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“The Earth Nourishing Itself”: Bodies and Theology in American Food Production Systems

By

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Thesis submitted to the Department of Religious Studies,
Pomona College

in partial fulfillment of the requirements for the degree of
Bachelor of Arts

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Jerry Irish, Zayn Kassam, and Darryl Smith, Advisors

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*To Zayn, who was the inspiration,
to Dean, who convinced me I wasn't crazy,
to Jerry, who made it possible,
and to the Murrays, who brought it all to life*

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Introduction

In the spring of 2008, I took a class at Pomona entitled “The Divine Body: Religion and the Environment,” a seminar that examined the ecological crisis in light of what major world religions tell their adherents about how to treat the world. It was during this class that I became introduced to the workings of the American industrial food system and its effects on the world. The connections between Peak Oil, high fructose corn syrup, mad cow disease and heart disease are extraordinarily complex; what became clear in my studies, however, both in that class and in the cooking escapades of my own life, was that the food system, in contrast to its supposed function as that which feeds and sustains a population, is hurting bodies. Destroying them. Harming them in ways that they have never been harmed before, in ways that we are still struggling to understand.

The industrial food production system is a head-on collision of ecology, morality, and human health, and their respective bodies of earth, animal and human. This thesis is an attempt to grapple with that damage from a theological perspective. What would it mean for a theology to answer to the degradation of American soil that sustains nothing but oil-drenched monoculture? to the horrifying conditions under which we as a nation raise, feed, and slaughter the animals for our consumption? to the dizzying array of food-related diseases that now affect our country in staggering frequency, particularly among lower socioeconomic classes? And what would that theology look like in the real world?

The first chapter of this thesis surveys the damage done to earth, animal and human bodies by the industrial food system. A discussion of corn, the backbone of the entire system, and its effects on the land leads into a discussion of corn-fed animals and the conditions under which they live. In the final section, some of the health effects directly traceable to eating

industrial food are overviewed. The second chapter highlights and examines three groups of people who, often for theological reasons, are growing food in alternative ways: ways that not only do not harm bodies, but sustain them and help them to thrive. The third chapter is a set of theological reflections on the first two, in which I try to pin down some essential theological differences between the first two chapters, and bring in theologians who are helpful in this enterprise. The four theological points I discuss are taking bodies seriously, a panentheistic approach to the world, interrelatedness and the presence of complexity, and mutuality and relational power.

Chapter One: Industrial

Forgetting, or not knowing in the first place, is what the industrial food chain is all about, the principal reason it is so opaque; for if we could see what lies on the far side of the increasingly high walls of our industrial agriculture, we would surely change the way we eat.

~ Michael Pollan, The Omnivore's Dilemma

1. Introduction

In the process of writing this thesis, people often asked me, “Why food?” I chose food as the lens through which to examine Sallie McFague’s body theology because food is that which sustains our bodies – the stuff of which bodies are made. The age-old phrase “You are what you eat” here rings powerfully true; in a time when heart disease, obesity and diabetes run rampant in such an affluent society as America, a good hard look at what we are currently putting into our bodies – and the effects it has on other kinds of bodies – is a worthy endeavor.

This chapter is an attempt to answer the question, “What are the effects of the industrial food system on the bodies of America?” The question is a huge one, and the answer is as well. My starting point was people who have chosen to feed themselves outside of that system, who usually give a variety of answers when asked why they have made that decision. In my research and conversations with people, however, there emerged three main reasons to disassociate oneself with the industrial food system. Like all parts in a whole, these three reasons are inextricably related; in an attempt to simplify an enormously complex picture, however, in this chapter I explore those reasons separately. I do so through the mediums of three different kinds of bodies: plant (Earth), animal and human.

The first reason is ecological. The industrial food system inflicts vast amounts of harm on our Earth and our land, harm that, unless it is stopped and/or reversed, may irreparably damage our nation’s ability to produce its own food. This ecological damage is examined through the medium of corn, the staple and driving force behind the entire system that is destroying our

Earth's body. The second reason is moral, discussed through the eyes of two animals that the corn in our food system feeds: cows and chickens. The conditions under which these animals are born, live and die are considered by many to be morally atrocious, at the very least questionable; and many people choose not to eat meat simply because they have deeply moral qualms about supporting a system that treats animal bodies the way it does. And the final reason is health. Not only is our food system destroying our land and torturing our animals, there is an abundance of evidence that the food it produces is deeply unhealthy for our bodies. Through the medium of a typical American consumer of industrial food, the final part of this chapter details the myriad of harmful ways industrial food can impact our human bodies.

2. Vegetable

To begin to understand the impacts of the industrial food system on our planet, our animals, and ourselves, we must first have a rudimentary understanding of how this food system works. And “how it works” revolves entirely around one vegetable: corn. To understand this, a brief history of the industrialization of our food system bears reviewing. According to Michael Pollan, one of the key turning points in this industrialization process is 1947, when the government was looking for something to do with its wartime production processes. Our country found itself with a huge surplus of ammonium nitrate, the key ingredient in making explosives – which also happened to be an excellent source of nitrogen, one of the most important nutrients a plant needs to grow. One day somebody made this connection, and thus at munitions plants throughout the country was born the industry of chemical fertilizers.¹

The impact of chemical fertilizers on the American food system can almost not be overstated. Nor can it be understood without understanding the significance of the nutrient they contain – nitrogen. For nitrogen, along with carbon, is one of the building blocks of life; it is

¹ Pollan, The Omnivore's Dilemma, p. 41

impossible to grow either crops or human bodies without it.² The amount of life that can be sustained on earth, therefore, is directly dependent on how much nitrogen is available to that life – and for thousands of years, this amount of nitrogen was fixed: while nitrogen is plentiful in the Earth’s ecosystem, making up 80% of our atmosphere, the atoms of this nitrogen are paired, nonreactive, and therefore useless to humans. In 1909, however, all of this changed when a German scientist named Fritz Haber discovered the process of “fixing” nitrogen – the process of splitting and joining the nitrogen from the atmosphere with hydrogen, creating molecules that could actually be put to use by humans. Suddenly, the amount of nitrogen available to life on Earth was not fixed anymore.

The ability to fix nitrogen, and thus the creation of synthetic nitrogen, may well be the most important invention of the twentieth century. To quote Pollan, it “changed everything – not just for the corn plant and the farm, not just for the food system, but also for the way life on earth is conducted.”³ Previously the amount of crops that could be grown in a field – and more broadly, how many human beings could exist on earth – strictly depended on how much nitrogen was present in the soil, and in the earth’s ecosystem itself. And over thousands of years of agriculture, farmers had developed many farming methods (crop rotation, fallow fields, the creation and spreading of manure) whose chief goal was to maximize the amount of nitrogen in the soil, and thus the number of crops they could grow. But the amount of nitrogen was always dependent on variables within the Earth’s ecosystem – on the processes involving the sun, plants, photosynthesis, and hundreds of other factors that create the feedback loop of the creation of life. Pollan describes the pre-industrialized farm as “a local, sun-driven cycle of fertility, in which the

² Smil, quoted by Pollan, p. 42

³ Pollan, p. 42

legumes fed the corn which fed the livestock which in turn (with their manure) fed the corn.”⁴

With the introduction of synthetic nitrogen in the form of chemical fertilizers in 1947, the way we grow and produce food in America was fundamentally reshaped. The pairing of chemical fertilizer and pesticides (another direct product of WWII, via the poisonous gas industry) led to the liberation from the old biological constraints, and created a farm that could be managed on industrial principles – as a factory, with the inputs of chemical fertilizer and pesticides generating outputs: crops.

Or more specifically, corn. Even more specifically, number 2 hybrid corn, a strain of corn that makes better use of chemical fertilizer than any other plant.⁵ The direct result of the chemical fertilizer/pesticide revolution was, to put it simply, an abundance of corn. In 1920 the average yield of corn by a typical American farmer was twenty bushels per acre. A modern farmer, fertilizer, pesticides, and tractor in hand, can produce up to two hundred.⁶ The cycle of corn that has developed in this country is one of constant overproduction. Corn is extraordinarily subsidized in this country; farmers receive their paychecks every year from the federal government. Farmers get a flat rate for delivering their corn to the elevator every year; that rate in 2005 was \$1.45 per bushel, \$1.05 less than it costs to grow that bushel of corn.⁷ In any other market system, this would result in farmers producing less, but not in this one. According to George Naylor, a corn and soybeans farmer with whom Pollan worked closely, “Farmers facing lower prices have only one option if they want to be able to maintain their standard of living, pay their bills, and service their debt, and that is to produce more.” Pollan continues:

⁴ Pollan, p. 44

⁵ Ibid., p. 45

⁶ Ibid., p. 37

⁷ Ibid., p. 53

A farm family needs a certain amount of cash flow every year to support itself, and if the price of corn falls, the only way to stay even is to sell more corn. Naylor says that farmers desperate to boost yield end up degrading their land, plowing and planting marginal land, applying more nitrogen [in fertilizers] – anything to squeeze a few more bushels from the soil. Yet the more bushels each farmer produces, the lower prices go, giving another turn to the perverse spiral of over production...[and] so the plague of cheap corn goes on, impoverishing farmers (both here and in the countries to which we export it), degrading the land, polluting the water, and bleeding the federal treasury, which now spends up to \$5 billion a year subsidizing cheap corn.⁸

The bottom line is that the way we produce corn – corn that does not go on to feed us, but instead provides carbohydrates for factory-farm animals – is destroying both our land, and our farmers. And the way we grow it – with pesticides, fertilizer, and machinery – runs not on natural, solar energy, but a less renewable one: fossil fuels.

The dependence of America's food system on fossil fuels is an aspect of *America's* dependence on fossil fuels (and all the political implications thereof) that is rarely mentioned in the public discourse on the subject. The food system is the second biggest consumer of fossil fuels in the U.S. Economy, making up one-fifth of the total amount consumed.⁹ For what happened with the invention of chemical fertilizers was a fundamental shift in the ultimate source of energy used to grow food. Before, it had been sunlight; now, it was petroleum. Hybrid corn makes better use of fossil fuel energy than any other plant, which has turned the process of growing corn from a biological process of "capturing sunlight to turn it into food [into] a process of converting fossil fuels into food."¹⁰ Every bushel of corn, between the fertilizer, the fossil fuel it takes to make the pesticides, drive the tractors, and harvest, dry and transport the corn, "requires the equivalent of between a quarter and a third of a gallon of oil to grow it – or around

⁸ Pollan, p. 54

⁹ Pollan, "An Open Letter to the Next Farmer-In-Chief" <http://www.nytimes.com/2008/10/12/magazine/12policy-t.html>

¹⁰ Pollan, *The Omnivore's Dilemma*, p. 45

fifty gallons of oil per acre of corn.”¹¹ Given that the USDA expects approximately 85 million acres of corn to be planted in the United States in 2009,¹² that means that 4.25 billion gallons of oil will be consumed in the production of that corn.

The overproduction of corn with pesticides and fertilizers – in other words, with fossil fuels – degrades America’s farmland to the point where if we keep going at this rate, we will destroy our country’s ability to produce its own food sometime within the next 50 years. This is not just an ecological problem – it is a national security problem as well. A nation that cannot produce its own food is a nation that is deeply crippled, as many nations in the world at the mercy of United States food production can attest to. And the body of our land is not the only body our country’s overproduction of corn is destroying. The bodies we grow it for – the animals on factory farms – come to great harm by it as well.

3. Animal

The corn that is grown on an industrial farm in Iowa cannot be consumed straight from the field. It is not corn that is meant to be eaten directly – it is grown instead to be fed to animals on factory farms, who are being raised for slaughter and distribution to America’s consumers. The main sources for my information concerning the treatment of animals on factory farms are John Robbins’ Diet for a New America and The Food Revolution, and Michael Pollan’s The Omnivore’s Dilemma. Both men write their books with the intention of “waking up” the American people to the realities of food production (and often specifically meat-eating) in their country, with an implicit (and in Robbins’ case, an explicit) plea to adjust their diet accordingly. Both men acknowledge and explore the full range of horrors the industrial food system has to offer; both men also share the firm belief that if people could only become aware of these

¹¹ Pollan, p. 45-46, emphasis mine

¹² http://www.nass.usda.gov/Newsroom/2009/03_31_2009.asp

horrors, they would cease to consume any more meat, or be any sort of agent in the systems that allow these processes to exist and thrive. In this section I look at two different animals: cattle and chickens.

3.1 Cattle

In The Omnivore's Dilemma, Michael Pollan visits a feedlot, a CAFO, in Vale, South Dakota, to trace the life of the corn-fed steer number 534. He hoped to get a glimpse as to how the massive amounts of corn (over)produced by our farmers were put to use on a factory farm, and chose a steer specifically because they are not, by nature, grain eaters, but grass eaters. "Here animals exquisitely adapted by natural selection to live on grass must be adapted by us – at considerable cost to their health, to the health of the land, and ultimately to the health of their eaters – to live on corn, for no other reason than it offers the cheapest calories around and because the great pile must be consumed."¹³ Another reason is efficiency – cows raised on grass also take longer to reach slaughter weight than cows who eat richer food like corn; while cows 50 years ago were four or five years old at slaughter, they are now fourteen to sixteen months – and in those fourteen to sixteen months, they go from 80 to 1,100 pounds.¹⁴ Corn is (falsely) the cheapest source of calories on the market, so that is what the animals are fed. Pollan describes the feedlot as "a city built upon America's mountain of surplus corn...plus the various pharmaceuticals a ruminant must have if it is to tolerate corn...afloat on an invisible sea of petroleum."¹⁵

But while moving the massive pile of America's corn through its animals raised for slaughter, who can convert it quickly into protein, might be a great achievement in efficiency, it lacks anything good in almost every other department. Cows are not evolutionarily designed to

¹³ Pollan., p. 68

¹⁴ Ibid., p. 71

¹⁵ Ibid., p. 73

eat corn, and as a result many feedlot cattle – according to some animal scientists, all of them, to one degree or another – are simply sick. Cows can develop bloating, in which their rumen swells until it presses against their lungs, or acidosis, a kind of bovine heartburn that causes them intense pain and can also weaken their immune system, opening them up to the full range of modern-day feedlot diseases: pneumonia, coccidiosis, enterotoxemia, feedlot polio. The acid from the corn also eats away at their rumen wall, allowing bacteria into the bloodstream and eventually the liver, where they form abscesses. Between 15 and 30 percent of cows have abscessed livers at slaughter, and in some pens that figure is as high as 70%.¹⁶ And ultimately, the fact that we force corn on our feedlot cows is not that good for us meat-eaters, either: studies are increasingly showing that many of the problems associated with eating beef in America – the biggest being heart disease – are actually problems with eating corn-fed beef.¹⁷

2.2 Chickens

John Robbins describes the factory farms in which chickens are raised for slaughter and laying as “living expressions of the attitude that animals are things, raw materials to be consumed however we might wish.”¹⁸ He details how male chicks, of little use when it comes to laying eggs, are “disposed of” almost right after they are born: thrown into a plastic bag and suffocated.¹⁹ But perhaps, he says, they are the lucky ones. Chickens in factories never see the light of day, and are instead confined to cages, and driven mad by the sheer numbers of other chickens present in their surroundings. Chickens have a complex social order, known in colloquial English as the “pecking order,” a social organization that can be recognized and followed in flocks as large as 90 hens. But when 80,000 chickens are stacked against each other

¹⁶ Pollan, p. 78

¹⁷ Ibid, p. 75

¹⁸ Robbins, p. 53

¹⁹ Ibid., p. 54

in warehouses, the inability to create and follow a social order drives the chickens mad, causing them to become violent towards each other:

Unable to establish any kind of social identity for themselves, the cooped-up animals fight constantly with each other. They are driven berserk by the lack of space and the complete frustration of their primal need for a social order. In their frustration they peck viciously at each other's feathers, frequently try to kill one another and even try to eat each other alive.²⁰

The violence the chickens display, as a result of the surroundings we impose on them, has the potential to harm and kill other chickens, thus reducing company profits. The common method for dealing with the violence is debeaking – the act of removing all or part of a chicken's beak. Besides being a painful and inhumane process in itself, debeaking also often makes it impossible for the birds to eat or drink: some end up dying due to thirst or starvation.

The violence that is a direct result of the lifestyle we impose upon these birds is often used as an excuse to cage them so tightly into wire cages that they can hardly move. Not just one chicken per cage, either – sometimes up to four or five birds can be crammed into a 12 inch by 12 inch square box. The chickens are pressed in on all sides, with no room to spread their wings or barely even turn around. And if their toes are not cut off a few days after they are born – ! – their toenails will continue to grow while they are in the cages, sometimes becoming so long (since there is no solid ground to wear them down) that they can get entangled in the wire and even the flesh of the toes grows completely around it.²¹ One of the most common effects of caging is for the birds to lose their feathers. The direct cause is not known – rubbing constantly against the wire, pecking from other birds, unnatural diet, and lack of sunlight are all probable

²⁰ Robbins, p. 56

²¹ Pollan, p. 61

contributors – but the results are: raw, flayed-looking chickens whose flesh has become bright red from constantly rubbing against the wire of the cages.²²

The wretched and cruel conditions do not stop there. When the egg production of a layer starts to wane, she is subjected to a process called “forced molting,” whereby she is completely deprived of light, food and water for up to two days. The “stress” induced by this near starvation and madness, if it hasn’t killed her, will almost certainly have “shocked into [the] physiological processes associated, under natural conditions, with the seasonal loss of plumage and growth of fresh feathers” – and hence greater egg production.²³ And even if they survive to lay a few more eggs, their life will end in a similar fashion – layers are deprived of food and water for the last 30 hours of their life, because it is not food that will have enough time to turn into body fat – it would just sit in their system and be a “waste.”²⁴

That is the single factor that constantly underlies every decision made in the running of a chicken factory – efficiency, and profits. And since profits are per pound, clearly the most rewarding thing to do is to pack as much meat onto the bird in as short a time as possible. This many breeders have succeeded in doing – with the result that as they grow, a chicken’s skeleton grows less and less able to support their body weight. Today’s broilers – chickens raised for their meat – pack on body weight so quickly that their muscles and bones literally cannot keep up with the pace at which they are gaining weight. They can thus hardly stand on their own two legs, and spend most of their time “‘huddling down on their haunches...Skeletal disorders are common. Many of these animals crouch or hobble about in pain on flawed feet and legs.’”²⁵ The lameness

²² Robbins, p. 66-67

²³ Ibid., p. 59

²⁴ Ibid., p. 60

²⁵ Ibid., p. 64

of the chicken does not matter, however; what matters is the amount the chicken will weigh when it is dead, not whether or not it could support that weight while alive.

And what is included, exactly, in the diet that makes the birds get so fat so quickly? Industrial corn, mostly – and drugs. More drugs than common sense would say is healthy or wise: sulfa drugs, hormones, antibiotics, nitrofurans, and arsenic compounds. Over 90% of chickens are fed arsenic compounds.²⁶ The diet of broilers is selected solely for the purpose of maximizing their weight at the lowest possible cost; the diet of layers, of course, has the goal of stimulating egg production as cheaply as possible.²⁷ The health of the animal – and of us, its eaters – is not something that is considered even a secondary factor. As a result many chickens suffer from a variety of diseases and general illnesses. One is “Caged Layer Fatigue,” in which the minerals in their bones and muscles decrease, contributing to their inability to stand. The list goes on:

...retarded growth, eye damage, blindness, lethargy, kidney damage, disturbed sexual development, bone and muscle weakness, brain damage, paralysis, internal bleeding, anemia, and deformed beaks and joints...bodily deformities...fragile bones, slipped tendons, twisted lower legs, and swollen joints...malformed backbones, twisted necks, and inflamed joints.²⁸

It is the potential for contracting these diseases that makes working in the poultry processing industry one of the most dangerous jobs in America.²⁹ Yet even with the list in front of one's eyes, the following statistic is still staggering: according to a government report, over 90% of the chickens from most flocks in the country are infected with leukosis.³⁰

Or as it is more commonly known, chicken cancer.

²⁶ Robbins, p. 65

²⁷ Ibid., p. 66

²⁸ Ibid., p. 66

²⁹ Ibid.

³⁰ Ibid., p. 67

Unsurprisingly, the lifestyle imposed on these chickens, whose every instinct is thwarted at every turn, puts the birds into what Robbins describes as a state of “perpetual panic...[they] show every sign of having been driven completely out of their minds.” They squawk, screech, scramble over one another, and live in a state of almost constant hysteria.³¹ One scientist wrote that the chickens are prone to stampedes: “With no apparent [immediate] cause, a wave of hysteria sweeps over the whole battery; wild, unnatural chirps, jumbled screams, and a fluttering as if every feather on every chicken had become possessed and frantic.”³²

But if the conditions under which “industrial” chickens live are so horrible, then surely the conditions endured by “organic” and “free-range” chickens must be better. But Michael Pollan, in a visit to a California organic henhouse called Petaluma Poultry, discovers that actually, organic chicken is neither as pastoral nor ethical as one might hope. What goes into calling a bird “organic,” he discovers, is to feed it certified organic feed (corn and soy grown without pesticides or chemical fertilizers), feed it no antibiotics or animal by-products, provide a small exercise yard outside the shed for the chickens to range freely if they wanted, and process the birds slightly younger and smaller.

No doubt some improvements are being made: their diet is free of pesticides, chemicals, and antibiotics, and they have a few more inches of living space and even the option of walking around outside. But the reality is not quite as straightforward as that: inside the organic chicken house are twenty thousand chickens all packed together on the ground, forming a “gently undulating white carpet stretched nearly the length of a football field.”³³ Pollan continues:

³¹ Robbins, p. 64

³² Ibid., p. 61

³³ Michael Pollan, The Omnivore’s Dilemma, p. 171

[The chickens] did pretty much everything chickens do except step outside the little doors located at either end of the shed...truth be told, [the chickens going outside] is the last thing the farm managers want to see happen, since these defenseless, crowded, and genetically identical birds are exquisitely vulnerable to infection. This is one of the larger ironies of growing organic food in an industrial system: it is even more precarious than a conventional industrial system. But the federal rules say an organic chicken should have ‘access to the outdoors’...so Petaluma Poultry provides the doors and the yard and everyone keeps their fingers crossed.”³⁴

As it turns out, though, the farm managers actually have very little to worry about. Since the food and water, and the rest of the flock, are always inside the shed, and since the doors leading to the outside *remain shut for the first five weeks of the birds’ lives*, a chicken hardly ever takes advantage of the opportunity to venture outside – in their view, they have no reason to. The most interesting part of the doors remaining closed for five weeks is that the birds are only alive for seven – so the term “free range” ends up being “not so much a lifestyle for these chickens as a two-week vacation option” that none of them have any reason to take advantage of.³⁵

The reality of organic farming is that it is now an \$11 billion dollar industry, due to the fact that industrial farming practices have been tweaked and adjusted to “technically” meet guidelines that have sort of lost sight of the overall goal of “organic” food. The irony, as Pollan points out, is that an organic henhouse, deprived of antibiotics but still packing 20,000 chickens together, is actually a very fragile phenomenon; an organic henhouse is, essentially, the industrial food system, without the attributes that make the industrial food system “work.” And in the end, the lives of the chickens are not improved that much anyway; while Pollan does not say much more about the life of a chicken in a henhouse, it seems quite probable that the same problems of social anxiety and violence that plague hens in industrial factories are present in the organic

³⁴ Pollan, p. 172

³⁵ Ibid., 172

henhouse. The chickens' lives, contrary to what most of us would like to believe about animals raised "organically," are really no better at all.

4. Human

The final body that I examine in this chapter is the human body – more specifically, the human body that eats industrial food. And as with the other two bodies, the star character of this story is, once again, corn. Number 2 commodity corn is the backbone of everything that occurs in our food system – including in the food that makes it to our plates. "You are what you eat, it's often said, and if this is true, then what we mostly are is corn – or, more precisely, processed corn."³⁶ Pollan goes on to quote a Berkeley biologist as saying "When you look at the isotope ratios [of carbon 13 to carbon 12, an indication of how much corn is in an organism's diet] we North Americans look like corn chips with legs."³⁷

The health implications of eating so much corn – in particular, animals who eat so much corn – are proving to be disastrous for the American consumer of industrial food. Heart disease is now the leading cause of death for Americans – more people die from heart and blood vessel-related diseases every year in the United States than from all other causes of death combined.³⁸ 1/3 of American women and 1/2 of American men die from these types of diseases.³⁹ While many factors contribute to the development of heart disease, the single most important factor is a person's blood cholesterol level, the primary influence of which is consumption of saturated fat. The primary source of saturated fat is animal products; and increasingly, studies are showing that the variety of health problems that can accompany eating meat, particularly beef, in America are really problems with eating corn-fed beef: "In the same way [that] ruminants are ill adapted to

³⁶ Pollan, p. 20

³⁷ Ibid., p. 23

³⁸ Robbins, p. 16

³⁹ Ibid., p. 14

eating corn, humans in turn may be poorly adapted to eating ruminants that eat corn.”⁴⁰ The risk of death from heart disease for vegetarians is half that of non-vegetarians.⁴¹ The average cholesterol level in the United States is 210 mg/dL, while vegetarians hold at 161 and vegans at 133.⁴² It is widely known that heart disease is America’s number one killer; yet the contributions of the way our food system works to the frequency of this disease is something that is not discussed nearly as often.

There is another disease, however, whose link to industrial food is almost never discussed: cancer. A report conducted by the American Institute for Cancer Research and the World Cancer Research Fund concluded, quite simply, that vegetarian diets decrease the risk of cancer; the report’s number one dietary recommendation is to “choose predominately plant-based diets rich in a variety of vegetables and fruits, legumes, and minimally processed starchy staple foods.”⁴³ Simply adopting a plant-based diet can evidently prevent the majority of all cancers; the most likely reason for this is because “the primary route through which many environmental carcinogens enter the human body is through food...specifically through animal products. If we eat high on the food chain today, we expose ourselves to levels of environmental toxicity that have never before existed on Earth.”⁴⁴ One of the biggest of these toxins is dioxin, which may account for up to 12% of cancer cases in industrialized societies. Up to 95% of human dioxin exposure comes from red meat, fish and dairy products; a single Big Mac carries 30% of the World Health Organization’s *daily* recommended intake.⁴⁵ Genetics, a highly touted field of research and promise for cancers, is not what is killing people; what is killing people is

⁴⁰ Pollan, p. 75

⁴¹ Robbins, p. 19

⁴² Ibid., p. 21

⁴³ quoted in Robbins, p. 38

⁴⁴ Robbins, p. 42

⁴⁵ Ibid.

the food that is entering their bodies – and if it is an animal, the food that food has consumed. According to William Castelli, director of the well-known Framington Heart Study that has discovered much of the information discussed in this section, adopting a low-fat plant-based diet would not only lower the rate of heart attacks in America by about 85% - it would also lower the cancer rate by 60%.⁴⁶

The most common health result of the industrial food system by far, however, is obesity. Obesity rates in America are the highest in the world: in 2006, 33.3% of American men and 35.3% of American women met the standards for obesity.⁴⁷ The surgeon general has officially named obesity an epidemic, and it costs the health care system approximately \$90 billion dollars a year in treatment – including diabetes, to which it is inextricably linked.⁴⁸ Pollan continues:

A recent study in the Journal of the American Medical Association predicts that a child born in 2000 has a one-in-three chance of developing diabetes. An African American child's chances are two in five. Because of diabetes and all the other health problems that accompany obesity, today's children may turn out to be the first generation of Americans whose life expectancy will actually be shorter than their parents.⁴⁹

There are many reasons given for why this is happening; but the traditional list of factors behind America's – and humanity's – rise in weight, while it has merit, does not necessarily get to the root causes of the problem. Which, according to Pollan, is the following: when food is both abundant and cheap, the way modern industrial food is, people will eat a lot of it, and get fat.⁵⁰ People and animals given large portions of food will eat up to 30% more of it than they would otherwise; this tendency goes back to our hunter-gatherer days, when we would eat as much as we could when we had the opportunity, to safeguard against future leaner days. The problem,

⁴⁶ Robbins, p. 47

⁴⁷ Center for Disease Control Obesity Information, <http://www.cdc.gov/nccdphp/dnpa/obesity/index.htm>

⁴⁸ Pollan, p. 102

⁴⁹ Ibid.

⁵⁰ Ibid.

though, is not just how much we are eating, but what, and what we are eating – besides corn and oil, often in the form of factory-farmed animals – is food that is too rich in energy and calories. We have, in effect, overloaded our systems; the amount of people suffering from overnutrition recently surpassed those suffering from undernutrition (one billion versus 800 million).⁵¹ Type II diabetes, now such a common occurrence in America and American children, usually develops when the body's system for managing glucose simply wears out; and the processed sugars and starches in industrial food turn to sugars and starches faster than anything else; "Type II diabetes and obesity are exactly what you would expect to see in a mammal whose environment has overwhelmed its metabolism with energy-dense foods."⁵²

The tendency of industrial food to cause innumerable and incurable health problems is a tendency that disproportionately affects people of lower social class and income. According to a study in the American Journal of Clinical Nutrition, this is simply because the foods on the market that are stuffed with the most processed sugars and starches – in other words, the unhealthiest foods – are also the foods that are the cheapest in terms of cost per calorie. In a supermarket, 1,200 calories of potato chips and cookies could be bought for a dollar, while a dollar's worth of carrots only contained 250. 875 calories of soda could be bought for a dollar, as opposed to 170 calories of fruit juice.⁵³ The cheapness of unhealthy food in America is one of the biggest contributing factors to the fact that diabetes, obesity, heart disease, and food-related diseases in general increase in occurrence the lower down the socioeconomic spectrum one looks.

⁵¹ Ibid.

⁵² Pollan, p. 107

⁵³ Pollan, p. 108

Conclusion

This chapter has tried to show how America's industrial food system, revolving around cheap energy in the form of corn, visits destruction on many different kinds of bodies: earth, animal and human. It does this largely because the bodies it uses and feeds are not its priority, not what it is concerned with. What would a system of food that is concerned with the well-being of bodies look like? The next chapter attempts to provide some answers to this question.

Chapter Two: “Beyond Organic”

“How I produce a chicken is an extension of my worldview.”
~ Joel Salatin, quoted in The Omnivore’s Dilemma

1. Introduction

An overview of the damage being put forth by a system is quite often a useful undertaking; focus too much on the damage, however, and sometimes a solution can slip further and further out of reach. In this chapter I look at three separate people or groups of people who are growing food in ways that are almost diametrically opposed to the methods highlighted in Chapter One. All three fall under the label of “beyond organic,” a term now being used to describe methods of organic farming that have not been subsumed into an industrial model. Though two of the groups of people I discuss in this chapter describe themselves as having religious motivations for growing food the way they do, it is important to mention at the outset that I do not wish in this chapter to attribute particular intentions to the people I write about. Religious motivation was not a prerequisite of being mentioned in this chapter; and though the presence of religious motivations is an important and interesting aspect of some of these situations that bears discussion, its absence would not detract from the quality and importance of the food work that is being done by each of these people or communities. If there are religious motivations (and there happen to be in almost every case), they have been incorporated into the discussion; but I am not, by mentioning people or situations in this chapter, implying in any way that the way they grow food *must* be motivated or informed by any specific theology.

The first section of this chapter highlights a Virginia grass farmer whose ideologies, farm and food practices are detailed by Michael Pollan in The Omnivore’s Dilemma. Particular emphasis is given to this farmer’s treatment of his land, his animals, and his whole farm as a complex ecological whole that feeds on and sustains itself, with him merely “helping it along.”

The second section focuses on a community of “green sisters,” Catholic nuns who feel that being organic, local, and growing their own food is an essential part of being in community with other humans and with God. The third and final section features a family in North San Diego County, California, who grow the majority of their own food – a process that is deeply informed by their spiritual theology.

2. Polyface Farm

Joel Salatin is a self-described “Christian-conservative-libertarian-environmentalist-lunatic farmer”⁵⁴ who owns and operates Polyface Farm, a grass farm in Virginia’s Shenandoah Valley. The farm is a family-owned “beyond organic” farm whose primary task, according to their website, is not actually in food production, but in healing: healing land, healing food, healing the economy, and healing “the culture.” All four of these tasks find convergence in a system of producing beef, poultry, pork, and rabbits that is modeled after “the Creator’s design...the best pattern for the biological world.”

That design, according to Joel, revolves entirely around grass – hence his self-description as a “grass farmer.”⁵⁵ The hundreds of species that make their residence in a single square foot of grass – from orchard grass and foxtail, to legumes and forbs, to the moles, earthworms, insects, bacteria and fungi – make this square foot of carpet something that is literally teeming with life – quite unlike the bright, too-green stuff of American front lawns. The author of Isaiah may have had it right when he said that “all flesh is grass;” in nature grass is where the food chain begins. Lacking rumens, humans can’t directly ingest the stuff; but we can, and have for thousands of years, consumed animals that consume it. Their taste for these animals led hunter-gatherers to deliberately promote the welfare of the grasses in their region, in order to attract and fatten the

⁵⁴ Pollan, p. 125

⁵⁵ Ibid., p. 125

animals that sustained them.⁵⁶ Practices such as setting fire to the savannah, keeping it free of trees and nourishing the soil, and periodically moving from place to place in order to not damage or erode the soils are two such examples.

Like these hunter-gatherers, Joel is in the grass-welfare-promotion business. To him, grass is not a context, a backdrop, or a scenery; it is a subject in its own right, the star of its own story. When Michael Pollan visited Joel on his farm, the first thing Joel made him do was get down on his hands and knees and take a good long look at the grass. Joel introduced him to all the varieties of grass that compose his pastures: orchard grass, fescue, red and white clover, millet and bluegrass, plaintain, timothy, and sweet grass. In Pollan's own words,

Joel wanted me to understand why he calls himself a grass farmer rather than a rancher or a pig farmer or a chicken farmer or a turkey farmer or a rabbit farmer or an egg farmer. The animals come and go, but the grasses, which directly or indirectly feed all the animals, abide, and the well-being of the farm depends more than anything on the well-being of its grass.⁵⁷

Actually, says Joel, "to be even more accurate...we should call ourselves sun farmers. The grass is just the way we capture" the energy from the sun that then gets transferred, through a complex food chain, to all of his animals. Joel's farm operates under a system that seeks to recreate the natural patterns and relationships that his animals and grass have to each other in nature. And one of the most important characteristics of this system is, somewhat surprisingly, timing.

The primary rule to follow in grass-grazing, according to Joel, is called "the law of the second bite": animals must never, ever be allowed to graze a pasture of grass before it has recovered from the previous grazing. After it has been grazed, grass grows very slowly for a certain period of time, but then enters a period called 'the blaze of growth.' This means that the grass has recovered from the previous grazing, and is rebuilding its reserves and root mass and

⁵⁶ Pollan, p. 128

⁵⁷ Ibid., p. 188

becoming rich with nutrients for the rumens. Around day 14 or so, grass growth begins to stagnate again as it prepares to flower and seed, which is when it starts to become less palatable to a grazer. This peak at day 14 is the optimal day for grazing; but what is most important is that grass not be touched before it enters its blaze of growth. This is the grave mistake of most ranchers and dairy farmers, who let their stock graze their pastures continuously. It is exactly these kinds of practices that contribute to the damage and erosion of soil, and it is exactly the kind of practice Joel seeks not only to avoid, but to turn around: his practices actually nurture and heal the land, not decimate it.

There is no such thing as a “typical” day at Polyface Farms, because one of the whole points of the grass farming model is that it is the opposite of the industrial model, with its tight schedules, rigid practices, and methods that never account for particularities of circumstance. To do grass farming right, one must possess “a wealth of *nuanced, local* knowledge at a time when most of the rest of agriculture has come to rely on precisely the opposite.”⁵⁸ But despite the constantly changing factors and circumstances that a grass farmer must continually be able to handle, a general model of how Joel’s grass farm works may certainly be outlined.

The food chain begins in one of the grass pastures, where about eighty cattle spend a day grazing to their hearts’ content. Allowing the cows to pick and choose what they eat lets them get whatever nutrients they might be craving or needing the most; the instincts of the ruminant are greatly in tune with the diversity of grasses in the “salad bar” (as Joel calls the pasture) and the services each kind of grass can render to it. But in this interaction between cow and grass, it is not just the cow who benefits. The grazing of ruminants is a complex process (involving interactions between its roots, earthworm population, and topsoil reformation) by which the soil actually rejuvenates and builds itself back up. A ruminant properly grazing on a pasture of grass

⁵⁸ Pollan, p. 191, emphasis mine.

is not a one-sided relationship: it is a relationship of mutuality, where over time the decaying roots, spurred by the cutting and chewing of grass, will actually facilitate the growth and thriving of new organic matter.⁵⁹ And not only does grazing stimulate the growth of grass, it also increases the diversity of grass species in a pasture: cattle do not “eliminate favored species by overgrazing them, and their equal-opportunity shearing ensures that no one species of grass ever dominates by rising to hog all the sunlight.”⁶⁰ And as has been discussed elsewhere, diversity in nature is strength, not a weakness: if a polyculture of grasses is diverse enough, it can withstand almost any kind of weather-based shock, and has the capability of producing in a year nearly as much total biomass as a forest receiving the same amount of rainfall.⁶¹ One of the end results is that Joel’s pastures will remove thousands of pounds of carbon from the atmosphere each year, storing it underground in the form of soil humus. All the while, the grazing of cows – besides letting them eat what they are naturally programmed to eat – not only sustains but enriches the soil. “Instead of mining the soil, such a meal builds more of it. Instead of diminishing the world, it has added to it.”⁶²

At the end of every grazing day, Joel moves his cattle to fresh grass, again one of the most important features of grass farming. Mimicking what herbivore populations do all over the world, moving the cattle not only satisfies the cows’ instincts to seek fresh ground that hasn’t been taken over by their own droppings, but they also allow the grasses, which have given all of themselves as nutrients to the cows, a chance to regrow and recover. Overgrazing is not the only danger, however; undergrazing can lead to woody, senescent grasses that result in a loss of productivity for the pasture. But getting it “just right” – getting the cattle onto the grass at the

⁵⁹ Pollan, p. 196

⁶⁰ Ibid., p. 197

⁶¹ Ibid.

⁶² Ibid., p. 199

precise moment that will exploit the blaze of growth but not be premature – yields enormous amounts of grass: the amount of “cow days,” or the average amount of forage a cow will eat in one day, that Joel gets out of his pastures can reach as much as 400 per acre. The average for his county is seventy. And the same practices that optimize everything else – feeding the cow, replenishing the soil, soil growth – also heal and rejuvenate the land the entire time.

After the cows have been moved, the pasture sits for three days before a brood of laying hens takes their place. Why? ““Because that’s how it works in nature...[it’s] a symbiotic relationship we’re trying to imitate.””⁶³ Birds perform several ecological functions on a pasture that has just been vacated by ruminants. Joel’s cows have no need of the vast amount of antibiotics that industrial cows must intake, because his hens pick (tasty) grubs, fly larvae, and parasites out from the cow patties, spreading manure and eliminating the threat of disease in the process. Now the insects no longer bother the ruminant, and the potential cycle for infestation and disease that breeds in the cow patties is broken.⁶⁴ The hens are apparently the best form of sanitation that Joel could ask for: “[t]hese birds do a more effective job of sanitizing a pasture than anything human, mechanical, or chemical, and the birds love doing it.”⁶⁵ The hens, and broilers that will follow them later, are also the reason Joel has no need for chemical fertilizer: the chickens’ manure, in addition to the cows’ supplies all the nitrogen and fertilizer the farm needs. Their extremely nitrogenous manure is one of the main reasons the broilers get rotated every day as well; left to their own devices, a flock of free-range chickens will peck away nearly all the grass in a pasture, and poison the soil with their excrement.⁶⁶

⁶³ Pollan, p. 126; 211

⁶⁴ Ibid., p. 211

⁶⁵ Ibid., p. 212

⁶⁶ Ibid., p. 210

Yet again, however, it is not just a service that the hens are providing to the pasture. They receive large amounts of nutrients from the grubs and larvae they pick out of the patties. The reason that Joel waits three days before moving the hens has to do with the growth cycle of the fly larvae: three days give them enough time to fatten up to where the hens like them to be, but not enough time to hatch into flies. While this method appears to be trite, it allows Joel to produce large quantities of nutrient-heavy chicken feed for absolutely no cost – something that he says cuts his costs of producing eggs by a whopping 25 cents per dozen.⁶⁷

Joel calls the process by which the production of several different “products” (to use the industrial term for a moment) are integrated into one another “stacking.” The grazing of the cows on the grass and the feeding of the hens from the cow patties is an example of stacking. Joel calls each “stacked” farm enterprises a *holon*, which had its origins from author Arthur Koestler:

Koestler felt English lacked a word to express the complex relationship of parts and wholes in a biological or social system. A holon (from the Greek holos, or whole, and the suffix on...suggesting a particle) is an entity that *from one perspective appears a self-contained whole, and from another a dependent part*.⁶⁸

In a system composed of holons, the terminology – indeed, the entire worldview – of the industrial system simply does not hold up. In the production of broilers, cattle and eggs – with grass, excrement, and time being only some of the factors – what is the by-product and what is the product? What do we name as waste products or raw materials? “Depending on the point of view you take – that of the chicken, the cow, or even the grass – the relationship between subject and object, cause and effect, flips.”⁶⁹

⁶⁷ Pollan, p. 211

⁶⁸ Ibid., p. 215, emphasis mine

⁶⁹ Pollan, p. 213

Nowhere is this more evident than in the role that pigs play on Joel's farm.⁷⁰ During the winter, the cows live in the barn, which, seemingly contrarily to conventional wisdom, Joel does not muck out while the cows live there. Every few days he layers woodchips and straw on top of the manure, which by the end of the winter has built up to a three-foot-high layer of barn carpeting. Joel's secret ingredient in the creation of his compost, however, is a few bucketfuls of corn, which, as it turns out, is the key to the entire process. Because as soon as the cattle go out to the pastures in the spring, Joel brings in the pigs – or as he calls them, the “pigaerators.” The pigs dive right into the manure in search of the now-alcoholic corn – and “what had been an anaerobic decomposition suddenly turns aerobic, which dramatically heats and speeds up the process, killing any pathogens. The result, after a few weeks of pigaerating, is a rich, cakey compost ready to use.”⁷¹

The starkest observation Pollan had regarding this process, however, was not the fact that the pigs created such a rich fertilizer. It was the joy – the “pigness” – with which they did it. “Buried clear to their butts in composting manure, a bobbing sea of wriggling hams and corkscrew tails, they were the happiest pigs I'd ever seen.”⁷² Joel describes the kind of efficiency found in the manure creation process as based on “the pigness of the pig”: the pigs are being exploited, it's true – they're being tricked into making compost, in addition to the pork they will eventually become. But if they aren't the happiest pigs in the world as they do so! Joel's system is a complete 180 degrees from the industrial method of hog production, a system that involves practices such as cutting off the pigs' tails to just enough that if it is bitten, it will hurt excruciatingly, and the depressed pig will fight back. The key difference between Joel's system and the industrial system is whose requirements it is based on – the pig's or the industry's. The

⁷⁰ Ibid., p. 217

⁷¹ Ibid.

⁷² Ibid., p. 218

industrial system creates requirements and then forces the animals to conform to them; on Joel's farm, he intimately knows what goes into the "pigness of a pig," and takes care to create a food system that not only does not trample on the dignity and happiness of the pig (or cow or chicken), but actually encourages it to thrive. He knows, and works with, and takes advantage of, the natural ways of "being in the world" that the animal possesses, and manages to create a thriving ecosystem and produce ethical and delicious food all the while.

According to their website, Joel and his multi-generational family of workers seek to develop "emotionally, economically, environmentally enhancing agricultural enterprises" and facilitate their spread throughout the world.⁷³ In the ecological and biological, not industrial, system that exists on their farm, all things are connected, and one cannot make a change in one thing without affecting everything else. The grass farm is not like a machine, but more like an organism; this, according to Joel, is the single biggest reason behind why large-scale industrial farming wreaks the enormous ecological havoc that it does. "...Like any organism, [my farm] has its proper scale. A mouse is the size of a mouse for a good reason, and a mouse that was the size of an elephant wouldn't do very well."⁷⁴ An agricultural textbook published years ago by a Cornell Agriculture professor put it best, though, "depending on your point of view, will sound either hopelessly quaint or arresting in its gnomic wisdom: 'Farming is not adapted to large-scale operations because of the following reasons: Farming is concerned with plants and animals that live, grow and die.'"⁷⁵ Joel's farm is not a line, but a loop: an endless collection of connections that feed and sustain each other even as they sustain themselves off of each other. In contrast to the industrial model of simplification, the processes that contribute to the functioning of Joel's farm are intricately complex, both in and of themselves and in how they relate to each other.

⁷³ <http://www.polyfacefarms.com/story.aspx>

⁷⁴ Pollan, p. 213

⁷⁵ Pollan, p. 214

Pollan points out, however, that possibly one reason this complexity is so hard for us to understand is that “it is not a complexity of our making.”⁷⁶ And yet that characteristic, in a way, is what also lends simplicity to the whole process. In Joel’s opinion, he has not “created” the system he uses to farm: “it is exactly the model God used in building nature.”⁷⁷ It is clear, from both the Salatin family website and Pollan’s descriptions of life on the farm, that Joel does not hold any important opinion of himself or the work he does. Despite the fact that his work days are seventeen hours and completely year-round, he often refers to the animals on his farm as those who do the majority of the work. He, in his own eyes, plays the same role as a conductor in an orchestra – “making sure everybody’s in the right place at the right time.”⁷⁸

Aside from the theological implications that can be discerned in Joel’s way of producing food (to be discussed in the next chapter), there seems to be an element of Joel’s own theology driving his work as well. When Joel says grace at the dinner table, he says “a rambling and strikingly non-generic version of grace, offering a fairly detailed summary of the day’s doings to a Lord who, to judge by Joel’s tone of easy familiarity, was present and keenly interested.”⁷⁹ Joel often describes his work as being modeled off of what God has already designed; on the family’s website they describe themselves as “believing that the Creator’s design is still the best pattern for the biological world.”⁸⁰

3. The Green Sisters

In an article called “Eating Spirit: Food, Faith and Spiritual Nourishment in the Lives of Green Sisters,” Sarah McFarland Taylor describes her experiences working with “green sisters,” Roman Catholic vowed religious women in the United States, Canada, and around the world

⁷⁶ Ibid., p. 195

⁷⁷ Ibid., p. 215

⁷⁸ Ibid., p. 212

⁷⁹ Ibid., p. 203

⁸⁰ <http://www.polyfacefarms.com/story.aspx>

“who are dedicating their lives and ministries to restoring the ecological well-being of the planet.”⁸¹ The article opens with Dominican Sister Miriam MacGillis hosting a “food workshop” in which she picks up a plate of many varieties of beans and passes it around to the all the participants. She has each participant run her fingers through them, pick them up, hold them, and really look at them. She tells them, “[These beans] have the whole story of the universe in them...you cannot talk about the bean without [talking about] the whole story.” She continues, “The bean communicates spirit. To eat it is to eat spirit.”

Sister MacGillis, and many other green sisters like her, see *food* – the growing, cooking and eating of it – as a medium “for addressing the world’s most grave environmental problems and their inseparable connections to violence, hunger, and social injustice.”⁸² Green sisters such as Sister Gail Worcelo, co-founder and prioress of Green Mountain Monastery, see food as the link between all aspects of our world that need to change in order “to bring us into the ecozoic era[.]” Ecozoic here refers to a period of time “in which humans cease exploitation of the earth’s resources and enter instead into an era of sustainable and mutually enhancing relationships between species and all humans.”⁸³ The sisters’ overall goal is to the largest extent possible create and participate in a diet that promotes a healthier planet, modeling ecological living as spiritual living and daily practice.

The reasons underlying these lifestyle choices are multiple, and all closely interconnected. They are ecological: the devastating effects of conventional farming methods on wildlife and the general health of ecosystems. They are moral: Sister MacGillis describes the industrial food system’s treatment of animals as something ““we [Catholic vowed religious women] cannot be a part of...It’s based on a totally inhumane, sacrilegious, dysfunctional,

⁸¹ Taylor, p. 446

⁸² Ibid., p. 448

⁸³ Ibid., p. 449

unsacred treatment of animal beings in the community of life who are our companions.’”⁸⁴ In surveys conducted by Taylor, 64% of those with whom the author conducted a survey were self-described as mostly, almost always, or always vegetarian;⁸⁵ 81% reported eating organic food along similar lines.⁸⁶ Many of the sisters grow or raise their own food in accordance with their vow of poverty; others recognize that organic food is expensive and luxurious to a degree, but argue that it is their job to help create a market for organic food, so that it may become cheaper and more available to the world’s poor. Furthermore, how “cheap” is food that has such devastating hidden health costs: the poisoning of water supplies, birth defects due to pesticide exposure, cancer clusters that manifest most heavily in poor areas, economic devastation to farming communities, and the destruction of the general health of earth’s ecosystems and human populations. Sisters spoke often of the documented effects of pesticides on not only the earth body, but the human body as well. More broadly, however, they made an explicit connection between the physical “impurity” of eating industrial food (through the presence of environmental toxins) and the spiritual impurity of “the complicity of supporting a system that poisons the life community of creation.”⁸⁷ Sister Worcelo expressed concern at a 1998 conference that “if everything we eat has had ‘the life force processed out of it’, then that is what we become – deadened and lacking the creative energy to make real and necessary change in the world,” to create a mutually enhancing earth-human relationship.⁸⁸ She continues:

It has to do with the quality and the consciousness in which food is raised...tomatoes grown biodynamically and factory-farmed tomatoes are as different as the living are from the dead! Matter and Spirit are One!

⁸⁴ Taylor, p. 448-449, emphasis mine

⁸⁵ Ibid., p. 449

⁸⁶ Ibid., p. 450

⁸⁷ Taylor, p. 453

⁸⁸ Ibid., p. 450

There is present in the food philosophy of many of the sisters this kind of body theology, seeing Spirit as present in the food they eat. The ecotheology expressed by many of the sisters is a theology that takes the body, many different kinds of bodies, seriously. In fact, not only are the earth, the animals, and the humans different bodies to take seriously; Taylor describes how, for green sisters, eating for the health of the planet involves “listen[ing] and abide[ing] by the needs and well-being of the contiguous human-earth body.”⁸⁹ For the sisters, it is all connected. The practices of growing industrial produce, for instance, are deeply embedded in a consciousness that involves using up the bodies of the world, and they produce drastically different results than methods which do not do such great harm.

There is more to the spiritual practice of eating consciously, however, than simply being mindful of where their food is grown. Some sisters spoke of how the process of cooking food, particularly food they have grown themselves, has become a form of meditation and communion with God. Sister of Charity of Halifax, Maureen Wild, describes the sensuality and mindfulness she experiences when she cooks, describing her food preparation as a “spirit-nourishing experience;” many sisters reported saying prayers or chants during their cooking and before their meal that recognize and pay homage to the connections between food, earth and spirit.⁹⁰ Sister MacGillis takes it one step farther theologically, saying that cooking is a process of “transubstantiation of food into the community.” She continues:

Transubstantiation is a very sacred word referring to Jesus Christ speaking over the bread in which the outer form didn’t change but the bread itself transformed on the inner plane where God was present. This has been going on all along. This is not an act confined to specially designated human beings...The entire universe is a giveaway that is ultimately transubstantiated and transformed.⁹¹

⁸⁹ Ibid., p. 453

⁹⁰ Taylor, p. 453-454

⁹¹ Ibid., p. 454

Here, there is no separation between food and meal and eater and spirit. Everything comes from everything else, and everything is connected. What had been food grown by the sisters is now transformed into a sacred meal, and God and spirit are present the entire time in the forms of the raw food and the meal.

Overall, the sisters' spiritual and life practices speak continually to the recognition of the life force present within food, and how mindful growing, preparation and eating of that food can be a spiritual and sacred experience, and create community among fellow human beings. “ ‘I love to cook as a spiritual exercise, eat in silence, having set two places (one for me and one for the Beloved), have candlelight, eat mindfully, grateful for the beings who give their lives to be food...Praying that my life (our lives) may be good food for one another.’”⁹² This approach toward food is an affirmation of food and body as sacred matter, as the sacred communion of all life. For everyone eats; food and its consumption is truly one of the most universal of human experiences. Green sisters see food as *the* great universal, and because of this, it provides avenues to many things. It is “a means of resistance and control to effect tangible institutional, cultural, political, and environmental change on earth while effecting a less-tangible spiritual deepening of religious life.” As the great universal, food becomes “both a symbolic and physical means for healing and rapprochement between human bodies and the earth body.” Which, fundamentally, are not two different things: in Sister MacGillis' eyes, “We are the Earth nourishing itself.”⁹³

4. The Murrays

Laura and Scott Murray live in Vista, California, on a hill overlooking the fields and hills of North San Diego County. They are self-described “Slow Foodies,” with Scott holding several

⁹² Ibid., p. 459

⁹³ Taylor, p. 461

key positions in Slow Food-related organizations. He is Chair of the Board of Slow Food San Diego, Chair of the San Diego Earth Day board, Chair of the Resource Conservation and Development Council, and Vice President of the State Association of that same council. Laura works as an organic food inspector, inspecting both family farms and “organic” (her quotes) industrial agriculture. Both have been involved in slow food movements and active in running a farm for both the family and outside buyers, for many years; but it has only been recently that Scott and Laura have come into property of their own in which they have the capacity to farm and grow their own food, a dream that has been in the making for over four years.

The day I visited their farm was a Saturday in early spring of 2009, a few weeks before anything got planted. Sitting with Laura on that warm afternoon, overlooking the rows of dark brown earth and previously existing trees that they are nourishing back to life, Laura spoke with me about her food and spiritual philosophies, which, as it turns out, are quite intertwined with each other. A theme that came up again and again in our conversation was that of taking active responsibility for one’s own life and expressing one’s full agency in the world. Laura’s spiritual philosophy emphasizes this, she explained, and “as I’ve educated myself over the last few years regarding the industrial food model, [I have realized that] the way I can take responsibility for my life...was to move to a place where I could have my own growing grounds, grow my own food and potentially food for others.”⁹⁴ Food, for her, is that which nourishes and sustains her body – her “temple.” And to take responsibility for that food means to produce her own. Her direct inspiration for the idea of being a producer of food, rather than a consumer, lies in a speech given by Vandana Shiva at Terra Madre, a gathering of food producers – farmers, fisherman, shepherds, and artisanal food producers – hosted by Slow Food USA in October of 2004. In her speech, Shiva stressed how people in the world are currently being taught to

⁹⁴ Personal communication, 04/04/09

“consume, consume, consume.” Instead of this, she said, we must become “prosumers,” people who *give* to the whole process of the world, people who both produce and consume. “I’m privileged,” says Laura, “to have been born in the United States. How can I live my life with less of a footprint, so that there is less suffering in the world? This [garden] is how I do that. This is how I become a prosumer.”

As an organic inspector in her day job, Laura is all too familiar with the status of both conventional and organic-industrial standards in the United States. She agrees with “beyond organic” farmers like Joel Salatin (many of whose books line her bookshelves) that applying the term “organic” to massive monocrop farms is questionable at best. She struggles on her trips to farms to find food that she feels comfortable eating; in particular, she takes issue with the amount of GMO’s (genetically modified organisms) present in nonorganic food. “When I go out into the real world, [the scary thing is,] I’m eating GMO food. It’s very hard to stay away from it, [because] it’s not labeled. And hardly anyone knows about it.” It was becoming a food inspector that continued to develop in her the desire to produce her own food: “When I travel for work, the choices that I have for food diminish. When I’m close to home, I can eat my own food. At home, 80% of my meals are from scratch. Taking those trips...got me thinking about how I can make choices in my life, how I have to be mindful of what choices are available to me.” Speaking of how it feels to eat and prepare food from the farm her husband runs, and how it will be even more so with food from her own garden, she says, “there’s [such a] sense of satisfaction [when I] go into [the rows] in the summertime, and walk up with a basket full of eggplants and tomatoes and lettuce and cucumbers and peppers, and make a delicious, healthful dinner with the things that I’ve just harvested. And preparing that meal, I feel like it’s the deepest love that I can share with my family, who are truly God’s gift to me.”

The role of God in Laura's garden is the same role as God plays in the rest of her life, one of constant presence and utter creativity. Says Laura of her spiritual⁹⁵ beliefs, "I'm a Religious Scientist. I study the teachings of Ernest Holmes, who wrote the Science of Mind. It's is a study of all the major religions [of the world]...the commonality of [which] sparked something in him [Ernest Holmes] that became a faith." When asked about how she conceives of God, Laura looks out across her garden, at a hawk soaring on thermals right above us. "God is the breeze that's blowing on my face. God is the birds singing in the garden. God is all around me; God is Ultimate Intelligence. God is the Creative Thought behind all things that humankind does."

She pauses for a moment, and then tells me of a book she read by Michalle Small Wright, called Behaving As If the God in All Things Mattered. That book, she says, shifted how she thinks about her garden. "I realized that I don't have dominion [over what happens in my garden anymore.] I'm in a..." she pauses to watch the hawk again and consider her words, "...a symbiotic relationship with the earth. I am the human that is being trained by nature to grow food" in ways that enhance and nurture it, not destroy it. In her book Wright describes what she calls the "nature intelligences" or "Devas," which Laura describes as "the Divine aspect" of how growing food works. In her eyes, the "nature intelligences" and God are one and the same. Now, she approaches her garden and her food from a sense of "What does God want me to plant here? How does God want me to grow [something] here?" It is clear that working in her garden, as with many other aspects of her life, gives Laura a sense of communing with the Divine.

The vision for the garden and the experience of the Divine that Laura finds in it does not just stop with feeding her family. They plan to sell a lot of what comes out of the garden, and Laura says that as she continually asks the questions, "What does God have in mind for this garden?" The answers that come up in the back of her head have to do with involving others in

⁹⁵ I use her term "spiritual" in place of "religious," which she did not use to describe herself or her belief system

the growing process. Laura says that the mission she feels developing for herself and her family is one of spreading awareness about homegrown food, and teaching others how to do what she and her family are doing. Particularly youth: “I keep seeing youth here. Not necessarily just [youth] from my spiritual community. Maybe there are kids from the local high school that come and help, or elementary school kids that come and see what a backyard farm can look like... There’s something that’s tapping at my mind about teaching people how to grow food. How does God want me to use this garden to teach other people how to do this?” Laura and Scott both deeply believe in the necessity and power of service to others; in food they have found their medium to give something back to the world:

We know that part of the reason we’re here and part of the opportunity of being here – both here on this property and here on this Earth – is to share with other people how to do gardening. And it seems like that’s happening all over the place now...my hope is that as we get further and further into [the era of] Peak Oil, that the privileged people in the west, especially the children, will learn and remember how to grow their own food.

Over and over again, what kept coming up as I spoke with Laura was the idea of connectivity. In Laura’s eyes, everything is connected, and this is directly as a result of her theological beliefs. In speaking of God, she used many metaphors and descriptors, but one of them defined God as “the connectivity of everything in life.” To borrow from Catherine Keller, “God is in and through and around all of this.”⁹⁶ Since God is (in) everything, “God is the connection between all things, the truth that exists between all things.”⁹⁷ This theological idea about God, according to Laura, also applies to everything else, since everything is God. Laura’s garden illustrates this connectivity: for “just one small example, if I produce food here, for one thing, I’m driving to the store less frequently, which means less gas used, which means less

⁹⁶ Keller, “The Flesh of God,” p. 92

⁹⁷ Laura Murray, personal communication, 04/04/09

polluting the atmosphere, which means less suffering on the planet.” This last idea – easing the suffering of others on the planet – is, as previously mentioned, a key part in Laura’s reasoning for wanting to grow her own food. In speaking of the role she feels God has called her to play in the world, she says, “I think part of what I’m here to do, as a person living a life where I’m guided by God in my actions, is to live simply.”

Laura brings closure to our conversation with a quote and a reflection:

So in the Bible it says that we [can] pray without ceasing. [That’s from] Ecclesiastes. That we can live our lives praying, without ceasing. So if I [am going to] live my life as a prayer, then I [must] speak with love to the people around me. I [must] act with love to the people around me. I [must] honor the Divine nature that’s all around me and in everything...there has to be reverence – reverence for all things, for the Divine in all things.

* * * * *

Seeing Laura sitting there, in a straw hat and a shirt that says “Let’s talk about Slow Food,” and looking out at neat rows of dirt awaiting their planting, I was most struck by the sense of enormous potential that was present in our conversation and in the brand-new garden. All the talk of God and the earth and making things grow had made me a bit reflective, a state of mind encouraged when I was allowed to spend some time working in the garden itself. Shoveling compost onto the hungry trees still recovering from their previous neglect, I felt the entire process of writing this thesis – my conversations with people about food, McFague’s embodied theology, and the hours spent thinking about God and food – find physical manifestation in the work I was doing. It’s one thing to read Sallie McFague’s theology about the universe being the body of God; it was quite another to kneel down and sift the compost I’d just shoveled between my fingers, and not only reflect, but FEEL, that I was contributing to a process that would not only sustain this part of God’s body, but enrich it – help it express itself even more fully. I

completed the afternoon by sitting down in Laura's kitchen and writing this part of this chapter, eating a carrot harvested from Scott's farm while I did. There are descriptions in many places about how *different* slow-grown vegetables taste compared to their conventional counterparts, and I know I am agreeing with many people when I say that what struck me most was the *life* that I tasted in that carrot. It was rich, it was crisp, it had multiple levels of flavor, but over all else, this carrot tasted alive. This should not surprise me greatly, however. According to Joel, that carrot *should* taste that way because it was grown the way food is supposed to be grown. According to Miriam MacGillis, that carrot *should* taste that way because in eating it, I am eating Spirit. According to Laura Murray, that carrot *should* taste that way because it was grown as part of a process to let everything in the universe express its Godself more fully.

5. Conclusion

In this chapter, I have tried to provide insight into ways of growing food that are alternative to the body-destroying methods described in Chapter One. Many of the people discussed had theological or religious motivations for growing food the way they do. Each situation featured was quite distinct from the other two: one was a full-time farmer, another a group of devoted Catholic women, and the third a family in the process of developing their vision to grow food for themselves and for others. But there are untold parallels and similarities that run beneath the surface of the work all of these people are doing. All are making efforts to be, in Laura and Shiva's words, prosumers, people who directly contribute something to the world as well as use things from it. All see food as the medium in which to do important ecological, moral, social, and health work; more specifically, all three see an alternative to the industrial model of food production as necessary to living rightly in the world. Most of all, the people of all three contexts share a love and respect for the way the world naturally works, a

process that is directly attributable to some vision of the Divine. In so doing, the people of all three communities highlighted in this chapter are working with the world, not against it, to grow food. In the process of sustaining and enriching themselves, they are working to sustain and enrich the world and its bodies.

Chapter Three: A Few Theological Reflections

1. Introduction

Having discussed at length two different “models” of growing food, industrial and “beyond organic,” I turn now to a process of theological reflection on these two models. In doing so I am echoing the endeavors of Gustavo Gutierrez and Victor Anderson. These theologians stress the importance of beginning “on the ground” with social realities – in each of their cases, Latin American poverty and racism – and then from that jumping-off point, beginning the process of thinking through the theological implications of those realities. The social reality that is my jumping-off point is how we grow food; and while it may seem incongruous at first, I believe that there are theological implications inherent in these processes, and that the differences between the models discussed in the previous two chapters lie in more than just methodology.

My goal with this chapter is not to write a theology of growing food. It is instead an attempt at reflecting on the theological differences between a model that degrades land, debunks chickens, and harms the humans it feeds, and a model that enriches the land, creates the happiest pigs someone has ever seen, and empowers the people who grow and eat its food. Through theological reflection, what can we discern about the worldview that might contribute to one of these models being adopted versus the other? What can we say about how each model approaches and treats the natural, physical world, or how it understands that world to be working? What can we say about the nature of relationships between humans, animals and earth in each model? And what do the answers to all these questions have to say about God? This chapter presents three theological ideas – taking bodies seriously, the presence of the Divine within the universe, and interconnectedness and complexity – that I found underlying many of

the food practices discussed in Chapter Two. For each idea, I first describe how these theological ideas are present in the food systems described in Chapter 2, and how they make those systems extraordinarily different from those described in Chapter 1. I then bring in theologians who are helpful in discussing each theological idea.

2. Bodies Matter

The first theological idea that comes out of Chapter 2 is that of *taking bodies seriously*. Taking bodies seriously, to me, means many things. It means to consider bodies a potential source of theological revelation. It means to be concerned for their well-being. It means, quite simply, to believe that bodies *matter*: that they should be thought about, listened to, cared for, enriched. This idea is interwoven throughout the stories of Chapter 2; the green sisters, for instance, have many reasons for making the food choices that they do, and many of those reasons are based on the well-being of many kinds of bodies. There is the earth body: the sisters express concern about the effects of conventional farming methods, particularly pesticides, on the land. There are animal bodies: Sister MacGillis deplores the treatment of animals in factory farms as not only inhumane, but unsacred, even sacrilegious. And there are human bodies: affected not only by pesticides, but also consuming food that has had “the life force” processed almost completely out of it. The body of the food itself counts as well: food grown in ways that do not harm the bodies of earth, animal and human is richer in spirit, in taste and in experience.

Joel and the Murrays, as well, take seriously the health of the bodies of the world. Joel and his family state outright that they are in the “redemption” business, a key aspect of which is healing the land on which his food and animals grow. Joel’s land, particularly his grass, is not only a tool to use or exploit; it is, as previously mentioned, a “subject in its own right.” And Laura finds inspiration for her food practices not only in helping to create a more sustainable

world, where there is less suffering for those who suffer, but also in the physical and spiritual nourishment her human body, and the bodies of those she loves, finds in homegrown food.

Another way to conceive of the idea of taking bodies seriously is to take the world on its own terms. This is something that Joel Salatin exemplifies to an extraordinary degree: his entire system of farming is based off of orchestrating processes of growing food and animals that already exist in nature. The best example of this is found in his description of “the pigness of the pig.” In using his pigs to create fertilizer, it is true that Joel is still “exploiting” them; but he is taking cues for how to exploit them from the pigs themselves, and not from his own conceptions of what he wants the pigs to do. He has looked at the pigs and asked, “How can I put to use the natural talents of a pig? What are these pigs telling me about how they can contribute to growing food?” He is, in other words, taking the pigs on their own terms. Unlike the industrial model, Joel is not telling his system how to work the earth; rather, the earth and all its complexities are telling him how his system should work. All three growers of food in Chapter 2 illustrate the idea of taking the world on its own terms, and “getting out of the way” as much as possible. In this schema, the approach of the grower is not to design, but to watch; not to dictate, but to listen; not to tell, but to learn.

In talking about taking bodies seriously, the first theologian to come to mind is James Nelson. Though his body theology is rooted in a particular expression of the human body – sexuality – he offers many insights that are helpful in taking all aspects of all bodies seriously. The main task of doing body theology, he states, is “critical reflection on our bodily experience as a fundamental realm of the experience of God.”⁹⁸ Again, he is talking primarily of human bodies; but “our bodily experience” can also be extended to the whole of experiences our human bodies have on this planet. For our human bodies interact not only with themselves and with

⁹⁸ Nelson, p. 43

each other, but with the bodies of the earth as well: trees, grass, rivers; cows, chickens, squirrels. And there need be no separation between our “human” bodies and the bodies of “nature”; what if we, too, considered ourselves as also bodies of the Earth, of the natural world? What if we took this bodily experience – all that it means to be human in this world – seriously as a site of spiritual and theological revelation? Doing body theology means to begin with the concrete.⁹⁹ It means to make the fundamental shift from thinking that we *have* bodies to thinking that we *are* bodies. It means to place significance on what happens to the bodies of the world – even beyond, perhaps, our own.

Bodies mattering, then, takes a huge first step towards answering the suffering experienced by the bodies of the world described in Chapter 1. The focus of the industrial model – efficiency at whatever costs – now becomes inappropriate and inexcusable, because it wholeheartedly ignores the damage being wreaked on earth, animal and human bodies. For a theology more suited to answering the needs of all these bodies, I turn now to Sallie McFague, whose groundbreaking work The Body of God offers a theology that not only takes bodies seriously, but breaks down the barriers between earth, animal and human bodies, and imagines them all as the body of God.

2.1 The classic organic model

Sallie McFague, in analyzing how we have gotten to this point of ecological destruction and where we are to go from here, concludes that what has gone wrong with modern thinking – and its Christian influences – is its reliance on a mechanistic model of the universe. At its root, the machine model of the world, so pervasive in our daily lives that it is difficult to articulate it, views everything in the universe as an aggregate of distinct and separate parts, acting on one another externally and subject to exhaustive scientific investigation. Accompanying the machine

⁹⁹ Nelson, p. 42

model is total knowledge of and domination over nature, as well as deism, the idea that God is external to the world, and interferes only when necessary. According to McFague, this model was not always the dominant mode of thinking of Western, even Christian thought; it developed only when scientists such as Francis Bacon started speaking of “‘entering and penetrating into the holes and corners’ to disclose ‘the secrets of nature.’”¹⁰⁰ What was once present in Western and Christian thinking was a more organic model of the universe, expressed by the phrase “the church as the body of Christ.”¹⁰¹ It is something like this model, McFague writes, that Christian thinking must return to in order to attend to the ecological crises facing the planet. She emphasizes, however, that it must be a return to something *like* that model, not that model itself. For in many ways the classic organic model of Christianity was deeply problematic, in ways that would contribute to the domination and destruction of nature when Protestant Christianity and scientific mechanism would later fuse together.

The first main problem with the classic organic model is that it was spiritualized, completely removed from all physical aspects of the world. Early Christian writers such as Origen saw the universe as animated by the World-Soul or the Logos of God, a model that possessed “a sense of divine immanence in the entire natural order that [and] include[d] all life-forms and all human beings.”¹⁰² The model that Christianity adopted, however, was the model of the church as the body of Christ, with Christ at its head. This model is dualistic and hierarchical, with spirit separate from nature, human beings (particularly Christians) separate from other creatures and the earth, and the head of a human being (rational and controlling) from the body (physical and existing to be controlled).¹⁰³ McFague continues:

¹⁰⁰ McFague, p. 33

¹⁰¹ Ibid., p. 30

¹⁰² Ibid., p. 35

¹⁰³ Ibid.

In the Christian version of the organic model, the divine (here manifest in Christ) is not present in the whole of creation or even in the whole of the human being, but is located in and limited to the rational/spiritual part of the human being, the head.¹⁰⁴

Because the head of the human being was associated with masculinity, she continues, the dualism within this model both allowed and encouraged the “disparagement and at times abhorrence” of both women and nature, two concepts that were already inextricably intertwined. Christianity has a long history of ascetism – of despising and rejecting the body – that, McFague notes, “would be less curious if Christianity did not make extravagant embodiment claims in its doctrines of Christ, resurrection, eucharist and ecclesiology. In its view of the church and Christians as the spiritualized body of Christ, the Christian organic model “neglects the rich, diverse, physical plentitude of creation – in other words, it neglects just about everything.”¹⁰⁵

The second, and more deeply, problematic aspect of the Christian organic model was the particular body that formed the basis for the model – the ideal, human, male body. Using this male body disregarded and marginalized more than half of the population to whom the model was addressed, and left the vast majority of living creatures in the universe out of the picture. But the main problem with this model was that it used only *one body*. The young, physically fit, white human male body (represented by Leonardo’s famous drawing of a male figure with arms and legs outstretched to the four corners of the cosmos¹⁰⁶) was believed to represent what was good for everything other kind of body in the world. This is the aspect that, if changed, would change nearly everything about the classic organic model that is problematic. “What if,” McFague asks, “the organic model did not assume a human (male or female) body for its base,

¹⁰⁴ McFague, p. 35

¹⁰⁵ Ibid., p. 36

¹⁰⁶ Ibid., p. 30

but bodies, all the diverse, strange, multitude of bodies (matter in all its millions, perhaps billions of forms) that make up the universe?”¹⁰⁷

2.2 *A theology of all bodies*

In The Body of God, McFague presents a theological solution to the ecological problem that is wholly based on taking the concept of bodies – not just body – seriously. What is needed, she states, is a “way of thinking about God’s transcendence in an immanental way”¹⁰⁸: to interpret the world as revelatory, as humanity’s meeting place with God. In other words, for the world and all its bodies to literally, metaphorically, and most importantly, theologically, *matter*. Her theology is based on the embodiment of God in the physical world, suggesting that “the primary belief of the Christian community, its doctrine of the incarnation (the belief that God is with us here on earth), *be radicalized beyond Jesus of Nazareth to include all matter*. God is incarnated in the world.”¹⁰⁹ Her theology attempts to look at everything – scripture, theology, praxis – through the lens of the world and the universe as the body of God, reinterpreting Christian questions through this lens of bodies (something that Christianity has traditionally had trouble with):

“What would it mean, for instance, to understand sin as the refusal to share the basic necessities of survival with other bodies? to see Jesus of Nazareth as paradigmatic of God’s love for bodies? to interpret creation as all the myriad forms of matter bodied forth from God and empowered with the breath of life, the spirit of God? to consider ourselves as inspirited bodies profoundly interrelated with all other such bodies and yet having the special distinction of shared responsibility with God for the well-being of our planet?”¹¹⁰

¹⁰⁷ McFague, p. 37

¹⁰⁸ Ibid., p. vii

¹⁰⁹ Ibid., p. xi. Italics mine.

¹¹⁰ Ibid., p. vii

In other words, if mainstream Christians believed that bodies mattered – for bodies “are not all that matters, but they do”¹¹¹ – how might that change their way of being in the world?

McFague believes that a reinterpretation of the world as God’s body can give Christians a new way of being in the world; a new context for reevaluating who they are; a functional cosmology for the love and care of their planet, for seeing themselves ““living in the earth as [their] home, a home [they] share with many other beings as parts of the body of God and loved by God.”¹¹² As a unique and special part of God’s body, humans become God’s partners in helping life on Earth to prosper. McFague’s model of the earth as God’s body, while only one model, only one offering, is an offering that Christianity can make to “the planetary agenda of our time” and have it really make a difference. For the planetary agenda of our time is one “that calls for all religions, nations, professions, and people to reconstruct their lives and their work to help our earth survive and prosper.”¹¹³

3. A panentheistic approach

McFague’s model of the world as the body of God leads right into the second theological idea coming out of Chapter 2: a panentheistic view of the universe in which a Divine force resides in all bodies. Laura’s description of God as the breeze blowing on her face and the birds singing in the garden is a wonderful example. Laura conceives of the entire world as being infused with Divine Spirit; but in a truly panentheistic model, God cannot be confined to Its physical manifestations. As the Ultimate Intelligence and force of Creative Thought behind the world, God is present in all creation but is not absorbed Its creation. The green sisters see the food they eat as infused with Spirit; as Sister MacGillis says, “Matter and Spirit are one!” When food is processed, part of what is lost is the life force present inside the food. The sisters

¹¹¹ McFague, p. viii

¹¹² Ibid., p. xii

¹¹³ McFague, p. viii

experience this vividly (as did I, sitting in the Murrays' kitchen eating a carrot) when they cook and consume food that has been grown by their own hands. Even Joel Salatin, while certainly not subscribing to a panentheistic view of the universe, sees God at work in the world around him when he says that the methods God created are the ones that humanity should try to follow. Orchestrating the dance between grass, cows, chickens and pigs, for him, is really about nurturing processes that God, the Divine Force of the universe, already dreamed up. It seems evident that Joel finds God in looking at what he perceives as God's work – the diggings of earthworms, for instance, or the joyous snorting of pigs. In his own way, Joel displays the same reverence for the Divine in all things that Laura Murray speaks of as she looks out at her garden – a reverence that they both express through how they grow their food.

What is most evident in Laura's theology, and to a lesser extent in that of the green sisters, is panentheism: God in the world and the world in God. There are numerous theologians that are helpful here – McFague, C. Robert Mesle, and Catherine Keller are three process theologians who to greater or lesser extents speak of a God that is wholly present in the physical universe. McFague's theology of the Body of God is, perhaps, most instructive, because it is a theology that is specifically ecological; but before further discussing that model, I wish to detail some of the ways in which Mesle's remarks on "God in the world" can be useful here.

3.1 Reflections from process theology

The idea of God on which process thought is built is the statement "God is love."¹¹⁴ God is that which expresses as life, creativity, and love everywhere in the universe. In describing everything in the universe as an expression of God, Mesle's focus is not just on the fact that God is present in all things, but on the role humans can play in helping God express more of God in the world. "We are surrounded by a world in which God is at work giving and sustaining life...In

¹¹⁴ Mesle, p. 1

each blade of grass, in each cell of our bodies, God is already present and active.”¹¹⁵ Our in responding to that sacredness inherent in the universe is first of all, Mesle says, to listen. Our first step is to listen for how God is expressing in the world. Once we have heard that, we may then be moved to act – to “change the [aspects of the] world that obscure God’s voice.”¹¹⁶ And the worst and biggest way in which God’s voice is obscured in the world, according to Mesle, is when God’s body, *any* part of God’s body, is impoverished, put down, or made to suffer. God does not express Itself through suffering (though God is certainly present in suffering); God expresses Itself through the flourishing and thriving of Life.

Part of the role of one who wishes to know God more, then, is to lend themselves towards the thriving and enrichment of anything God is expressing as – in this case, everything in the universe, grass, cows and humans alike. But it is not merely a matter of helping parts of God’s body thrive; it is just as important to not play an active role in impoverishing *any* part of God’s body. “When we impoverish others we also impoverish God, for the divine life...is continually sharing the lives of all.”¹¹⁷ Mesle continues:

It is possible to add and subtract from infinity, to add to it more or less. God’s life is infinitely rich; yet, God shares the life of the world, of my wife, of my children, me and you. Had we made better decisions, we could have contributed greater richness to God. We could have given God more with which to work in God’s ongoing effort to bring about good.¹¹⁸

Mesle concludes that “we had better have a care about the world in which we live,” because how we treat the world is, to an extent, how we treat God. Since God is present in the land that we degrade, we are contributing less richness to God when we degrade it. Since God is present in the cow and chicken that die in such horrible conditions in a factory farm, we are getting in the

¹¹⁵ Mesle, p. 113

¹¹⁶ Ibid.

¹¹⁷ Ibid., p. 57

¹¹⁸ Ibid.

way of God expressing Itself. And since God is present even in us, even in our human bodies, how we treat those bodies, both our own and each others', can lend itself towards either greater or less thriving of God.

3.2 "*The flesh of God*"

Having already reviewed McFague's theology in the previous section, I turn now to the musings of Catherine Keller on that theology, found in an article named "The Flesh of God: A Metaphor for the Wild." Keller responds to McFague's theology while sitting in a brook, while in nature's midst. Her response is part reflection and meditation, and part theoretical analysis and contribution. Her reflections, written while sitting in a brook, agree with McFague that there is something inescapably divine about the natural world: "[The] intuition trickles in again...God is in and through and around all of this. This is a little complex bit of God's infinitely complex body. This rock is God's tough flesh, this stream God's fluid, this insect God's sprightliness, this friend God's thoughtfulness."¹¹⁹ She admires McFague's model for never claiming "the power to explain or even to describe"; instead it is merely an "imaginative construct" that encourages humanity to see, be, and act differently in the world – in ways that involve more trust, ethics, and love.¹²⁰ Keller goes on to explore some of the more abstract challenges of McFague's model, such as the precise nature of the relationship between God and the universe – is it dualistic? single? Or somewhere in between? Keller takes the latter course, advocating for an "open-ended panentheism" in which God is not identical with the material world, but also not separate from it; there is "a strong distinction but no sharp line" between the spirit of God and the spirits of creatures.¹²¹ Her concern is the precise connotation of the "in" of "God in the world" or "spirit in the flesh," and her conclusion is that it at once resembles both the "relational 'in' of intimacy" –

¹¹⁹ Keller, p. 92

¹²⁰ Ibid., p. 93

¹²¹ Ibid., p. 95

such as that between lovers or a parent and child – and the “organic ‘in’ of the sap in the tree, the blood in the veins, the fetus in the womb.” She continues:

God, who is the universe, is in each thing and each actually existing thing is immediately in God, as is the universe. Therefore, to say that “each thing is in each thing” is not other than to say that “through all things God is in all things” and that “through all things all things are in God.”¹²²

She finishes her contribution with a plea for theology to display more “confident uncertainty” in the face of this vastly inexplicable world in which we lived, a world that we are only just beginning to understand. Her plea for a theology that stands “on the edge of chaos” is similar, she says, to the actual world in which we live: whether in spiral galaxies, traffic jams, whirlpools, or leaky taps, the parts of this world that are most interesting and complex are those which are happening just at the point where order fades away, and where chaos commences. The order and authority of older paradigms must be abandoned for a more open-ended way of viewing the universe, a universe that is held together right on the edge of chaos. She refers to the conceptualization of God in Job as a possible source of insight into this idea: the whirlwind poetry that “stresses the wildness, the utterly undomesticated and untameable life of the creation.” The whirlwind that is God, she says, in his monologue to Job is chastising us for how we treat the world: that we “dare indeed to make *merchandise* of the *wild itself*, who *commodify* the *incarnation* of the *deep*.”¹²³ We have, in short, oversimplified everything – and caused great harm in the process.

While the theology of McFague and Keller is one that has the broad, overall ecological problem in mind, I think it can be a very powerful theological basis on which to approach the suffering bodies of Chapter One. Like with Mesle’s model, now these same life-forms are thrust

¹²² Keller, p. 96

¹²³ Ibid., p. 102; emphasis mine

into a very different light, and take on a very different form and meaning. No longer are the earth, tomato and cow tools that exist for the benefit of humanity; rather they are unique, individual, indispensable parts of the Divine. Nor are humans whose health and livelihood suffers under the industrial food production system so easily dismissed; for we all are parts of God's infinitely complex body, and God's partners in ensuring the well-being of this planet.

4. Unity, diversity, and interrelatedness

One of the most important corollaries of a panentheistic model is also the third and final theological idea discussed in this chapter: *unity, diversity and interrelatedness*. It is the assertion that, within a model of the universe as God's body, everything is interconnected: there is nothing that is completely separate from anything else. Yet everything is also unique, having its own niche and playing its own special role in the unfolding of the universe. The real-life manifestation of this theological idea is relationships of mutuality and symbiosis, where participants in a relationship have relational power rather than hierarchical power. These ideas of undeniable interrelatedness, mutuality and symbiosis are one of the few *modus operandi* that is evident in every single grower of food discussed in Chapter 2.

4.1 Unity in diversity

The theology that is occurring here is somewhat complex, so I will draw on several theologians to help me elucidate it. First comes Sallie McFague, whose concept of unity in diversity I have borrowed to title this section. As a source for her model of the universe, McFague draws on the common creation story – the development of the entire universe, in its stunning complexity and diversity, from first a single point of matter and then from the ashes of exploding stars.¹²⁴ This story of the evolution of the universe, says McFague, is staggering – “staggering both in the simplicity and seeming sterility of its beginning and in the complexity,

¹²⁴ McFague, p. 44

fertility and diversity of its present reality.”¹²⁵ The more we learn about the universe, whether through galaxies, grass, ecosystems, or each other, the more we come to realize not only that diversity is the direction in which evolution tends, but that diversity in nature is its strength, not its weakness. This is very much in harmony with the idea of panentheism, where diversity simply represents the manifold ways God has of manifesting in the world. Regarding religion, for example, Mesle points out that much richness and beauty in the world would be lost if the world had been entirely Christian or entirely Buddhist.¹²⁶ The same is true when languages die out, when species become extinct, when great works of art or literature or culture are lost: a little bit of the beauty, richness, and unfathomable diversity of God’s body has been lost when this occurs.

This diversity of God is so great that none of us can ever hope to understand all of it. The scope of everything in the universe is unimaginable to us, for as McFague says, we have only “middle vision” – we can comprehend a blade of grass or the awesomeness of a mountain, but we cannot comprehend the size of an atom nucleus or the vastness of a galaxy. But one way it might become a little more understandable is through McFague’s model, which draws on the common source that is shared by all life in the universe. “We are all made of the ashes of dead stars” is one way of putting this; Neil Degrasse Tyson put it best, I think, when he said that “not only we are in the universe; the universe is *in us*.”¹²⁷ McFague summarizes the unification of the diversity and unity inherent in the universe when she says that

the common creation story is uncommon because it is the wildest, most outrageous, most awesome tale conceivable: from an initial explosion, an infinitely hot, infinitely dense matter/energy event billions of years ago, the entire universe has evolved into its

¹²⁵ Ibid., p. 43

¹²⁶ Mesle, p. 102

¹²⁷ Neil Degrasse Tyson, quoted on The Daily Show With Jon Stewart, 1/30/2007, retrieved on 04/18/09: <http://www.thedailyshow.com/video/index.jhtml?videoId=81508&title=Neil-deGrasse-Tyson-Pt.-1>

present complexity, diversity, size and age. The common/uncommon character points to one of this story's critical features: a kind of unity and diversity...that is based on radical relationship and interdependence and yet produces the most stupefying array of diversified individuals.¹²⁸

It is this range of “diversified individuals” that a model like McFague's is fully prepared to confront – bodies, in all their stupefying complexity, that all ultimately have the same source and share the same destiny on this lonely planet spinning through the universe. Rather than engage in “plethoraphobia,” the fear of different kinds of bodies (a term she borrows from feminism), we must face this diversity squarely in the face. Rather than strive to understand it, or pretend that it does not or should not exist, a productive first step would be simply to embrace this diversity as a natural and right state of the universe.

4.2 Undeniable interrelatedness

In our universe, then, everything is connected. Whether its source is God or the common creation event, every complexity in the universe is connected to every other complexity. Here we hear echoes of Joel Salatin's description of how his farm works. He can never just change one thing about how his farm runs; since everything is mutually interdependent, to change one thing is to change many different things. This notion of connected-yet-special, many-but-one, not-one-not-two is best expressed, I believe, by Arthur Koestler's (and Joel Salatin's) term *holon*. Holon, as discussed in Chapter 2, was coined to describe the mutually interdependent nature of the parts-in-a-whole of a biological or ecological system. It can be difficult to separate holons from each other, or even to precisely define them, because while at times they appear separate and independent, at other times they are inextricable from other processes or parts. Holons are a far cry from the distinct aggregate parts that comprise a linear industrial system, wherein a clearly definable input gets plugged into a machine and produces a neatly defined output. A system with

¹²⁸ McFague, p. 27

holons is *messier* – harder to draw up and even harder to reproduce correctly. But as we learn from Joel, the natural world operates in holons, and produces incredible results in the process(es). Joel can never change just one thing on his farm, for to change one thing is to change many things. In fact, it might even be said that there is never any “one thing” to change – for everything on Joel’s farm is defined in relation to something else.

The relationships found on Joel’s farm are the kind of relationships one would expect to find in a system of interrelatedness: relationships of mutuality and symbiosis. Unlike the industrial model, where one component must *take* something from another component in order to gain something for itself, the holons of Joel’s system enhance each other as they enhance themselves. They are, to borrow Laura Murray and Vandana Shiva’s word, *prosumers* – giving back to the world as they receive things from it. It is not just the holons of Joel’s system that embody this idea; the green sisters and Laura Murray do as well, both in their theology and their practice. Laura’s description of God as “the connectivity of the universe” illustrates the idea that nothing is separate or independent, for all things find God as their source. And though they are nothing but beans that she passes around, Sister MacGillis describes them as “hav[ing] the whole story of the universe in them.” James Nelson describes this as the body being “the very universality of things. My body is not a part of the universe that I possesses totally – it is the totality of the universe that I possess partially.”¹²⁹ The bean, then, is not a body that is actually separate from mine. It is a physical form that is drawing from the same God-body that I am.

4.3 Reacting with love

When confronted with a universe where a staggeringly different assortment of complexities are all connected through one ultimate source, whether that source be God or a common creation story, how is one to react? Keeping with the motif of diversity, there is, of

¹²⁹ Nelson, p. 50

course, no one single way. But here, I wish to share my own reaction to it; and in doing so I find Catherine Keller to be extremely helpful. In speaking of the “chaos” which confronts her as she looks at the universe – “the others in their singularity and multiplicity” – she speaks of this array of “diversified individuals” as *demanding* something from her. More specifically, demanding her sensitivity – and her justice.¹³⁰ My reaction when faced with the diversity of the universe is somewhat similar: once I am able to get past my urge to understand it, there is a sense in which I *owe* it something. It pushes me to honor it, and honor it on its own terms, not my own. If I try to brush over it, or look past it, or just pretend it does not exist, I am shortchanging that part of the universe – and thus, the universe itself. And if my model is panentheism, where everything in the universe is a manifestation of God, then to neglect diversity is, put simply, to neglect God Itself.

So what is one to do? As has been stated repeatedly throughout this thesis, it all goes back to *bodies* – acknowledging them, caring for their welfare, realizing their complexity and working for their well-being. And I believe I am in harmony with nearly all the theologians I have reviewed in this chapter when I say that one of the simplest (though certainly not the easiest) answers lies in love. Love for ourselves – for our own bodies. Love for each other – for each other’s bodies. Love for those creatures with whom we share this planet – for the bodies of animals. And love for the body on which we make our home – the earthly body. The theological ideas expressed in this chapter, and to greater or lesser extents expressed in the food practices of Chapter 2, all center around the idea of working towards wholeness, toward a world that works for everyone – toward a world where all kind of bodies can thrive. It is here that the metaphor and reality of food is particularly appropriate, for food is the source of nourishment and enrichment of all different kinds of bodies. This thesis has made clear that many current methods of producing food in our country do not enrich or nourish bodies, but rather damage and

¹³⁰ Keller, The Face of the Deep, p. 7

diminish them. If this is to change, we must work within a model that loves all bodies and wants to see them flourish. We must, in the words of Sister MacGillis, become the Earth that nourishes itself.

Conclusion

In this thesis I have attempted to explore connections between food, bodies and theologies. I have tried to demonstrate the utter disregard for bodies displayed by nearly all aspects of the modern industrial food system, and how this disregard has caused dangerous ecological damage, unethical damage to living creatures, and unnecessary and tragic damage to human health. I have then examined systems of food production completely antithetical to the industrial model, and how they consciously work towards the flourishing of bodies. Within these contrasting models I have found some theological points of interest that were worth exploring – namely, the idea that bodies *matter*. A model of the universe as interconnected diversities all sharing the same source supports this idea; but it is not necessary for the well-being of bodies to be important.

In its scope, its methodology, and its depth, I consider this thesis to be extremely incomplete. But through its incompleteness I have managed to conclude one thing. In the end, what matters is that *bodies matter*. A food system that does not take this concept seriously is a system in which irreparable and unacceptable damage can be done. And a food system that takes this concept seriously is a food system in which *all* bodies can flourish.

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