The Question Concerning Technology*, in *Basic Writings*, trans. William Lovitt (New York: HarperCollins Publisher, Inc., 1993), 320.

remains artful. Although the scientific revolution has changed medicine in a plethora of ways, medicine is still thoroughly embedded in another framework. It is evident that Dr. Agus sees this characteristic of medicine as secondary. However, it is unclear what this property is; Agus does not distinguish between the features of his binary. For the practice of medicine, what does not belong in the technological framework?

## GADAMER AND THE EQUILIBRIUM OF HEALTH

In order to get a sense of this aspect of medicine, I look to Hans-Georg Gadamer's essay "Apologia for the Art of Healing." In this work, Gadamer offers an illuminating description of contemporary medicine. Specifically, he characterizes the "fundamental transformation" that occurred in the modern era. That is, he identifies the intellectual space between ancient medicine and the medical practices of today.

For nature as the object of modern natural science is not the nature into which the medical skills, and indeed all the skills of human 'art,' once felt themselves to be integrated. Indeed the particular character of the modern natural sciences lies in the fact that they understand their own knowledge precisely as a capacity to produce effects.<sup>9</sup>

This is the fundamental framework of the sciences that inform modern medicine. Twenty-first century scientific knowledge allows the technologist to produce effects in nature. When medicine is taken as a technology, the physician understands himself as a producer of effects. The modern physician is a technician that looks at the body as an object, as the physical system to which his treatments apply. This treatment, then, causes a reaction, an artificial effect in the patient, which brings about healing. Health, it seems, is the absence of certain mechanisms and the presence of others. A healthy person would likely be understood as the summation of the working mechanisms associated with

---

<sup>9</sup> Hans-Georg Gadamer, "Apologia for the Art of Healing," in *The Engima of Health*, trans. Jason Geiger and Nicholas Walker (Stanford: Stanford University Press, 1996), 35.

humans. The physician holds a privileged position, as he is able to create an effect on the workings of the body. Utilizing scientific knowledge and natural resources, the physician's role in this process is technological. The technology of the physician can create health, because it allows him to alter bodily mechanisms.

Gadamer finds this framework inherently problematic. Though he admits the benefits of medical technology are bountiful, this modern view of science does not characterize the traits necessary for an essential understanding of medicine. Interestingly, Gadamer looks to a passage in the Gospel of Luke to elicit the problematization of modern medicine: "And [Christ] said unto them, 'Ye will surely say unto me this proverb, Physician, heal thyself: whatsoever we have heard done in Capernaum, do also here in thy country.'"<sup>10</sup>

In this millennia-old adage, Gadamer sees the irony of the modern natural sciences, an irony that is accentuated in the contemporary practice of medicine. As a technologist, the physician treats his patients as physical systems, as scientifically understood mechanisms. The patient is only known through the machine-like constructions of nature in the natural sciences. However, when the physician examines himself, an irony presents itself. How can the physician see himself merely as mechanisms? In order to produce the artificial effect that creates health, the physician would have to look at himself as solely a physical system. But, if he could do so, from where does that action come? In treating himself, the subject-object separation of modernity falls apart. Gadamer finds this paradox inescapable in the modern medical understanding.

---

<sup>10</sup> Luke 4:23

To circumvent this issue, Gadamer – as he most often does – turns to the ancient world, whose science was not characterized by this paradox. In particular, he looks to the science of the Ionians. Specifically, Gadamer is interested in their concept of *equilibrium*. Indeed, among the Ionians, equilibrium was primary in the understanding of nature.

The Greek concept of nature consisted in the discovery that the totality is an order structure which allows all the processes of nature to repeat themselves and to pass away in determinate configurations. Nature is therefore something which as it were holds to its own course, does so in and of itself. This is the fundamental idea of Ionian cosmology in which all the original cosmogonic conceptions came to fulfillment: in the end the whole mighty harmonious balance of interacting events determines all things as a form of nature justice.<sup>11</sup>

This idea of nature is radically different from the modern scientific attitude. Nature, in the eyes of the Greeks, maintains itself; it holds to a state of equilibrium. Nature constantly changes to keep a certain balance, and this balance that can never be completely divided because everything is related to the overall equilibrium state. On the other hand, modern natural science is the project of finding mechanisms and understanding effects. Unlike Greek science, modern natural science is reductive. This reductiveness is the characteristic of modern science; it is what makes modern technology possible. It allows the technologist to look beyond the whole being to pursue his purposes. However, the Ionian's equilibrium of nature cannot be fully divided into different parts. In this way, the Greeks recognized nature as always being something whole. This conception of nature implies that there was no departmentalization in Ionian philosophy in the way it exists today. Rather, every study and every event must be understood within the totality of the natural equilibrium.

---

<sup>11</sup> Gadamer, 36.

When this view of nature is applied to health, the physician's practice dramatically changes its role. Gadamer rightly argues, that this ancient concept of equilibrium better describes the contemporary physician and his actual work. If this is so and one opts to view health as an equilibrium, what changes in medical practice? While the physician in the previous model creates an effect in the patient, the physician as understood by the Greeks does something more. The physician interacts with the patient as an equilibrium, not an isolated physical system. Rather, the patient's entire being is presented to the physician. The patient is understood as a complex natural balancing act, which includes all of his ways of being.

Indeed, although the physician is primarily concerned with the body, he understands the body in relation to that patient's entire life and even the entirety of the natural world. Health, then, is understood through the relation of many things. The body is always attempting to maintain itself; it is always trying to achieve a certain balance, an equilibrium we call health. The mechanistic cosmology of modernity ultimately prevents such a rich description of health. Mechanistic science cannot meaningfully talk of the agential aspects of human existence. However, the ancient understanding of equilibrium can provide such a comprehensive view.

In this ancient view, a different sense of division is present. As mentioned, the division of the body from other aspects of one's life never fully occurs. The physician's role becomes more complex; the goal of health becomes related to other concerns. This understanding of division is fundamental to Greek philosophy and crucial to its separation from modern philosophy. To really articulate the difference in these

worldviews, Gadamer utilizes a famous quote from Plato, where Plato makes an analogy between the fields of medicine and rhetoric.

Socrates: Well, isn't the method of medicine in a way the same as the method of rhetoric?

...

Socrates: Do you think, then, that it is possible to reach a serious understanding of the nature of the soul without understanding the nature of the world as a whole?

Phaedrus: Well, if we're to listen to Hippocrates, Asclepius' descendant, we won't even understand the body if we don't follow that method.<sup>12</sup>

In this passage, Plato highlights the impossibility of a practice of medicine that does not acknowledge the nature of the whole. Both medicine and rhetoric represent a division of the person into the body and the soul. But, the physician as well as the rhetorician must understand the entirety of one's life in order to understand the practice of his own art. This is the special type of division in Greek science, where parts of the whole can never exist independently – they must understand each other.

This attitude is especially apt for the medical practices, particularly when one looks at the treatment of illness. While modern science identifies a disease through the effect of a particular presence in the body, the science of equilibrium understands it differently. If health is understood as the natural balance of the body, then illness must be the loss of that balance. And, when the body loses its own equilibrium, the whole self becomes unbalanced, because the body is fundamentally understood in relation to the totality of being. Certainly, everyone experiences an imbalance in their emotional, financial, educational, and social lives when they become ill.

Therefore, when the physician treats a patient, he recognizes the imbalance of the patient's body, but also the loss of equilibrium in the patient's totality. The prescribed

---

<sup>12</sup> Plato, *Phaedrus*, in *Plato: Complete Works*, trans. Alexander Nehamas and Paul Woodruff, ed. John M. Cooper (Indianapolis: Hackett Publishing Company Inc., 1997), 270b-c.

treatment must aid the patient in the return of his bodily harmony, as well that of his entire life. To be sure, physicians will often prescribe different medicines to persons with the same symptoms. To successfully aid a patient in his particularities, a physician must offer a treatment that is practical and reasonable to that specific patient. Medical procedures must suit the patient in all of the aspects of his life. To truly practice medicine, a physician must have an understanding of the patient's agential and social life. Only then can the best medicine can be administered. Gadamer rightly states, "Just as the [rhetorician] must draw on true insight to find the right word which will influence those who listen, so too the physician must look beyond the immediate object of his knowledge and skill if he is to be a true physician."<sup>13</sup> In looking past the body, the physician can understand the other parts of the whole. In Plato's analogy, the physician must have knowledge of the right words. Indeed, the best doctors are very skilled at influencing their patients with their rhetoric. Although their discipline is concerned with healing the body, physicians must have an understanding of the soul to adequately practice their craft.

#### MEDICINE AS IRREDUCIBLY ARTFUL

Ionian science, then, seems to better describe the practice of medicine than the paradigm of modern science. It is a practice that treats the balance of people's lives, not just biological mechanisms. However, modern science is, of course, the basis for much of our understanding of disease. And, certainly, contemporary medicine will not seriously think of returning to the humorism of the Greeks. Where, then, does one find Ionian science in modern medicine? It is found in what Dr. Agus calls the *art of medicine*. This artfulness is found in the characteristics that make medicine a *techne*. That is, the idea of equilibrium is ever-present in *technes*. A *techne*, as stated before, is interested in

---

<sup>13</sup> Gadamer, 42.

production. If we look at medicine merely through the lens of the modern natural sciences, the idea of a real production is lost. Certainly, modern science allows the physician to produce effects, but these effects are importantly different from goal of medicine. Every act of good medicine is an attempt to return to the patient his health. Health, then, is better understood as an equilibrium, and treatment likewise be understood as a method of fixing said equilibrium.

Additionally and most importantly, this artfulness of medicine allows physicians to treat the patient in his entirety. It allows medical professionals to take an active role in returning their patients back into their previous lives. This artful characteristic of medicine is an irreducibly vital understanding of the practice. If this is taken seriously, Dr. Agus's quote is quite confusing. Why would he desire a shift away from this understanding of medicine? If the artfulness of a medical practice were to be lost, whatever would be left is not true medicine. If medical technology eclipses the artfulness of medicine, persons in their wholeness would no longer be treated. Rather, only mechanistic systems as described by natural science would be affected. Hopefully, no physician would support way of thinking.

Additionally, although his words suggest otherwise, I do not think Dr. Agus would support such a change in perspective. Rather, I think Agus wants a reevaluation of the science that informs his field of medicine. This project is radically different than a shift away from the art of medicine. Changes within the medical sciences are always continually occurring. Indeed, this characteristic of science is what makes the application of science so very useful. Scientific progress requires the desire for new interpretations. But, changing the technology of medicine does not dismiss the art that presences itself in



the physicians work. Later in his talk, Agus argues for a multi-discipline approach toward new cancer scientific research – a goal Gadamer would presumably support. Though this transition seems quite important for oncology, this says nothing about our understanding of health and the connection of the body and the person. These concepts are fundamental to an understanding of medicine. Neither oncology nor any other branch of medicine could ever improve itself by “going from being the art of medicine, more to the science of medicine.”<sup>14</sup>

#### DISTINCTION OF DISEASE AND ILLNESS

The profession of medicine, then, really is fundamentally a *techne*. But, as such, it is a special *techne*. That is, it is best understood as aiding the nature equilibrium of man. While all *technes* are oriented toward a production, medicine is aimed at reproducing the balance of health. As Gadamer acknowledged, this ancient wisdom is irreplaceable in modern medicine. But, however mindful one may be of this complex nature of medicine, the allure of modernity is ever present. Though our experience pushes against it, the simplicity of the modern subject-object split makes its application seem extraordinarily attractive.

As evidence of this pressure, one might try to separate the facets of medicine. If the entire practice of medicine cannot be understood as a technology, a division might seem to provide the ground to appropriately integrate medicine as a technology. However, this concept of division, as was previously examined, is distinctly modern in its attitude. In contemporary society, such divisions are often utilized, but their legitimacy is always questionable. In this section, I will examine one particular division: the disease-illness distinction. Though this division is often utilized to explain our understanding of healing,

---

<sup>14</sup> Agus.

I will try to show its limitations for the practice of medicine and its ultimate lack of depth in its description of the process of healing.

The distinction seems to function like this. The label of disease belongs to a physical state. It is the condition that the physician treats; this status is the object of the medical practitioner's gaze. Through their knowledge, only the physician and scientist have access to this reality. A disease might be an unusual biological presence or a person's genetic abnormality; it has the characteristic of an abnormal physiological response. In utilizing the label of disease, the physician and patient refer to something physical, something that can be pointed at; a disease is a part of the natural world.

Illness, however, is a wholly different aspect of the unhealthy person. Illness is characterized through the experience of a patient. Disease is something discussed objectively by the doctor or scientist, but illness is present in the subjective world of the person. When someone is ill, he is not suffering from a pathogen or physiological reaction. Rather, the ill person is understood to occupy a certain psychological state.

David B. Morris writes:

The country of the ill, no matter how widely shared its terrain, is not a universal realm located outside the influence of space and time. Our common fate, it turns out, is entry into a region that regularly, if sometimes very slowly, shifts its features, like a populous valley once covered by primal seas. Illness depends on relatively stable biological features – a cough in every culture uses the same muscles and respiratory organs – but it is also deeply historical, no less changing than the microbes that surround and interpenetrate us.<sup>15</sup>

Illnesses certainly incorporate physical presences that are signs of a disease. If a person becomes infected with a strain of virus, the disease – the presence of the virus and the bodily response to it – may cause the feeling of illness; the cough or sneeze alerts the

---

<sup>15</sup> David B. Morris, *Illness and Culture in the Postmodern Age* (London: University of California Press, 1998), 22-23.

person to his ill condition. When one says, “I have a cold,” he admits of being ill. When the doctor identifies a viral infection, only then does the patient learn he has a disease. Illness is instead culturally and linguistically formed. As Morris said, it is deeply historical. While the object of a disease might be reinterpreted over time, it still supposedly points toward a reality of nature. However, an illness can fundamentally change; it is not wholly part of the natural world. Art – Morris uses the example of Andy Warhol’s soup cans – can be informative of a society’s understanding of illness.<sup>16</sup> Unlike disease, illnesses are not grounded in anything immutable. They might become associated with the knowledge of a disease, but the subjectivity of their claim essentially restricts their power.

The state of being ill, then, is not completely dependent on the presence of a disease. Indeed, an individual may believe that he is ill without having any disease. Certainly, everyone knows a person who is forever convinced that he is ill, regardless of the physician’s analysis of his biological state. This person’s obsession with illness is an exceptional case that really articulates the illness and disease distinction. The opposite case is equally definitive: a diseased person might not feel ill. That is, a disease could affect the biologically understood person without altering his social, psychological reality. Illness and disease, though often related, are not necessarily so.

What does this mean for modern medicine? What effect does this distinction have in the medical field? At first, it might seem to bypass the previous discussion of the art of medicine. While the treatment of disease is scientific, the art of medicine might only apply to the treatment of illness. If this is taken seriously, one might only associate the medicine’s illness with the whole person. The label of disease would thus escape the

---

<sup>16</sup> Morris, 29.

demands of acknowledging the person's totality. Indeed, illness might be understood as a natural equilibrium, whose balance is fundamentally related to the person's equilibrium of life, but disease might sidestep this ancient understanding of nature. The modern physician, as a technologist, might avoid treating illness and simply treat the physical disease. In this mode of thought, the two happenings – the disease and the illness – are separately placed in the previously articulated understandings of nature – nature as mechanism and nature as equilibrium.

#### DISEASE AND ILLNESS AS HUMAN CONSTRUCTIONS

However attractive this position may appear, this distinction – at least as it is defined above – fails to truly be substantive. Peter Conrad and Joseph W. Schneider, in their work *Deviance and Medicalization: From Badness to Sickness*, offer insight into this difference between disease and illness. To begin, they contrast this distinction with the radically different cultural relativist perspective. The cultural relativist does not see the exclusive understandings that supposedly form disease and illness. Rather, both physical and social processes are always viewed through the lens of a specific society. In contrast to the modern scientific basis of disease, here disease points to something socially understood. A disease known through social norms may be radically diverse for different peoples.

To exemplify this, the authors refer to the Papago Indians, a relatively distinct group in the American Southwest. While the majority of Americans think of obesity as a disease, the Papago Indians do not. Rather, they understand the exact opposite to be true. If a member of that culture develops without obese characteristics, they seek medical treatment. Indeed, almost every member of the Papago Indian culture is obese by

American standards. “Normal” physiology for most Americans functions as a abnormality to the Papago. Obesity is an entrenched social norm, to such a degree that the lack of obesity is considered a disease. The typical American understanding of obesity as a disease is therefore completely reversed in Papago culture.

This case sufficiently problematizes the previous idea of disease. It seems the same physiology is understood as diseased by some cultural standard, but another criterion sees that phenomenon as purely healthy. Disease carries a negative connotation, a connotation which is socially understood. When the physician looks at a disease, he is always and already looking at something culturally significant. Disease is not merely the biological and physical signs. Certainly, there are physiological conditions that function as diseases in all known cultures. Undoubtedly, a culture that does not understand influenza as something bad would be hard to find. Still, the idea of disease is not inherent in a specific set of natural phenomena. In identifying an appearance as negative, the doctor utilizes something outside the domain of natural science; he is saying something irreducible normative. Moreover, because this normative aspect is inescapable, both illness and disease have this culturally relative understanding.

However, the authors are not quite satisfied with this description of disease and illness as well. Cultural relativism treats social norms as something definite or unquestionable. Certainly, norms exist and function in every human interaction, but a reliance on these norms ignores something essential in a rich understanding of this issue. Similarly, the disease-illness distinction misses this as well. The authors find it fundamental that “[i]llness and disease are human constructions; they do not exist without

someone proposing, describing, and recognizing them. There are processes we commonsensically call 'disease,' but that does not make them a priori diseases."<sup>17</sup>

Both the strict disease-illness division and the cultural relativist view do not adequately recognize this issue. Diseases and illnesses are first formed and defined through human action; they are neither evident in physiological science nor completely handed down through social norms. Disease is the label we give to deviances that we deem to be bad. Indeed, disease is more than a physiological description and, likewise, it is greater than any cultural identification. Only through the act of labeling something as a disease, a meaning is offered to the patient's condition. Even when it seems obvious that a person has physical affliction, the badness of the disease is constructed by humanity. In saying someone is diseased, one saying something that affects the person as a whole, a person who is defined physically, socially, culturally, etc. The merely mechanistic view of the human fails to account for this aspect of disease. To adequately talk about disease, one would need to talk about the meaning of the human as an entirety. Indeed, the authors point out that:

Although [illness] is based partly on current conceptions of what disease is, and more often than not in Western society grounded in biophysical phenomena, this social evaluative process is central rather than peripheral to the concept of illness and disease. It follows logically that both diagnoses (as systematized classifications) and treatments are founded on social judgments; they cannot be separated.<sup>18</sup>

Here, I understand Conrad and Schneider as utilizing the meaning of distinction similar to the Platonic view presented earlier. Just like Plato notes that medicine and rhetoric are two parts of the soul that must be understood in relation to the whole of being,

---

<sup>17</sup> Peter Conrad and Joseph Schneider, *Deviance and Medicalization: From Badness to Sickness* (Philadelphia: Temple University Press, 1992), 30.

<sup>18</sup> Conrad and Schneider, 31-32.

the authors here are articulating the impossibility of understanding the body without knowing the social dimension of human existence. Disease – a condition of the body – can never exist outside or beyond the social meaning humans give to it; the workings of the soul are ever important for an understanding of disease. The previous definition of disease falls apart because it essentially contains elements formerly assigned to illness.

Rather illness and disease must be understood as social deviances. If this is so, one might ask the question: Why are some deviances called diseases and other deviances are known otherwise? Though the “badness” of a deviance is socially constructed, the treatment of that deviance is also a human construction. Exceptionally bad behaviors are often granted different statuses. For example, particular behaviors are known as diseases, but others are recognized as crimes. Conrad and Schneider are primarily interested in this problem. Why are certain diseases understood as such and not as crimes? But, merely the fact that disease-labeled deviances might be understood otherwise already points to an explanation of disease that is not purely mechanistic.

## CONCLUSION

With this conception of disease and illness, a physician must acknowledge the complexity of treating a patient in the totality of his circumstances. To heal the patient, the physician needs to act upon the humanly constructed ideas of disease, which might be very different for the physician and patient. Any aspect of the patient’s life might affect his understanding of disease and its affect on health. To aid the patient in returning to a state of health, the doctor must truly recognize the patient’s livelihood. Presumably, the suffering person wants to rebound into his everyday life. Without understanding the patient’s view of his disease and his normal balance of life, the physician is acting blindly.

Medicine is not merely the process of creating changes in mechanistic bodies, but rather it is the practice of treating disease. And because disease is always greater the biophysical account, medicine must never be limited to a technology. No distinction makes this possible. Medicine is essentially artful; it is the art of healing. Every medical act must be mindful of the humanly constructed meaningfulness in the treatment. This intrinsic significance of the medical arts is only grasped when one looks into the wholeness of being.

While the complexity of the medical situation might indeed beg over-simplifications to explain its behavior, any reductionist understanding cannot truly grasp the meaningful practice. If medicine's purpose is sincerely healing people, then it must acknowledge the intricacies and difficulties of the entire human condition. Medicine can never eliminate or reduce the artfulness of the craft. That is, regardless of the degree to which the natural sciences inform medical decisions and actions, the medical practice will never be merely a science.

Finally, many recent trends are overtly affirming this aspect of medical practice. Though some might overlook or dismiss the artfulness in the physicians' work, countless thinkers have identified this deep understanding of medicine and suggested we pay it the attention it deserves. For example, in the movement of narrative medicine, the individual stories of patients – the physician's primary source of understanding the entirety of the patients' lives – receive a central role in diagnostics and treatment.<sup>19</sup> The patients are recognized in their wholeness. Indeed, the current push for preventative medicine also identifies the necessity of a richer conception of the human than solely that of natural

---

<sup>19</sup> Rita Charon. "What to do with Stories: The Science of Narrative Medicine." *Canadian Family Physician* 53 (2007): 1265-1267.



science. In the conception of preventative medicine, it is acknowledged that lifestyle changes, those that affect the entire life of the patient, are undeniably important for a successful practice of medicine. Furthermore, with the rise of entire discipline of medical ethics, the importance of the moral discourse that informs healthcare providers is becoming increasingly evident. Moral dilemmas in the practice of medicine emphasize the demand for knowledge of the wholeness of being. Additionally, in his analysis of the medical gaze, Foucault exposed the integral relationship between discursive practices and medical knowledge.<sup>20</sup> Medicine, as a discipline, should be aware of the discursive practices that advise physicians in the art of healing.

Undeniably, medicine cannot be appropriately understood as merely a producing of effects, a technology. Viewing it as such cheapens the significance and meaningfulness of the practice. Medicine, rather, is an exceptional techne that aids people in the return of their lives' equilibrium. Medicine is forever the art of healing.

---

<sup>20</sup> Michel Foucault, *The Birth of the Clinic: An Archaeology of Medical Perception*, trans ... (New York: Vintage Books).

## Works Cited

- Aristotle. *Nicomachean Ethics*. Translated by Terence Irwin. Second Edition. Indianapolis: Hackett Publishing Company, Inc., 1999.
- Charon, Rita. "What to do with Stories: The Science of Narrative Medicine." *Canadian Family Physician* 53(2007): 1265 – 1267.
- Dunne, Joseph. *Back to the Rough Ground: 'Phronesis' and 'Techne' in Modern Philosophy and Aristotle*. Notre Dame: University of Notre Dame Press, 1993.
- Foucault, Michel. *The Birth of the Clinic: An Archeology of Medical Perception*. New York: Vintage Books, 1994.
- Gadamer, Hans-Georg. *Truth and Method*. Translation revised by Joel Weinsheimer and Donald G. Marshall. Second, Revised Edition. New York: Continuum Publishing Group, 2004.
- Gadamer, Hans-Georg. *Apologia for the Art of Healing*, in *The Engima of Health*. Translated by Jason Geiger and Nicholas Walker. Stanford: Stanford University Press, 1996.
- Heidegger, Martin. *The Question Concerning Technology*, in *Basic Writings*, edited by David Farrell Krell, translated by William Lovitt. New York: HarperCollins Publisher, Inc., 1993.
- Jeager, Werner. *Paideia: The Ideals of Greek Culture*. vol. III. Translated by Gilbert Highet. Oxford: Oxford University Press, 1967.
- King James Version Bible*. Bible Gateway. <http://www.biblegateway.com> (accessed March 15, 2010).
- Peters, F.E. *Greek Philosophical Terms: A Historical Lexicon*. New York: New York University Press, 1970.

Plato, *Sophist*, in *Plato: Complete Works*. Translated by Nicholas P. White. Edited by John M. Cooper. Indianapolis: Hackett Publishing Company Inc., 1997.

Plato, *Phaedrus*, in *Plato: Complete Works*, Translated by Alexander Nehamas and Paul Woodruff. Edited by John M. Cooper Indianapolis: Hackett Publishing Company Inc., 1997.

Roochink, David. *Of Art and Wisdom: Plato's Understanding of Techne*. University Park, PA: The Pennsylvania State University Press, 1996.

## **Daniel Esslinger**

536 W. College Ave, Apt 27  
State College, PA 16801

(570) 854-6647  
dje5015@psu.edu

### **EDUCATION**

#### **Pennsylvania State University, University Park, PA**

Fall 2006 – Present

- Schreyer Honors College
- BS, Pre-medicine
- BA, Philosophy, Concentration: Philosophy of Science and Mathematics
- Study abroad at the National University of Singapore in Fall 2008

### **EXPERIENCE**

#### **Research Intern**

Summer 2008

Weis Center for Research, Danville, PA

- Prepared, conducted and analyzed Calcium imaging experiments

#### **Faculty Research Assistant**

Spring 2007 – Fall 2007

Pennsylvania State University, University Park, PA

- Investigated topics in number theory
- Presented work at the Penn State Undergraduate Research in Mathematics Conference

#### **Family Physician Observer**

Summer 2007

Geisinger Millville Outpatient Clinic, Millville, PA

- Gained an appreciation of the medical practice

#### **Pathologist Assistant Observer**

May 2007

Bryn Mawr Hospital, Bryn Mawr, PA

- Perceived the profession of identifying pathologies

### **ACTIVITIES**

#### **Philosophy Club Officer**

Fall 2007 - Present

Pennsylvania State University, University Park, PA

- Facilitated philosophical discussions at weekly club meetings
- Promoted club health at involvement fairs and other campus outlets

#### **Physiology Teaching Assistant**

Summer 2009

Pennsylvania State University, University Park, PA

- Supported and taught students in Biol 472, an advanced physiology course

#### **Chemistry Tutor**

Spring 2009 – Present

Pennsylvania State University, University Park, PA

- Aided undergraduate students in learning inorganic and organic chemistry

#### **Emergency Room Volunteer**

Spring 2008 – Present

Mount Nittany Medical Center, State College, PA

- Assisted doctors and nurses with patient care

#### **Camp Volunteer**

Summers of 2005-2008

Camp Emerge, Millville, PA

- Provided care for autistic children and their families

### **ACADEMIC AWARDS**

Schreyer Ambassador Travel Grant

Dotterer Travel Fellowship

Academic Excellence Scholarship, Penn State University