EDUCATION IN A POSTFACTUAL WORLD

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From Knowing to Understanding

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Foreword: Jamie Barker, PhD
Afterword: Gary Senecal, PhD

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To Flynn Patrick Baxter

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PART III: FACT-MINDED SCIENCE

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FOREWORD

Patrick Whitehead's text comes to us at a critical juncture in our nation's history and culture. We, as people of the United States, reside in one of the most divisive times in decades, yet we attempt to simplify, not necessarily our own existence, but the existence of others to better cope with our humanness. The assumptions we make, but more importantly, those assumptions made for us, reinforce and codify our understanding of a world that becomes increasingly complex with each passing moment. At any time, we are making decisions based on certain facts, yet those facts, although sometimes proven, do not allow for a more manifest reality. As I write this, however, I can almost hear Patrick telling me to reign it in because I am getting too abstract, and given the stylistic choices made in this book, allow me to do just that.

I live in southwest Georgia. This has been called part of the Bible Belt by many and has also been said to be part of the Black Belt by people like W. E. B. Dubois, as he discussed Albany in two of the chapters in *The Souls of Black Folk*. It is a very impoverished area of the nation, and it is also one that is very warm nearly all year. Albany was once a robust, vibrant city, but the loss of industry, due largely to outsourcing, has left the city in crippling poverty. The city is also a little over 70 percent African American and 54 percent female. Thus, by my being a "white" male, I am a double minority in the city. That is a strange statement to make and perhaps to read.

Like every person, I am marked by the color of my skin. When I walk into certain stores or restaurants, clerks may be less likely to follow me around to make sure I'm not stealing, or the hostess may be quicker to sit me at the restaurant. I don't choose this privilege; it was given to me by the result of history. I did not always notice that I had this privilege. The privilege is magnified, I have found, when I wear a suit. When donning this dress, I take on the full uniform of the powerful white, upper (middle) class, male. This, however, is just costume. I am hardly upper or upper middle class. But I can pass if I wear the right attire. This is no different than decades ago when an African American, who had a very light complexion, tried to pass as "white." I use "white" in quotes because to be "white" is something that can be, and has been, argued over. It is without question that "whites" have had many advantages in this country for a very long time, and as such, if one could pass as white, it would be a very beneficial advantage. For example, we know that the people of Ireland have a very light complexion, but they were not considered "white" by the British. They were seen as inferiors in every way. When the Irish came to the United States, they suddenly found that they were not only Irish in heritage but also "white." The discrimination against the Irish, Jewish, Polish, Italian, and other "non-white" immigrants is well documented. However, they still had privilege over African Americans and Asian Americans in the first few centuries of this nation's history. But when did they become white?

Equally complicated is the idea of what it means to be "black." Due to rapes during slavery, many people who claim to be "black" have some European ancestry in their heritage. Moreover, someone who has one "black" parent and one "white" parent can easily claim to be black; however, the same person has a more difficult time claiming to be white. Why is that? Do we consider Barack Obama, Halle Berry, or Mariah Carey to be white? Historically, race was determined by the mother, mainly because we always knew who the mother was but not always the father. Unfortunately, we didn't always have Maury Povich to tell us who was *not the father*. What if the same child who was born of two different races then had a child with a white person. Would the child be white? Well, not historically:

> From 1790–1810, the Census Bureau designated the following populations as different races: 1) free whites, 2) all other free persons except Indians not taxed, 3). Slaves. From 1820–1840 it was: 1) free whites, 2) unnaturalized foreigners (foreigners who were not

> U.S. citizens), 3) free colored, 4) slaves. In 1850–1860: 1) whites, 2) blacks, 3) mulattos (half white, half black), 4) mulatto slaves, 5) black slaves. From 1870–1920: 1) whites, 2) blacks, 3) mulattos, 4) quadroons (one quarter black), 5) octoroons (one-eighth black), 6) Chinese, 7) Japanese, 8) Indians. (Tyson 372)

Therefore, per the last example from 1870–1920, if one of your great grandparents was "black" and everyone the rest were "white," you were not considered "white." This may seem strange, but perhaps even stranger is the "one drop rule" that existed in the South, which stated that if you had just one drop of African blood in your body, you were "black." That seems a bit extreme, but it did exist.

This one drop rule seems very interesting to me. We have a hard time in this nation deciding when one is "black" and when one is "white," but these are just two of many different races that are categorized in the United States. If filling out a form identifying race, a person from India would check "Asian," and a person from the Middle East would check "white." Yes, really. I checked. These categories seem strange, mainly because they are strange. So, if I had an African American relative who was in my family and was my great, great, great grandmother, what would that make me? No serious, I want to know because I do. I check the box as "white" because that is what I knew growing up. I definitely don't look African American, and I have never had my "whiteness" questioned. But am I really "white"? Who is the ultimate authority?

This is just my supposed race. What about my sex. Well, I was born male. Not every person is born in this binary. In fact, sometimes parents and physicians must make a choice when a baby is born and has a non-definitive sex. Furthermore, sexuality is another element of who I am. I consider myself heterosexual. Not everyone does. Not everyone is born as heterosexual or homosexual or bisexual or asexual, and the list goes on. For the most part, our sexualities do not mark us as our race or sex might.

To complicate things, which is something I love to do, I should probably bring my wife into the mix. As a "white(ish)," heterosexual male, who has tattoos all down his arms, who shaves his head, who has four hoop earrings, and who is more than six feet tall and three hundred pounds, many people view me as a bit intimidating. I'm loud at times and usually wear a scowl on my face. People see my appearance and immediately figure out who I am. But when announce that I am an English professor who

specializes in minority literature, most people are more than surprised. This last part usually softens the surprise that my wife is "black." This has caused me to become much more aware of my white privilege, as often I now go into hotels alone to see if they have rooms. We have been refused service in the past and were told we could not stay there. We have also been forced to sit in the back of restaurants. We use my privilege, whether we acknowledge it openly or not. Furthermore, I have had a much more difficult time facing the racism of both "blacks" and "whites" because of our relationship. Of course, she shares in this burden, but I would dare not speak for her. This hatred that we both face has forced me to make the decision to carry a pistol on my side nearly everywhere I go. This is an interesting decision for someone who is ultra-liberal. But, just as being called "white" places a label on me that doesn't quite fit, so does the label of liberal. In fact, I have shied away from this label after the recent election. I have yet to find the proper label to encompass what I believe. Can the same not be said for most people's faith? Cafeteria Christianity is probably the most popular religion in the United States, especially when the Bible is much more vocal against gluttony than it is homosexuality (consider Proverbs 23:20–21; Proverbs 28:7; Proverbs 23:2; Deuteronomy 21:20; 2 Peter 1:5–7; 2 Timothy 3:1–9; 2 Corinthians 10:5; Matthew 11:18–19; and Galatians 5:22 for a *start*). Where are the Christians who should be protesting in front of the various buffets? How we identify ourselves and how others identify us is usually not the same. Furthermore, the labels that we place on ourselves or others place on us fail to truly identify who we are.

Who we are cannot be condensed into a single attribute. I'm "white(ish)," but I came from an impoverished family who moved out of Appalachia. Being "white" does not allow for that understanding to be made apparent. Then again, this is a label created by society to, at first, talk about different people from different places. With time, we started placing hierarchies on these different races. What we are left with now is the residue of historical traumas of the past mixed with historical racism and present day racism, which is all coagulating in a society that is very angry for a variety of reasons. The reality is that there is no scientific thing as race. We look different. We like different things. We have different histories. That is the reality. People react differently to different people based on preconceived notions that have been amplified by the media and the people of our community. What we are left with is self-induced fears, hatred, and ignorance. What we are is a nation that refuses to acknowledge that the biggest differences

that divide us are all manufactured; unfortunately, although race is not real, the hatred that is based on these differences is all too much a reality.

Jamie Barker, PhD
June 2017,
Albany, GA

AUTHOR FOREWORD

During the Democratic National Convention for the 2016 United States Presidential election, former US Representative Newt Gingrich was interviewed by CNN political news reporter Alisyn Camerota. The two were arguing whether or not crime had been rising or falling over the last decade. Camerota quoted Federal Bureau of Investigation (FBI) facts that crime had been on a steady decline in the last decade while Gingrich tried to convey the subjective felt-sense of the people—namely, that they were feeling less and less safe.

I was at once intrigued and horrified by the position Gingrich had taken. My intrigue was for the epistemological position he was unflappably taking—a position marginalized in scientific and academic communities. He was arguing that subjective awareness is more important for understanding people than is deductive reasoning. As a phenomenological psychologist, I am sympathetic to this position. In many ways, I have sat where Gingrich has sat, being ridiculed for trusting the words of my participants and trying to understand their experience instead of reducing them to an anonymous number in a clinical trial. Gingrich's public statement of position signified the importance of a scientific inquiry and education that validates a qualitative approach. He was hoisting the flag of feelings over facts.

My horror was in how short he had stopped with trying to *understand* these feelings of unsafety. Rejecting the unquestionability of deductive

reasoning as the sole progenitor of truth does not mean that we yield to opinions, feelings, and perspective. Just like there are rules in logic and deduction, there are rules for understanding subjective experience. If ten people report feeling less safe, the analysis is not over! Were the alleged reports true, then there is something important that needs to be learned: despite a decline in crime, people report feeling less safe. *Evidently there is a dimension of safety that is not directly related to crime*. However, we cannot know what this dimension is unless we listen to those who describe it and subsequently apply a rigorous method to it.

Gingrich, perhaps inadvertently, gives the nod to the chief importance of qualitative research. However, what he describes is a straw man argument: "qualitative research means feelings over facts." Watching this interview left me feeling deeply despondent. As educators, we have failed our students by training them in a very lopsided manner: namely, facts over feelings. Whenever a student wishes to better understand feelings, or is faced with a problem that cannot be easily resolved with a fact, they have no methods for doing so. Indeed, they have a severely impoverished sense of what this might even mean.

If nothing else, the 2016 US Presidential election has demonstrated an important shift in social validity. Instead of naïve capitulation to the sovereignty of facts, we are beginning to see people, uneducated and educated alike, push back, arguing that the facts do not do justice to their feelings. Instead of relying on credible resources for news about current events, there has been a massive proliferation of fabricated news by which people educate themselves about current events. We must bear witness to the demise of facts as unquestionable statements about reality. In this book, I argue that this is not a bad thing.

Fake news is not the problem; it is a symptom of the problem. The popular social media website "Facebook" has taken steps to make fake news stories less profitable. This is not the solution. If anything, legislating against the fabricated news stories is just a way of ignoring the problem. The problem is that we have been subjecting students and adults to a terribly lop-sided education for decades. Had the education provided been more balanced, then the fake news epidemic would never have materialized.

The problem is fact-mindedness. Facts are the relics of enlightenment thinking. They represent unbiased and unquestionable truth about our universe. The more you collect, the more you know; the more you know, the more powerful you are; the more powerful you are …. You get the picture.

Facts aren't the bad guys. Blaming them would be as misguided as blaming the Middle-Eastern entrepreneurs for the result of the 2016 US Presidential Election. These were the entrepreneurs who fabricated the stories that became so popular on conservative websites in the United States that demonstrated how terrible Hillary Clinton would be as a Presidential Candidate. Facts are not bad, but they do not alone constitute an education.

Facts are not hidden in the universe. You don't start digging a hole in your backyard hoping to discover some new fact about nature. Facts are placeholders: they allow us to say something about the relationships between things. That ten times ten is one-hundred is a fact. But for Pedro, the ten stacks of ten pennies that he has collected adds up to one-hundred pennies. Even though he may know that "10x10=100," he may still have to count them to be sure that it applies to him as well. Until he has done so a few times, he won't understand what that facts means for him. For Pedro, the fact that 10x10=100 isn't understood until he experiences this directly.

In this book, I argue that judgment must always be applied to matters of fact. That is to say, the fact is not the end of the story. For many years now I have been averse to the kind of education that privileges fact-finding and answer-giving. The idea that gravity compels bodies does not substantiate itself; it is a way of describing the relationships between bodies. Gravity helps us better understand physical relationships, but by itself, and outside of any meaningful context, that fact of gravity is useless.

Matters of fact are little medieval superstitions masquerading around as scientific currency. It is not simply that facts are over and done with. Facts have made it possible for us to relinquish the bit about ourselves that makes each of us unique. Facts take the place of individuality, critical thinking, scientific inquiry, and personal meaning. As a result, we lose trust in ourselves and in others, and become alienated from anything even remotely personal. This has been known in contemporary philosophy for over a century, and scientists—at least the earnest ones—have known this for a little bit longer.

I'm not arguing for the end of facts but for a release of the compelling hold that facts have on us. Any belief in a fact is way of shifting responsibility for understanding from yourself and onto somebody else—an expert, a textbook, a scientist, or a for-profit fake news website. It relieves you from having to invest yourself in the importance of whatever detail to which the fact pertains. That schizophrenia has a hereditary component is interesting by itself. It allows us to speculate as to why a given person may develop

the disorder. But any psychologist who has studied this phenomenon (or student who has taken the time to better understand it) will explain that the hereditary component is more complicated than the fact suggests. To believe in the fact is to ignore all of the decision-making, judgment calls, research design, and explanations that the researchers were responsible for. Such a fact requires the scrutiny of hundreds of cases—real people and recorded files. This work cannot be easily summarized into an eighteen-word sentence. A great deal of significant information will be left out.

We do not need to be more careful stewards of the news. Reputable and non-reputable news-sources will still print articles that have been carefully shaped into attractive stories that protect the way that they interpret the world. What we need to do instead is to teach our students how to think for themselves. In addition to the creativity, curiosity, and insight that this encourages, it also empowers students to realize their own responsibility in their educations. Now when Peter memorizes the fact that LogbMN=LogbM+LogbN for use on his next math exam, he can admit that he is blindly taking his instructor's word for it because it would take too long to test it himself. If it doesn't work out for him on the exam or in life, then it was his own poor judgment that got him there (and not the fault of the instructor or textbook or political figure). I'm talking about solving logarithmic proofs, but I'm really talking about important stuff like well-being, happiness, and life-satisfaction.

In this book, my aim is to convince you of the shortcomings of fact-mindedness. This is going to challenge how you understand yourself and the world around you. It's also going to challenge the methods that you have learned are the best at understanding yourself and the world around you. This means that I'm also going to suggest that you change these things too. The entire foundation of science, the institution of formal schooling, and even popular culture seem to be opposed to this project. Everywhere there are roadblocks to being (human or otherwise); instead we find instances of what "*is* in fact."

"Is" is an ontological signifier; it amounts to the assumption that something exists in fact, and that this something can be placed neatly into a box. The boxes demarcate one thing from the next. Our world, we have learned, is full of such things. When combined by the verb "is," we understand that the complicated networks of experience that make up "college professors" and "fisheries biologists" are nothing but the particular box in which they can be found. *Facts are profoundly limiting*.

To be sure, something like this has been done before. There has been a century and a half (or more) of men and women like me, every one more ambitious, audacious, insightful, and well-spoken than I. They have argued against the dominant ideology that sought to codify the complicated universe into systems of predictability and manipulability. Moreover, they have done so at times when it was decidedly inconvenient to do so. Their insights were more timely, and in some cases, even prophetic. *Unfortunately, these authors seldom trickle down into general education curricula*. Instead, they are often dismissed in a *de-facto* manner. They say "We don't have time to wait for people to understand the complicated interrelationships between things!"

This book will look at the problem of habitually replacing experience with facts. German mathematician-turned-philosopher, Edmund Husserl, criticized modern science for requiring that we replace experience with facts. German philosopher and economist Karl Marx criticized capitalism for making it impossible *not* to do so. English mathematician-turned philosopher Alfred North Whitehead explained that such an approach to science and to learning is "the most useless bore on God's earth." German philosopher Martin Heidegger observed that science and philosophy have "left the question of being behind." There have even been students of these scholars who have written definitive texts on the subject. However, many of these texts have been written in a foreign language; they have seen a small readership from obscure academic presses; and they ultimately remain largely obscured from the lay public. My goal is to connect you with their insights and to beat you over the head with a theme that runs through each of them: you are capable of understanding the meaning that the world has for you—you do not need to take someone else's word for it!

I never really decided to write this book. The book chose me. I keep sitting down to write something else and end up working on this instead. I wish I could say that this was annoying because that would make me a serious academic author, but I cannot. I began writing it while I was supposed to be writing my dissertation, continued it as I was drafting my textbook, and again while I was editing my first monograph. Now I'm supposed to be writing articles, conference presentations, book reviews, and hyper-specialized academic monographs, yet here I am punching these words out on the keyboard. This one just seemed like more fun. It is where my intrinsic motivation is directed.

Finally, I have "decided" to do this now because I'm tired of being empty handed whenever a student, friend, or family member (okay, that one never happens) expresses interest in the idea that we are more complicated than things. I hope to write it in a manner that is comprehensible—simple even. My wish is that you will read it and say to yourself, "no shit, Patrick." I hope you read it once and that the arguments within quickly become obsolete. I hope the arguments are so obvious that you could hardly believe that you used to reject your own awareness of the personal significance that people, experiences, and knowledge had for you, preferring instead to rely on something your professor told you.

INTRODUCTION

THE *CRISIS* IN SCIENCE: WHERE IT ALL BEGAN

The tendency to replace experience with facts about experience wasn't always so routine. Indeed, scientists used to compare observations about the universe with experience of the universe throughout their research. But this forever changed in 1934.

Let me set the stage. It's 1934 and we're in Prague for the eighth *International Congress of Philosophy*. The Congress, which convenes once every five years or so, reviews the continuing relevance of philosophy in the academy and beyond. In 1934, the Congress had much to celebrate. But what sorts of exciting things ever happen at a philosophy congress? In order to understand the gravity of such a meeting, it is important to back up half a century to re-examine the relationship between philosophy and science. At the close of the nineteenth century (1800–1899), philosophy and science were inseparable.

You see, in the nineteenth century it was understood that philosophy was the cornerstone of the sciences. Most people find this statement to be ludicrous today. We do, however, still have some relics from Philosophy's heyday. The Doctor of Philosophy (PhD), coined in the middle of that century, is still recognized as the highest degree that can be held in any scientific field. It was the philosophers who examined the methods, questions, and areas of emphasis for scientists to explore. Philosophy is how you determine which questions can be asked and how they might be most meaningfully answered. Philosophy is how you determine how to test a

method to determine its validity. It was to philosophy that scientists had to look for direction. Today, philosophy is seldom held in such high esteem—a problem that will be explored throughout the duration of this work.

Today, students hapless enough to declare a philosophy major are repeatedly tormented with obligatory and unsolicited advice regarding the limitations this would place on their work-résumés. What might one do with a philosophy degree?! What gets accomplished in a philosophy building?! Indeed, the buildings that house the physical sciences—departments of micro-biology, chemistry, and physics, among others—are the buildings where the frontiers of science are being pushed forward. The physical sciences are where the hard work is being done. Now one finds that departments of philosophy are across the quad (if they even get their own building). This is where the ineffable questions are being asked: what is the meaning of life? Which *is* is the *is* that I mean when I say that this cup *is* red or this earth *is* round? These questions are answered by thinking through an endless variety of thought experiments, carefully engineered haikus, or until patience for such questions runs out. Then it's back across the quad to do some real work. Philosophy is where we sort through our own shit, but the sciences are where actual work gets done. After all, I'm not going to think my way through my enormous pile of student loan debt. Science, Technology, Engineering, and Math—the STEM disciplines, that's where the jobs are. Philosophy has been secreted away in the humanities to be spoken of only with the cautious skepticism that was once reserved for the sciences (try to remember what happened to Galileo and other "crazies" in the seventeenth century). We have forgotten that philosophy is responsible for the status of science: philosophy supplies the courage, creativity, and criteria for scientific action. Today it gets ignored.

It wasn't always ignored though. Indeed, modern science—that practice to which we have all piously pledged our scholastic allegiance—is indebted to philosophy. Science is incapable of transforming its own foundations. This transformation must come from without. Philosophy was responsible for the modern scientific revolution, and in 1934 this was still recognized.

Take meteorology as an example. In the medieval era, of what did meteorology consist? Remember that in medieval Europe, only a handful of people were allowed to ask such questions. Indeed, only a select few could read and write. Such education was indistinguishable from theological convention. There are many instances of rainfall in the Bible. Conveniently, there is even a theme that is common to each of them: God is

responsible for rain. So here's the medieval meteorological puzzle; see how you do: It is raining. Why might it be raining? and what might you do about it?

Entire communities gathered behind the learned folks for their understanding of the cause behind the rain: God is responsible. The meaning that the rain (or lack thereof) might have for the people: we have been bad/good and have been cursed/blessed. You can also imagine how such an understanding of meteorology might influence the behavior of the communities' members: now they might spend an extra hour praying each day; now they might make an additional sacrifice each week; now they might cut out certain other punishable behaviors; and so on.

Present day meteorology has benefited from a number of scientific discoveries. Each of them seem arbitrary or meaningless in their own right, but taken together and with an understanding of how they fit together, they give us a deep understanding of the relationship between atmospheric composition, pressure systems, temperature, air flow, and fluid dynamics.

How do we get from theological interpretations of reality to scientific ones? How do we get from medieval to modern? The answer is metaphysics. Metaphysics supplies the ways by which we may come to know the universe. In the medieval period in Europe, the metaphysical principle was simple: everything is God. My obnoxious neighbor, seasonal depression, periwinkle, cumulonimbus clouds, and pinecones—they're all God. How do we understand them better, change them, or influence them? Through God. Do you see? The medieval metaphysic is actually quite thorough. No stone is left unturned. By understanding God, we understand everything (and the reverse). Moreover, nothing falls outside of this metaphysical perspective, and if it does, it is necessarily wrong because it doesn't fit with the primary principle that everything is God.

This changes with the modern revolution, which may be summarized in an equally simple manner: everything is *not* God, *not* one; they are just independent things! That is, the world is not made up of a bunch of manifestations of God, but of a bunch of different things: hard things, soft things, organic things, heavy things, light things, highly reactive things, docile things, and so on. How do we understand them better? By isolating each single thing and learning everything there is to know about it. How do we change them? By carefully manipulating them and recording what we find. How do we test them? By making predictions based on earlier discoveries and testing those. Eventually, after looking at everything