The Athenaeum Society of Hopkinsville, Kentucky

Blue Hill, Stone Barns, and Barber's Third Plate

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President, Secretary Treasurer, fellow Presenter, and esteemed Athenaeum members, I would thank you for giving me the opportunity to share with you this evening. Tonight, is my maiden voyage behind this hallowed podium. Standing here, I cannot help but feel both a sense of pure excitement and a sense of pure petrifying anxiety. Although I cannot feel my legs, it is truly an honor to stand here, and the significance of this moment is not lost on me. In the instants to follow, I would like to speak about a topic that has recently become a major source of inspiration to me.

Up until about four weeks ago, I had settled on a different subject for this paper. The topic was prototypical, an interesting historical event speckled with a little folklore. Despite the progress I had made, I ended up unexpectedly stumbling across the story of a fascinating individual. Within the first few moments of hearing this person speak, I was captivated, inspired, entranced. A few days later I had digested pages of his writings, hours of podcasts in which he was the featured guest and watched countless lectures where he poetically recited his ideas. I gobbled every bit of information I could lay my eyes, ears, and hands upon. I was undeniably obsessed. I had not felt this feeling in years, maybe since college. The blissful feeling of wanting to learn everything possible. At that moment, I knew I wanted to alter the subject behind my first Athenaeum paper.

You may be thinking for me to have been so moved this individual must be a political giant or a gallant war hero. Not quite, as a matter of fact this person by trade is a chef. He is not only a chef, but a writer, an entrepreneur, and the leader of a food movement that could change the entire way we think about our modern culinary culture. A new culture that creates a symbiotic relationship between the food on our plates and the local landscapes where our food is grown.

The topic of my paper this evening is Chef Dan Barber. On the surface, it does not sound rather interesting, nor very inspiring, but the historical, scientific, and cultural themes of Chef Barber's story are vast and plenty. Upon my discovery of it, I knew I had to share it. Tonight, I will tell the story of Blue Hill, Stone Barns, and Barber's Third Plate.

In the early spring of 2000, Dan Barber plopped exhaustedly in the back of a yellow New York City cab. He had just made a trip to the local farmers market. Cases jam-packed with early spring produce filled the taxi's trunk. It was the height of Asparagus' growing season, and a spectacular variety that had been driven down by Hudson Valley family farmers was the prize of his shopping spree.

Six months before, he had just opened Blue Hill restaurant in Greenwich Village New York, in which he himself was the head chef. It had become a titanic effort that showed with a tired look on Dan's face. Being a restaurateur is a self-tormenting endeavor that couples tireless hours of strenuous work with a risk tolerance that would make the most self-confident venture capitalists blush. According to a 2014 study at The Ohio State University, sixty percent of all eateries close within the first year, 80% do so in a five-year period. One negative review by a well-respected food critic can sink a restaurant, especially in the competitive market of New York City, and the finicky desires of people make it hard to find any term of longevity in this industry. Along with all the systemic challenges inherent to restaurant ownership, his food was not quite there yet. Dan opened the eatery to highlight his culinary style along with quality ingredients, but at that point, had failed to find a cohesive identity to represent Blue Hill's menu.

As the cab pulled up to the restaurant doors, he pondered the dinner service to-be that evening, formulating how he could prepare his recent purchase of ingredients into a delicious, yet cohesive menu that encapsulated the essence of Blue Hill. Dan Barber's tall, lanky frame proceeded to lug the cases of produce out of the cab into the Blue Hill kitchen. He has a stature that doesn't scream of a chef who frequently tastes tests his creations. His pushed back curly hair and thin demeanor speaks more to a mad scientist. A genius who experiences his fair share of sleepless nights perfecting his craft.

With the long hours and stress showing, he begrudgingly opened the refrigerator door with a case of perfectly ripe asparagus on his hip. He looked in shock as he spotted a week's worth of asparagus already in the fridge. That look quickly turned into an expression of rage.

"Why in hell did we have asparagus on the market list today," he proclaimed in anger across the kitchen.

Just as he had seen the French Chefs, known for their tempers, whom he had studied under in Southern France, he berated the Blue Hill Staff. "How can we be this disorganized," he shouted. "How could they have ordered more asparagus when we were so overloaded," he thought to himself in disbelief.

"That's it, I want you to pull every case of asparagus out of this refrigerator," he told the cooks, "tonight we will have asparagus in every dish."

He must have sounded serious because they prepped every bit of asparagus inside. When Dan observed the bright green stalks piled high like New York City towers throughout the kitchen, he thought to himself it was ridiculous. A notion he threw out in anger, taken seriously by his

staff, to include one specific vegetable in every dish was ludicrous for a fine dining chef. However, at that moment, a sense of clarity came over him. Maybe it was the exhaustion, or the fact that he had not yet made food to his standards, but this was a test he was willing to take. For his self-confidence this was a challenge he could not, would not, fail at.

As dinner service began, Dan had taken the challenge head on. The menu had been drafted, and indeed, asparagus was featured in every course of the fixed menu. Erected in an old speak easy, Blue Hill has all the old New York City charm that accompanies a dining establishment with low light and white table clothes. It was the perfect setting for this culinary battle - Dan Barber versus the asparagus. He was steadfast and ready, but what happened next was a curve ball of apocalyptic proportions for Barber and Blue Hill. Through the entrance of the restaurant strutted Jonathan Gold, the head reviewer of Gourmet Magazine. This was a defining moment for Barber. Gold's review could dictate the future of not only the restaurant, but his entire career. A battle between a fatigued chef and a singular vegetable was on the undercard that evening, but Jonathan Gold didn't get the memo. This self-induced torture had worked out in the worst way.

That evening Mr. Gold ate asparagus, and generous amounts of it. Dishes, such as Halibut with leeks and asparagus, duck with artichokes and asparagus, asparagus soup with roasted asparagus floating in it, asparagus salad, chicken with mushrooms and asparagus, all graced the menu. That was all topped off with asparagus ice cream for good measure. Dan had assumed the service was an absolute disaster. In no way could the head critic at Gourmet Magazine take a fine dining establishment that cooked one vegetable in every dish on its menu seriously. He

knew he was finished, but just as unexpectedly as Mr. Gold walking in that night something even more surprising happened the next morning.

"What does it mean to be a farm-oriented restaurant in New Yok City?" was the opening line of Jonathan Gold's raving review of Blue Hill and Dan Barber. Mr. Gold labeled him as a chef who was not afraid to highlight farm-fresh ingredients that were at their peak season of flavor. He labeled Dan as the future of the farm-to-table movement, which had at that time started to skyrocket as the premier culinary movement in the US. Jonathan Gold had defined Blue Hill before Dan even knew it himself, a farm-to-table restaurant focusing on locally sourced seasonal ingredients. The Hudson Valley asparagus, his interpretation of it, and Mr. Gold's review led to the realization of Barber's new identity.

Being labeled the future of a movement is no small honor, but in the years to follow Dan went on to shoulder that responsibility becoming one of the most iconic chefs in the world. Within two years, he was named one of *Food and Wine Magazine's "Best New Chefs"*. He has received multiple *Michelin Stars* and several *James Beard Awards*, the most coveted honors in the culinary world. Barber received a *James Beard Award* in 2006 for *"Best Chef New York"*, one in 2009 for *"Outstanding Chef"*, and again in 2009 for the *"Top Chef in America"*. He would use this new identity to define his culinary style, but also lead others to think differently about our modern food system. As the years have progressed he has become a true scholar of sustainability and has developed a philosophy that could change our contemporary food culture.

To put in bluntly, the world's food system is on a collision course for a civilization threatening catastrophe. At its current rate, the world's population is rising faster than any point

in its history, and that number is expected to grow to ten billion people by the end of this century. In 2010, 925 million people experienced hunger, three times the US population. Even with approximately 10% of the world suffering from malnutrition, we throw away thirty percent of the food grown in the US, the Earth's largest agricultural producer. The world's population shifted from being primarily rural to primarily urban in 2007. Therefore, number of humans who contribute to our food supply is exponentially diminishing. Our food system is increasingly becoming heavier on capital and less efficient in its mission of providing all mankind with nourishment. Due to these trends, within the next fifty years the human civilization will have to grow more food than it has in the past 10,000.

Today, we have a food industry that places importance on providing consumers with a marketable product over ones that lead to a healthy diet. Corporations that manufacture grocery items packed with sugar, and fast-food chains that tout convenience over nutrition are the leaders of our food distribution. This, especially, pertains to the United States and is contributing to a devastating national health crisis. By 2020 seventy-five percent of all Americans will be obese, and according to a National Vital Statistic's study, sixty percent of all deaths can be contributed to a disease linked to obesity. It is a hamstring on our healthcare system costing 300 billion dollars every year and growing. This will become an epidemic that will touch every individual in our nation.

We are a society that is only three generations removed from a time of "victory gardens." During WWII, Franklin D. Roosevelt challenged the nation to grow home kitchen gardens to help do their part to solve the national food shortage. In the year of 1943, 20 million gardens were cultivated across the country. The food harvested from these gardens supplied forty percent of

all American produce. Fast forward seventy-five years later, and this pattern of eating has flipped on its axis. Currently, the average American family spends thirty-one minutes a day preparing, eating, and cleaning after meals. Due to this fact, people are losing their cultural connection to food that had been passed down from generation to generation. As someone who loves food and whose fondest memories are spending time with his grandparents in the kitchen, this may be the most tragic consequence. The recipes and knowledge that I learned in those moments will be the heart filling heirlooms that I will take with me for the entirety of my life. The current generation of children are not experiencing this familial cultural connection to food.

Nothing is more proof of this fact than a video I observed of Jamie Oliver and a primary school class in West Virginia. Oliver, has become the leading voice on the detriments of the modern every night menu that is, quite frankly, killing the US. His philosophy is to start with our youngest generations to set the foundation for how individuals view healthy eating in the decades to come. In this classroom Jamie unveiled a basket of fresh produce and challenged the children to guess what each item was. To the bright-eyed contestants a tomato was a potato, a radish an onion, an eggplant a pear, and cauliflower was broccoli. They were not able to correctly name one item in the basket. Today, children are more familiar with processed chicken parts in the shape of dinosaurs than they are with a delicious healthy vegetable. Our families are not passing on the healthy culture of food, and this trend over the past three decades has only subsidized the health crisis of obesity we experience today.

If all of what I noted before did not paint a bleak future of our current food fulfillment structure, we still face an even greater test before us. We are not only going to have to find an effective way to distribute a nutritious diet to the Earth's growing population, but we are going

to have to do it with less resources. We will have access to less water. Many cities around the world, such as Cape Town, South Africa are experiencing debilitating drought and are struggling to quench its citizens' thirst. We are going to have to produce more with less climate stability. We will also be confronted with the task of growing with less fuel. Most reputable geologists believe we have already reached peak oil. To put that in perspective, our highly industrial agricultural methods require ten calories of fossil fuel energy to yield one calorie of food energy. Our insistence on a protein centric diet is exceptionally devastating to our nation's farmland. Livestock production overly depletes resources. Approximately one-third of the grain grown in our fields is fed to animals, and eighty-five percent of our water used in agriculture goes to livestock.

Todays fields are planted with less crop genetic diversity, which historically has served as our insurance policy to climate instability, pests, and disease. Ninety percent of our vegetable varieties went extinct in the 20th century. Today's agricultural model has replaced small family farms that celebrated diverse heirloom varieties with massive fields showcasing thousands of acres of monocultures. Our seed industry is majorly consolidated, which has led to a few corporations promoting a limited variety of crops. Most are genetically modified to be resistant to disease or drought. In theory, these modifications are beneficial to farmers. They assist in producing higher yields, thus increasing a farmer's profitability. However, these monocultures generally require a great deal of resources, and they deplete the soil of its natural fertility. Rotation crops can be planted to replenish a soil's nutrients, but there isn't much of a market for these crops forcing farmers to focus on the mainstays to ensure economic viability. As a result, studies show the American heartland's soil has lost eighty-five percent of its mineral content. To

continually produce these high yields, the soil's minerals must be replenished with fertilizers that leach from the soil into waterways flowing to the Gulf of Mexico. As a result, an area of hypoxic water the size of New Jersey exists at the mouth of the Mississippi Delta. Inside this "dead zone" fewer organisms can thrive causing a detrimental impact on the Gulf's ecosystem.

The looming soil crisis that faces American agriculture is not a new encounter. The dirty thirties, or commonly known as the "Dust Bowl", is at the forefront of American minds when we think of agricultural environmental catastrophes. However, there was a disaster that predated this period a hundred years before, the soil crisis of the 1830's. Thirty years before the Civil War American farmers experienced a disaster that changed the course of the United States. In the agricultural south tobacco was the most popular cash crop for farmers and served as the lifeline for the region's economy. The main issue with basing a whole farm operation of off tobacco is that it is enormously taxing on the landscape. Since the economy was based on growing as much of this leaf as possible the farmers were not replenishing the soil. This shortsighted farming method caught up to them, and the soil became virtually useless causing massive hardship. Southerners had lost their economic lifeline of tobacco exports, but also the ability to grow the grain that kept them alive.

In the decades to follow, it was not just the South that experienced a massive food shortage, but the country as a whole. Agriculturally focused, southern states supplied the US with most of its food supply. Without the fertile southern farms, Congress became very concerned that we lacked the ability to feed our growing country. This was the driving force behind the Homestead Act of 1862. The legislation incentivized citizens to settle out west with the hope that they would cultivate the Great Plains creating a new agricultural boom. With the

passage of this act southern populations migrated in droves to cultivate new lands. However, they didn't learn from their mistakes. Farming practices were not altered, and the migrant settlers eviscerated one of the most fertile areas in the history of humankind by the 1930's, leading to the Dustbowl. The Midwest's soil's richness, in part, came from a northern glacier melt that shifted soil south into the Great Plains millions of years ago. The dirt was even more fortified as millions of Bison roamed its land, fertilizing with their manure as the herds grazed. After first creating the catastrophe in the South, we migrated to a land with more potential and ruined it within seventy years. History is doomed to repeat itself, and if modern day American's are not careful, we will do the same.

Now, I would like to make the point that I am not implicating the farmers or food corporations for the challenges that exist today. There are great people in these camps who are trying to solve massive issues. We, as inhabitants of this planet, have played a part in the contributing factors that have led us to this point. Farmers have resorted to monocultures and unsustainable farming practices to feed the world, and corporations are selling what consumers demand from them.

I will sincerely admit I am a part of the problem. I have an undying love for Hot Pockets and Taco Bell, and up until three weeks ago I had never given much thought about modern farming practices. With that being said, a perfect storm has formed on the horizon, and it is time we take a step back and reexamine where we are. It is time to develop a food system that uses resources efficiently and promotes a healthy diet, but also one that is truly sustainable.

In the early 2000's, the term farm-to-table rose to popularity at a pace that could have broken the sound barrier. It began as a culinary movement that did not put agronomists at the forefront of transforming the way we think about food supply chains, but elevated chefs to the status of philosophers and activists. In essence, "farm-to-table" is the act of providing local food in restaurants by the acquisition of ingredients from local producers. The idea was that through strengthening local communities, we could change our culinary culture, and Chefs would be the medium to cultivate those relationships. The principles of this movement were believed to promote healthier diets and create sustainable agriculture by supporting local farming economies. This old world, pure way of thinking caused thousands of "locavores" to join the movements ranks. Due to his success at Blue Hill, Dan Barber became the spokesperson of this trend. However, he realized farm-to-table was not actually the end result, but a launching pad. He soon found the farm-to-table philosophy had one intrinsic flaw. By this discovery he was able to evolve it into an idea called the Third Plate. This new philosophy could solve the worlds agricultural issues and do so with a focus on the hedonistic drive for robust flavor.

In 2004 Dan had the opportunity to take his farm-to-table methods to the next level by opening a second restaurant at Stone Barns Center for Food and Agriculture. Located about thirty miles north of downtown Manhattan, Stone Barns sits on a gorgeous eighty acres of land on what was the Rockefellers old dairy farm. David Rockefeller, grandson of the patriarch John D. Rockefeller, established the center as a tribute to his late wife Peggy, who helped found the American Farmland Trust in 1980. The American Farmland Trust's (AFT) mission is to protect farmland and promote sound farming practices. It functions to educate communities on how to strategically protect their farmland and local food resources. As a sustainable farming research

and education center, Stone Barns would continue Peggy Rockefellers and the AFT's work. The Center includes a 2,300 square foot soiled greenhouse and an 8-acre production field tended to by Jack Algiere. In addition to produce production, the farm also includes twenty acres of pasture and woodlands dedicated to livestock. Stone Barns raises a mixture of pigs, sheep, lamb, chickens, geese, rabbits and honeybees with Craig Haney overseeing the livestock operations. This farm portrays an ideal model of small-scale sustainability where all its components create a harmonious ecosystem. Produce is grown not only for sale, but to feed the livestock. The livestock then graze upon the lands refortifying the soil. This generates a never-ending cycle that promotes thriving plants with soil preservation practices and healthy animals from quality feed, freeing this farm from the chemicals and biotics that plague our current food system.

In the center of the fields, stands a 1930's Normandy style stone structure where the Rockefeller's would milk their dairy herd. Dan Barbers new restaurant, Blue Hill at Stone Barns, would sit in this structure. The restaurant doesn't take the farm to the table, but instead takes the tables to the farm. Described often as a spiritual experience, the simple menu highlights the ingredients provided by the ecosystem thriving around it. This can be best exemplified in a dish commonly served there called "The Fence Post." The dish is merely a plank of wood with multiple metal spikes protruding from the base. On each spike, a single piece of produce, such as a radish, persimmon, or a carrot is displayed. Its simplicity causes you to slow down and savor the ingredient, thus generating an experience that brings you closer to nature. Consequently, Chef Barber's talents are not the star of the meal, it is the locally grown food. The farmers are the true chefs, Barber is only the messenger. As a part of this system, Dan began to evolve his philosophy of where the chef fits in working to preserve our food supply.

One year after opening, Blue Hill at Stone Barns was ready to serve its first grass-fed lamb reared on its premises. It was a Fin-Dorsett breed that took many months of resources and tedious pasture grass management to raise. The night of its premiere, three lambs were slaughtered generating forty-eight beautiful chops. However, within the first fifteen minutes of dinner service the lamb chops were completely sold out. At that moment Barber realized what was the biggest flaw of the farm-to-table movement.

With all the time spent herding the lamb between pastures, driving to and from a responsible slaughterhouse, and educating the staff three lambs were only able generate enough food to make it through the first few tickets of a dinner. Even though he was trying to provide food by setting up shop literally in the middle of a farm, it was not sustainable. He realized that he was placing too much importance on the best parts of the animal. His menu forced him to cook high-on-the hog, as opposed to nose-to-tail. This illustrates the failing of the farm-to-table movement. Farm-to-table Chef's still cherry-pick the best ingredients rather than highlighting and using what the farmer can provide.

This point was even further driven home to Dan when he went to visit a large-scale organic grain farm owned by Klaas Martens in upstate New York. Dan had been purchasing an old world variety of Emer wheat he used for Blue Hills breads from Klaas, and he wanted to visit the operation. On the journey to the farm he expected to see golden fields of wheat, but when he arrived it was much different. Instead of wheat he saw fields of millet, buckwheat, rye, barley, cover crops, and leguminous plants. When he inquired as to where all the wheat was, Klaas informed him that these crops were the most important of his operation. After being poisoned by an herbicide in 1994, Martens decided to transition his grain operation to fully organic

methods. Because he cannot use chemicals he must rely on a tedious crop rotation plan of up to eleven different plants to naturally preserve the soil fertility of his farmland. When it comes to soil nutrient depletion wheat is the Hummer of the grain world, but by planting leguminous crops that add nitrogen, greens that desalinate, and yellow flowering plants that add sulfur back to the soil Klaas naturally enriches his fields. This process ensures that his wheat crops remain healthy and provide high yields. The issue with this method is that there is not much of a market for his rotation crops. They may be sold as inexpensive livestock feed to recoup, but these crops end up being sunk costs. If chefs focused on using an approach that celebrated his whole agricultural ecosystem, then he could increase his revenue streams.

By not focusing on the whole farm, it is difficult to imagine farm-to-table cooking shaping the kind of food system we want for the future. Through these experiences, Barber came to the philosophy he calls the Third Plate. A food magazine once asked a group of chefs, editors, and artists to sketch a plate of food that illustrated what they believed we would be eating in thirty-five years. Most sent back images of dystopian visions, such as insects, seaweed, or pharmaceutical pills that we would be forced to eat as our resources are depleted. However, Dan sent back a picture that included three plates of food. The first plate was a seven-ounce corn-fed steak with a small side of vegetables representing the American expectation of a meal for the past half-century. The second was a seven-ounce grass-fed steak with a side of organic locally sourced heirloom carrots. This signified where we are today with farm-to-table and the progress made in the past decade. The "third plate" characterized a philosophy for the future. This dish reversed the steak dinner analogy and depicted a large carrot steak at the center of the plate. It was accompanied by a sauce made of braised, second cuts of beef. Chef Barber wrote

"the point was not to suggest that we'll be reduced to eating meat in sauces or that vegetable steaks were the future of food. It was to predict that the future of cuisine will represent a paradigm shift, a new way of thinking, that defies American ingrained expectations. The Third Plate represents a new type of cuisine that goes beyond raising awareness like farm-to-table but begins to reflect a cuisine that is derived from what the landscape can provide."

The most celebrated cuisines in the world were derived from this concept. Italy, France, Southeast Asia, and South America are home to thousands of regional micro-cuisines. Since all these areas experience different challenges in climate and soil fertility they were forced through hardship to develop eating habits that were inspired by their local landscapes. We celebrate the most decadent parts of these cuisines, but that is usually not indicative of what the natives eat. For example, we think of Italian cooking as focusing on tomatoes, but authentic Italian cooking is dense in legume-based dishes. The beans were needed to add nitrogen back to the soil in order to grow nitrogen dependent tomatoes. In Japan buckwheat was an essential rotation crop to growing rice. The natives in return used the buckwheat to make soba noodles. To create a sustainable farming ecosystem nothing was wasted in these cultures.

The United States has simply had it too good, and we have not begun to develop these regional food cuisines. Known by early colonizers as the Garden of Eden, America is blessed with extremely rich soil fertility as well as climate characteristics that are perfect for food cultivation. We also have massive amounts of ranch land to raise livestock. This led to an excess of eating styles that focused on generous portions of protein and the most coveted vegetables. Due to this fact, we have only one true regional cuisine in our country, southern cooking.

Southerners are known for being resourceful when it comes to food. The majority of home gardens in the US are located in the Southeast, and canning is a common tradition passed on. Second choice cuts of protein, such as pork shoulders, chicken wings, and headcheese are familiar fare. Southern cooking was developed from the hardship of poverty. Hop and Johns, a common dish of the Carolina rice kitchen, is a perfect example of this. A dish consisting of beans, rice, collards, and a smattering of pork was developed by West African slaves who had experience with harsh growing conditions in their homeland. When the soil fertility was failing in the 19th century beans were needed to grow rice by replenishing the soil of minerals, collards desalinated the soil, and the second-cuts of pork were added for flavor ensuring nothing was wasted from slaughtered pigs that ran wild in the forests. In one bowl of food, hop and johns tells the story of the whole southern landscape and what it can provide. The Third Plate celebrates this idea of regional cuisine, and by adopting this philosophy Americans can get in front of the challenges we will soon face. We can create new cuisines, celebrate our local landscapes, and help preserve our ability to supply sustenance before it is too late.

The most notable cuisines in the world have taken thousands of years of cultural traditions to mature, but how do we begin building this accomplishment today? That is the question of where we go forward in bringing the Third Plate from something imaginable to edible. Barber will admit that this is a massive undertaking that will ask the us to completely change the way we eat, but it is a challenge he believes we must do for future generations. Dan often quotes Wes Jackson's thought, "if you are thinking about something you cannot solve in your lifetime then your ideas are not big enough."

He imagines that to start changing our culinary culture, chefs will have to be at the forefront of this movement. They will have to transition from the role of food preparers to food educators. Dan recognizes that chefs serve as the liaison between food suppliers and the people who consume it. This gives them a unique platform to educate the public on what practices best lend to sustainability. By creating menus that better resemble the Third Plate philosophy, they can inform society that eating with a conservationist mindset can not only be morally important, but delicious. He once powerfully stated a cook can heat up a piece of high-cut protein, but a chef is one who can make tripe taste absolutely delicious. When chefs serve the lesser known plants that support a whole farm's fertility and cuts that promote eating the nose to tail of an animal, people will have the opportunity open their minds to new dishes not commonly celebrated in our culinary culture, ones that promote preservation.

Flavor is the secret weapon of the Third Plate. In soil there exists an ecosystem of millions of microorganisms that provide nutrients to plants. Soil scientists do not know exactly how this natural process works to produce great flavor but agree in its necessity. One day Jack Algiere, the produce supervisor at Stone Barns, walked into Dan's office with a carrot, a refractometer, and a grin that showed he was way too proud of himself. A refractometer measures the sugar content, and in correlation the nutrient density of produce. He squeezed the juice of the root he had just harvested on the utensil, and it had a reading of 14 brix, or 14 grams of sucrose in 100 grams of solution. To put this in perspective, they tested a high priced organic carrot from Whole Foods, and it had a reading of zero brix! The Whole Foods carrot was grown on a monoculture produce farm in California with organic fertilizers while Stone Barns' carrot was grown in

chemical-free soil enriched through intensive crop rotations. This hit home the point to Barber that sustainable growing methods harvest the most nutritious and delicious tasting food.

The human hedonistic desire for flavor is what sets the Third Plate philosophy apart from other conservation movements. Those movements promote sacrifice to preserve something, but the Third Plate encourages satisfaction through taste. If chefs are successful in educating our population that changing our habits can be a gratifying choice then this movement can stick. People will create markets for tasty rotation crops that will promote farmers to adopt growing practices that preserve soil fertility. If people can learn to prepare and love eating an animal from the nose to the tail, they will help reduce our dependence on protein centric plates. While visiting large farms in the Midwest, Barber gathered that farmers are more than willing to change their crop portfolio if it is economically viable. With increased profits, eating sustainably should become more cost effective to consumers. The system can change once the demands of people flow upward and change our markets. Deviations in the way we think about food are starting to take hold. The farm-to-table movement's success has caused an increase in the demand for organic produce, and more fast food giants are promoting healthier food options on their menus. According to the National Gardening Association, 35% of households in 2014 reported having a home garden. A healthy and sustainable food culture is on the cusp to becoming mainstream in the US. In that moment, the Third Plate will not just be the future, but will become our present, and we can begin to build delicious American regional cuisines that are derived from our diverse landscapes.

Today, Chef Barber still cooks at Blue Hill at Stone Barns, but his focus is on education and research. He gives many lectures on his philosophies and has a New York Times Best Seller, titled

The Third Plate. He was also featured in an episode of Netflix's "The Chef's Table," which began my inspiration for this paper. His efforts promoting the Third Plate philosophy led to him being named one of *Time Magazine's "Top 100 Most Influential People in the World."* Most of his focus on research includes collaborating with farmers and breeders. Barber has partnered with them to create crop varieties specifically bred for flavor and yield, such as his namesake Barber Wheat. A strain that touts a bright chocolaty and nutty flavor, but also yields average harvests higher than the monoculture wheat varieties used in the Midwest. After the success of Barber Wheat, he helped found Row 7 Seed Company hoping to supplant these high yielding flavor-bred plants into the mainstream of agricultural production.

Dan Barber is immersed in taking his Third Plate philosophy to the next phase, working to ingrain it in farms and conventional culinary culture, and it will be interesting to see how his mission develops over the next decade. Personally, this research process has inspired myself to change the way I think of growing, preparing, and eating food. As you can probably guess, I am a food fanatic. Not only, do I love cooking, but I also have a 1,500 square foot garden plot in my back yard. Going forward, I am going to make the transition to fully organic methods, and I am going to try to include lesser-known varieties of plants in my harvests hoping to do my part in conserving heirloom species. When I cook new recipes, I am going to look for more traditional dishes that are indicative of a whole cuisine. Also, when I source food that I do not grow I will be cognizant of where my food comes from, and of my diet's effects on our food system's sustainability. Most of all, I am going to pass these ideas to my children so that hopefully they take these lessons with them.

The progress I hope to make is only a drop in the bucket. I cannot see myself only rarely eating a good pork chop or eliminating the occasional processed frozen pizza, but I know that I can make progress in changing my habits. It remains to be seen how our food system will adapt to the challenges that it will soon face. It also remains to be seen if Chef Barber's Third Plate has a secure place in our future culinary culture. However, I do know I will begin to do my part to consume a more regionally sustainable diet while also passing that knowledge on to future generations, as my family heirloom.