

Background

On sustainability, what soccer and systems-thinking have to do with it, and how I'm qualified to explain.

MY DELAYED EPIPHANY ABOUT SUSTAINABILITY

Like most of my epiphanies, it's embarrassing I didn't have it sooner. I was mentally processing some of my recent reading as I walked home after a rewarding day of advising graduate students and teaching two of my favorite college courses. On that walk is when it finally sank in for me—the connection between climate change and human rights.¹ Of course, climate refugees who have been robbed of their right to shelter already know this. Some refugees are forced to uproot their entire lives, which is a comparatively good option. Those who lack the financial or physical ability to move remain stuck in the same vulnerable location, except now without shelter.

It turns out there were about thirty-six million climate refugees in 2009 alone,² which was the year I finally had my epiphany. Or to put it another way, if you had randomly traded places with someone else in the world that year, you would have been four times more likely to be a climate refugee than a resident of New York City.

Climate refugees face harsh realities. They endure violence against migrant groups as they struggle for their share of overstressed food and

1. Desmond Tutu, who learned a thing or two about human rights while bringing down apartheid, warned in 2014 that “climate change has emerged as the human rights challenge of our time.”

2. The United Nations High Commission for Refugees reported that thirty-six million people were displaced by disasters in 2009.

water resources. Such pressures are one reason the U.S. military recognizes climate change as a security threat multiplier. More refugees equals less stability. And we can be certain there will be more climate refugees the less we do about climate change.

My education should have led me to my epiphany sooner. I had read hundreds of thousands of pages about climate change and about human rights. I had used *sustainability*, a term that encompasses both climate change and human rights, in the title of my engineering Ph.D. dissertation. I had spent four years at a liberal arts college proud of its long history of teaching students to “ignore boundaries” and “make connections,” presumably between topics such as climate change and human rights.

My work experiences should have led me to the epiphany sooner. That same term *sustainability* was in the title of those college courses I was teaching at the time of my epiphany. I had helped design and build a solar-powered home on the Northern Cheyenne Indian Reservation. I came to the reservation eager to reduce climate-changing emissions from home energy use. I left the reservation hoping that fewer parents would need to choose whether heat or food was the bigger necessity for their children.

My personal life should have led me to the epiphany sooner. I married a human rights advocate, by far the best connection I made in college. My dad, a biologist, planned family outings to teach us about connections in the natural world. My sister, brother, mom, and I got to stay up late for salamander migrations (which are not that impressive) and woodcock mating rituals (which are).

When our family dog had other commitments, I was a bodyguard/witness for my dad as he knocked on cabin doors to ask hunters’ permission to study streams running through their property. My dad probably thought it was obvious to me that he studied the algae and phosphorus in the streams because of connections to the water we drink and food we eat. I just assumed he really liked algae and phosphorus.³

Even my soccer life should have led me to the epiphany sooner. I had devoted an irrational amount of physical and mental effort to a sport that, as we’re about to see, can reveal unexpected connections.

Again, I’m embarrassed that I saw climate change and human rights as isolated problems before that walk home. And I’ll never know what,

3. I have since learned that too much phosphorus in a stream can lead to algal blooms, which lead to low dissolved oxygen levels, which lead to the death of aquatic animals. In many cases, the skewed phosphorus levels can be traced to runoff from overfertilized crops and lawns.

specifically, finally shifted my mindset after a lifetime of relevant experiences.⁴ But I now recognize the core ideas that brought me to that insight and to others like it. And these ideas seem to also bring epiphanies for the thousands of students I have had the privilege of working with.⁵

So, I think I can help your sustainability epiphanies come sooner than mine. That's why I wrote this book.⁶

WHY SOCCER?

Sócrates Has Our Answer

Soccer is part of life for billions of people. It is both the most popular and the fastest-growing sport on Earth.

Unless you are a citizen of Guam, Brunei, Bhutan, or Mauritania, a soccer team representing your nation competed for one of thirty-two coveted spots in the most recent World Cup, which was held in 2014 in Brazil. And even Bhutan has a team trying to qualify for the next World Cup, in 2018 in Russia.

The professional soccer landscape extends far beyond the World Cup. National teams compete for bragging rights in regional and continental tournaments. Professional club teams play each other in domestic leagues and across national borders. In the Champions League, an annual competition between the best club teams in Europe, even preliminary matches can draw bigger live global audiences than American football's Super Bowl.

Professional soccer gets the media attention, but amateur, informal, and even spontaneous play is the lifeblood of soccer. The Game⁷ is played and watched for fun in every corner of the world. It happens on fields of grass, sand, asphalt, cobblestone, and dirt. Players may be tall or short, poor or rich, young or old, and skilled or not. And yet, despite these visible differences, the Game is basically the same.

4. I'm pretty sure the book I was reading at the time of my epiphany was *Common Wealth: Economics for a Crowded Planet* by Jeffrey Sachs. However, I had already been exposed to the main ideas in the book, so I don't think I could have just read *Common Wealth* five years earlier and had the same epiphany.

5. My teaching seems to produce epiphanies for many students, but others just find me disorganized.

6. OK, so I also wrote this book for fun, and to hopefully share some of that fun with you.

7. I will capitalize "Game" when referring to the sport of soccer for a few reasons: for clarity; to allude to the larger meaning of the sport; and because nouns are capitalized in German, and Germany won the most recent World Cup.

Because soccer is so far-reaching and engrained, it affects our lives more than any other sport. The Nobel Prize-winning philosopher Albert Camus gave soccer credit for “all that I know most surely about morality and obligations.” The Game has caused⁸ and paused⁹ wars.

But this is not one of those books (books I love, by the way) about how the Game has some larger meaning. Instead, this book responds to a question from Sócrates: “What if we could one day direct this enthusiasm that we have for football¹⁰ toward positive causes for humanity?”

Now, there was no soccer in ancient Greece—at least as we know it.¹¹ So our question could not possibly have been asked by Socrates, the ancient Greek philosopher. Instead, the “Socrates” who posed our question was Sócrates Brasileiro Sampaio de Souza Vieira de Oliveira, the legendary Brazilian soccer player.¹²

His Greek namesake would have been proud. The Brazilian Sócrates engages us in the Socratic method because his question leads us to our answer—we’ll use soccer stories to align passion for the Game with the quest for sustainability, which is our “positive cause for humanity.”

Learning about sustainability through soccer is hopefully more fun—and therefore more memorable—than the analogies to made-up water reservoirs through which I’ve had to learn. Plus, real-world interdependencies, not just analogies, link the soccer system and the systems we hope to sustain; it’s just that these connections are not usually obvious. So,

8. The underlying tension of what is known as the “Soccer War” was migration between El Salvador and Honduras. Still, the war was sparked by rioting during soccer games as the two countries competed to qualify for the 1970 World Cup.

9. The same year as the Soccer War, a three-day ceasefire was declared in Nigeria’s civil war to accommodate the visit of soccer legend Pelé with his Brazilian club team, Santos. And during World War I, when German and British troops stopped fighting on Christmas day in 1914, they played soccer.

10. “Football” is what pretty much every country in the world calls what Americans refer to as “soccer.” I’ll use the two interchangeably and use “American football” when I need to refer to the sport in which massive men in helmets and tight pants smash into each other and shorten their life expectancies.

11. There was no soccer in ancient Greece, but, as we’ll cover later, the Greeks did play a game called *episkyros*, which had field linings similar to those in soccer.

12. Sócrates was a leader on Brazil’s 1982 World Cup team, a team that played some of the most beautiful soccer ever seen. Beauty was more important to Sócrates than the outcome of the game, which is good because Brazil did not win the World Cup in 1982. Not only was Sócrates a soccer great, he was also a political activist, musician, author, and medical doctor. He was addicted to alcohol and nicotine. In the midst of Brazil’s military dictatorship, Sócrates democratized Corinthians, the club he was playing for at the time. He also fathered six children and said, “I like to reproduce.” Needless to say, Google him.

when we discover these interdependencies in soccer and sustainability, we sharpen our ability to find them in other seemingly unrelated systems.

Sustainability requires a systems view and so does soccer. It's a holistic sport, in which a slight change in one play can affect what follows in unexpected and dramatic ways.¹³ Appreciating the Game requires us to do more than simply reduce it to specific moves or plays. We must also expand our perspective to appreciate the infinite possibilities that result because all of these moves and plays are intricately woven in a web of interdependence.

We can understand other sports through statistics from independent events, such as pitches in baseball or downs in American football. Even free-flowing sports like basketball and ice hockey have fewer players than soccer and, therefore, less variability. These sports also rely far more than soccer does on predetermined plays that are practiced repeatedly before the game and then prescribed by coaches during it. In soccer, no amount of simulation in practice can provide the exact scenario encountered in a game. Every moment is unique.

With that in mind, let's return to answer our slightly modified version of Sócrates's question: How can we use soccer on our quest for sustainability?

First, we can tap into the passion for soccer shared by billions of people.

And second, we can learn from the interdependencies in the Game to help us discover connections between our sustainability obligations (such as human rights and climate change).

THE BLACK PANTHER AND THE SACRED MONSTER

Systems-Thinking for Sustainability

At the most basic level, pursuing sustainability means trying to meet our present needs without ruining the ability of people in the future to meet their own needs. The United Nations calls sustainability "the framework for efforts to achieve a higher quality of life for all people."¹⁴

13. In Germany, *Der Ball ist rund* ("the ball is round") is an overused expression meaning that anything can happen in soccer.

14. This *sustainability* definition is anthropocentric, emphasizing humans. But of course we are linked with plants, animals, and microorganisms in a network that makes life possible. For instance, we rely on plants' photosynthesis for our food and to convert carbon dioxide into the oxygen we need. Plants, in turn, depend on microorganisms fixing nitrogen at their roots.

Climate change is not the only warning sign on our unsustainable path. We are also flirting dangerously with planetary limits when it comes to species loss, pollution of air and water, and deforestation.

It helps me to think of sustainability as sharing the chance to flourish on Earth with as many people as possible, both now and in the future. I also try to remember that sustainability is an idea like freedom, liberty, or faith: we start with a general meaning, and the best way to refine it more is to try to put these ideas into practice.

This broad idea of sustainability is at the core of our biggest challenges: providing food, shelter, and clean water for all; preventing (and adapting to) climate chaos; ensuring that our consumption does not overwhelm the carrying capacity of our only planet; and protecting rights to happiness, political participation, and a clean environment—regardless of race, gender, economic status, or any other differences. I think you get the idea—sustainability applies everywhere we look.

So let's leave the sustainability theory and applications at that for now—I promise you'll learn more through the stories that follow.

No matter the specific application, systems-thinking is the map for our sustainability quests. Systems-thinking is a shift in perspective from the parts to the whole, from objects to relationships, and from structures to processes. The shift in perspective reveals connections we may otherwise overlook. The shift moves our focus from reducing unsustainability toward creating true sustainability.

Systems-thinking complements the more familiar reductionist approach, in which we take things apart and then study the pieces in more detail. Reductionism underpins most academic learning, for which we split reality into courses, majors, disciplines, and specializations. By narrowly defining perspectives, reductionism makes numerical measurement possible and provides an illusion of certainty. But pure reductionism fails us because even when we know all the parts, and even when we know their arrangement and movements, we still have gaps in our knowledge.

Full understanding doesn't come from simply breaking systems into their smallest pieces. In fact, the most essential properties are often due to the relationships between parts. Our brain and eyes are amazing organs on their own, but without the integration between them you wouldn't be reading this.

In the same way, sustainability challenges like the ones from my epiphany (climate change and human rights) cannot be met with a reductionist approach alone. The systems approach shows us connections between the parts of these complex challenges, and between the challenges themselves.

Reductionism ↔ Systems-thinking

parts ↔ whole

objects ↔ relationships

structures ↔ processes

certainty ↔ insight

quantities ↔ qualities

measuring ↔ mapping

disciplinary ↔ multidisciplinary

[FIGURE 1] Systems-thinking complements reductionism.

Let's bring in our first soccer analogy to emphasize how systems-thinking complements reductionism.

The reductionist view is sufficient to see the greatness of Eusébio da Silva Ferreira. Eusébio earned his nickname, "The Black Panther," by combining catlike speed and agility with exceptional ball skills. Over his twenty-two-year career, the Black Panther averaged over a goal per game in a sport in which players who score once in every three games are exceptional. Eusébio scored more than six hundred times for Benfica, a Portuguese professional club team. Playing for Portugal's national team at the 1966 World Cup,¹⁵ Eusébio scored nine goals, more than anyone else at that tournament. Goals are the currency of soccer, so we can simply count the ones the Black Panther scored to measure his influence. The reductionist approach works just fine here.

On the other hand, we need the systems perspective to fully appreciate players like Mário Coluna, and to understand how he earned one of the best nicknames ever: "The Sacred Monster." Coluna possessed

15. Mozambique was a Portuguese colony in 1966, so players from Mozambique represented Portugal's national team. Even as African countries have gained independence, the best African-born players often represent other nations where they also have citizenship. For example, France won the 1998 World Cup thanks to irreplaceable contributions from Marcel Desailly (born in Ghana) and Patrick Vieira (born in Senegal).

speed, agility, and skill—like Eusébio. But instead of dominating games by scoring goals,¹⁶ the Sacred Monster made his mark in other ways. He stifled other teams' attacks and created countless scoring opportunities for his teammates, including Eusébio.

Like Eusébio, Coluna began his career in Maputo, the largest city in Mozambique. Coluna also starred for Portugal's national team in 1966 and is a legend at Benfica, the club he led to two consecutive European club championships, the first without Eusébio.¹⁷ Coluna didn't score as many goals as Eusébio. Instead, Coluna disrupted opponents. He made his teammates better—whether in games, in practice, or in the locker room. So, while the Sacred Monster's contributions were less obvious than the Black Panther's, they were just as vital.

Systems-thinking is a way to catch what reductionism can miss: connections, relationships, patterns, processes, and context.

A reductionist approach shows us that the object under the microscope has carbon and oxygen elements. With a systems approach, we see whether these elements are arranged to form coal or a diamond.

A reductionist view tells us about Eusébio, the Black Panther. A systems view reveals the beautiful contributions of Coluna, the Sacred Monster.

Both approaches are needed, of course, but reductionism is engrained and has become intuitive while systems-thinking gets overlooked. Ambiguity about systems-thinking is a big reason for this oversight. So, throughout this book, we'll clarify this powerful idea through stories about Adidas's selfish attempt to improve the 2010 World Cup, the development of Florida's Everglades, and lollipop-sucking soccer managers, among others.

Systems include small ecosystems, like my dad's algae-filled streams, and big ecosystems, like the disappearing Amazon rainforest. These natural systems are all connected to some degree. For example, when we clear the Amazon rainforest, the carbon released from the trees into the atmosphere contributes to climate change, with the result that people in Maputo, and coastal cities like it all over the world, face rising seas and damaging storms on top of droughts one year and floods the next.

16. As far as who wins the game, it doesn't matter *who* on the team scores, but being the one who scores is typically better for salaries and endorsements—and for being remembered in (most) books.

17. Benfica missed out on three consecutive European Championships when Coluna was injured by a bad foul from an AC Milan player in the 1963 final. Incredibly, the rules then did not allow any substitutions, even for injuries caused by fouls. So not only did Benfica lose Coluna—they also had to play ten versus eleven for the rest of the game.

Natural systems are linked to each other and to the systems humans create: everything from buildings, roads, and machines to social systems like governments, corporations, and communities. As with the natural systems, the behavior of these human-designed systems depends on the interconnected elements, flows, stocks, and purposes that we will learn more about in chapter 2.

Entire programs of study are devoted to selected natural or designed systems.¹⁸ A growing academic discipline is even devoted entirely to systems in general. And researchers spend careers seeking cross-cutting systems principles. This effort is justified because systems-thinking is at the core of some of the biggest scientific contributions in recent history. Among the groundbreaking advances in Albert Einstein's theory of relativity, for example, is the notion that space and time are not separate; the two should be considered together and in relation to each other. Similarly, in medicine, the placebo effect is when fake treatments lead to real improvements, just because patients expect to feel better. Like space and time, the body and mind must be considered together.

If we covered every last detail about systems in this book, I'd get bored, and your path to epiphanies would be even longer than mine. Fortunately, the most valuable use of systems-thinking is also the most straightforward: adding it to our everyday thought processes as we pursue sustainability.

So let's move on, because sustainability and systems are just ideas, and we need examples, applications, and stories to bring these ideas to life.

WHY ME?

*An Autobiography in Less Than Twelve Hundred Words*¹⁹

Now that you know it took me three decades to appreciate the connections between climate change and human rights, you're probably wondering why you should listen to anything I have to say about sustainability, or systems-thinking, or even soccer for that matter. It's a valid concern, and one I think is best answered with a very brief autobiography.

Until I was six, the upstate New York town where I grew up didn't even have a soccer league. So my dad and his friend started one. They

18. Even in these systems-themed courses and majors, too much specialization can lead to the ironic situation where an overly reductionist approach is applied in an ill-fated attempt to study a system.

19. Not counting footnotes.

also brought in expert coaches to run summer camps. I knew they were experts because they had accents (which instantly boosts one's soccer credentials in the United States). But despite the camp coaches' accents, my teammates and I learned far more about the Game from my dad.

I only played locally until an all-star team from our league got clobbered by a team from a nearby town. Then my dad and his friend started a travel team for my friends and me to play against better competition. We got pretty good, mostly stayed out of trouble, and learned life lessons about collaboration, persistence, and never trusting referees.

My rural upbringing combined with my driven (and slightly obsessive) personality meant that I spent lots of time practicing soccer alone.²⁰ I launched shot after shot from our gravel driveway against a homemade wooden backstop attached to the storage shed. For the six months of the year when the ground was frozen or covered with snow, I played in the loft of our repurposed dairy barn.²¹ I worked on my skills by dribbling in figure eights to songs by Bob Dylan and Green Day. Then I went outside and ran as fast as I could through the snow.

When I was fifteen, I was invited to join a select travel team by a mature-beyond-his-years future friend whom I saw only as a competitor at the time. My parents,²² who could ride their bikes to work before my sister, brother, and I scrambled their lives, put hundreds of thousands of miles on their Dodge Caravan so I could compete against the best players around. A former star college player coached us for free. We won a

20. I worked harder than anyone I knew except my younger sister—who, as in everything else, kept me from resting on my soccer laurels. I started for my high school team as a ninth-grader; she did it in eighth grade. I made the statewide select team; she made the team for the entire Northeast region. I played college soccer at Lafayette College, where an ambitious goal was to be a top-twenty-five team in the country; she played at the University of Maryland, where an ambitious goal was to win a national championship. It hasn't stopped. Some people call me "Dr. Klotz," because I have a Ph.D.; my sister is the real doctor, the kind they ask for on airplanes.

21. When my "little" brother Ricky was nine, I convinced him to play goalie for me in the freezing-cold barn loft. I gave him a thin mat to dive on, which protected him from landing directly on the wooden floor, but the barn was so small that my shots were from closer than ten yards, which meant he could barely get his arms up to protect himself, let alone intentionally stop shots. Five years younger and roughly half my size, Ricky did have one advantage when we switched to playing one-on-one: he could run closer to the walls, which angled downward so that there was more space the closer to the ground you got.

22. My mom was the only person as vital to our soccer careers as my dad was. You'll hear more about her, in particular when we discuss T-shirt quilts and distracting recycling.

national indoor championship, partly because we had talented players and a devoted and clever coach, and partly because the six months of winter meant we practiced indoors a lot more than teams from less dreary climates.

I arrived at Lafayette College the season after they made it to the final sixteen at the top level of college soccer in the United States. With the same coach—and better players, or so we thought—we lost three times as many games as we won in each of my first two seasons. But then some of the “better” players left, the coach changed, and so did our mindsets. We had one of the biggest turnarounds ever in college soccer. In each of my final two seasons, we won our league and qualified for the national championship tournament.

Throughout my amateur career, my job was to score goals, make passes that led to goals, and occasionally play some defense, which mostly meant (illegally) holding the opponents’ tallest player on corner kicks. I had more than my fair share of fantastic teammates who freed me to play my role, and I played it well enough to get a chance to keep playing after college.

To participate in professional preseason soccer, I commuted in my early graduation gift, the now old-enough-to-be-cool Dodge Caravan. I missed college classes and parties. Eventually, to the chagrin of my grandmother,²³ I even skipped the graduation ceremony.

After signing my first contract, I cried tears of joy on the Pennsylvania Turnpike somewhere near Altoona as Dylan’s “Like a Rolling Stone” brought flashbacks to long and cold hours practicing in the barn. Now that I was officially a professional soccer player, I had achieved a lifelong goal—which I had conceived when the United States had no viable professional soccer league.

I played two seasons, making about \$2,000 a month, enough to not have another job (but not enough to indiscriminantly buy cheese at the supermarket). My entire compensation as a professional was a fraction of what my parents had spent on my amateur career. I scored a few goals,²⁴ saw the country from bus and airplane windows, and nutmegged

23. I later found out that my grandmother had missed out on her college graduation because the United States entered World War II and she had to immediately serve as a replacement for schoolteachers who were called into action. Her reason for missing graduation is better than mine.

24. The Portuguese legend Eusébio and I both finished our careers with the exact same number of appearances (five) and goals (one) in the U.S. professional indoor league.

some of my heroes.²⁵ But I also spent more time on the bench than on the field.

I retired from soccer, but I kept my goal-oriented personality—which is a good thing, because I had about \$500 in my bank account, and everything I owned could fit in my used four-door Nissan²⁶ (if I deflated my air mattress and put my futon frame on the bike rack).

I expected to miss soccer after retiring, but by that time I was hopelessly in love with my then girlfriend, now wife,²⁷ Monica,²⁸ and was looking forward to seeing her more. Fortunately, playing college soccer at Lafayette had required that I also earn a degree (in engineering), which made it pretty easy to find a job working on school construction projects in New Jersey. Monica and I lived at the beach, and then in Bruce Springsteen’s hometown (Freehold). We could pay for whatever we wanted (she has simple tastes), I golfed a few times a week . . . and I was bored out of my mind.

I still had great times with Monica, my family,²⁹ and my friends, but I no longer had a guiding focus to provide meaning to my life. And yes,

Eusébio played for the Buffalo Stallions in 1980–81, at the very end of his career and after having several knee surgeries. I played for the Harrisburg Heat in 2000–01 after recovering from a leg fracture. Unfortunately for me, these parallels do not extend to our outdoor careers. No one knows exactly how many goals Eusébio scored, just that it’s over six hundred. No one cares how many I scored (three).

25. A “nutmeg” in soccer is when you dribble the ball between the defender’s legs. It’s a functional move that also embarrasses the defender, which typically earns a joking cheer from the crowd. I nutmegged Frankie Hejduk on May 27, 2001, in a game in Pittsburgh, Pennsylvania. Hejduk played for the United States at the 1998 and 2002 World Cups. On New Year’s Day of that same year, I nutmegged Bob Bradley in Princeton, New Jersey. Bradley managed the U.S. team at the 2010 World Cup. Both Hejduk and Bradley had far more accomplished careers than I, and I’m sure neither would consider it a highlight of their career had they nutmegged me.

26. When I bought the Nissan, my brother got the Dodge Caravan, which now shook violently when driven at highway speeds, perhaps because the front bumper was now attached with wire.

27. Among the attendees at our wedding was a full side of eleven teammates, plus a coach, a utility player, and an extra goalkeeper (for adaptability, which will make sense later if it doesn’t already).

28. Soccer was the only reason I had any luck with girls as an always shy, sometimes cruel, and often acne-plagued adolescent. When Monica and I met, she didn’t even know I played.

29. When I finished playing, Rick was all of a sudden bigger than me. I cheered for his high school and college teams, sitting with my parents (in the offensive end) and getting more nervous than I ever had while playing. On his summer break from college, Rick occupied the living room of the one-bedroom apartment Monica and I shared. Rick and I spent hours practicing heading, and I’ll never forget him scoring on a header in one of the first games of the next season.

I do recognize how silly it is to think that winning a soccer game is meaningful and building schools is not. At least you know I'm being honest.

My career transition from construction manager to professor was part of this search for meaning, and it has mostly worked. Nothing I do now is more rewarding than spending time with bright and motivated students. Research challenges me to always learn new things. And just when I start to think the mental struggle is futile, research is rewarding in an entirely different way, with unexpected breakthroughs. Admittedly, my goal against our college rivals in the league championship game still gives me more pride than any of my published research papers, but the gap is closing.

The fundamental concept behind all of my teaching and research is systems-thinking. Sustainability is the application.

So now you know that there were better soccer players than me. And, fortunately for humanity, I'm not the only one devoting my career to sustainability. But when it comes to soccer *and* sustainability, I'm your guy.

HOW TO USE THIS BOOK

I hope this book both rewards and absorbs you. To maintain flow in the text, I use footnotes for bonus information that I think is insightful—or funny. If you disagree after reading a few footnotes, you can skip them and breeze through the main text.

Footnotes also include seminal supporting references.³⁰ Of course, I haven't listed every last reference for the wide range of topics we'll cover, especially in cases when a Google keyword search will quickly give you evidence and insight. Google can confirm the soccer stories too, and a Youtube search will usually turn up supporting video.

But we can't leave everything to search engines. So, in addition to the seminal references in the footnotes, I've shared my favorite additional resources in a "Recommended Reading" section at the end. I hope this approach balances your desire to learn more with the reality that the best learning is self directed.

30. Along with website links for some references, I've tried to include enough information that you can find them with a Google search.