

Film 8, Being the Change and Tomorrow

Ok, we have talked quite a bit about what each of us can do about the climate crisis. This has included personal actions, climate activism, becoming politically active, communication, etc.

In terms of personal actions, we have talked about largely plant-based diets, food waste, automobile ownership, air travel, a minimalist approach to stuff, and so forth.

But what if you wanted to jump ahead to the endgame? In other words, what if you wanted to actually live a largely sustainable life right now? Would it be possible, here, in America? In California?

To be clear, what we are talking about here is reducing our greenhouse emissions to 1/10 of the average American's climate footprint.

And would it be possible for more than just an individual? In other words, could a family, let's say two parents and two children, live this sort of lifestyle in America today?

If so, what kind of life would it be? Could it possibly be a good life? A fulfilling life that made everyone happy?

At one point in the 2009 documentary *No Impact Man*, the lead character, his partner, and their small daughter are huddled in their dark Manhattan apartment, with seemingly no electricity and only candles for light. Is this what a sustainable future would be like?

Fortunately, there are other options.

The documentary *Being the Change: Live Well and Spark a Climate Revolution* chronicles the life of Peter Kalmus and his family (Kalmus, his partner, and their two children) as they attempt to live sustainable lives.

Incidentally, as Peter Kalmus is a climate scientist at NASA's Jet Propulsion Laboratory in Pasadena, California, he is particularly well positioned to accurately assess his own climate footprint.

And that footprint, as it turns out, is exceptionally small.

As Kalmus notes in the book of the same name upon which the documentary is based, his personal greenhouse gas emissions are about 1/10 of the average Americans. Specifically, Kalmus's emissions are about two metric tons annually. You might recall that this is about where we should all be to be in accord with the Paris Agreement from the COP 21.

As Kalmus notes in the book, "[t]his level of reduction, while incomplete, allows my family and me to continue a normal suburban life. This suggests that a similar reduction is well within reach for many of us. And as more people make significant reductions, and systemic alternatives to fossil fuel become increasingly available, going the rest of the way will become easier" (page 145, Kindle location 2561). Kalmus adds that "I still emit nearly twice the average Bangladeshi, and infinitely more than a wild, nonhuman Earthling [i.e. animals]."

It is interesting to note that this approach comes from a scientist – and a climate scientist at that. Given his background, we might expect that Kalmus would advocate for technological solutions like self-driving electric cars and a new generation of solar cells made with nanotechnology. Instead, he talks about bicycle riding and humanure.

By the way, the title, *Being the Change*, is a reference to that quote attributed to Gandhi that I keep mentioning: "Be the change you want to see you in the world." What might being the change be like in this context? Watch the film or read the book.

Here is how the publisher describes the book on which the film is based:

"We all want to be happy. Yet as we consume ever more in a frantic bid for happiness, global warming worsens. Alarmed by drastic changes now occurring in the Earth's climate systems, the author, a climate scientist and suburban father of two, embarked on a journey to change his life and the world. He began by bicycling, growing food, meditating, and making other simple, fulfilling changes. Ultimately, he slashed his climate impact to under a tenth of the US average and became happier in the process."

"Being the Change explores the connections between our individual daily actions and our collective predicament. It merges science, spirituality, and practical action to develop a satisfying and appropriate response to global warming...."

"The core message is deeply optimistic: living without fossil fuels is not only possible, it can be better."

Wait, "living without fossil fuels is not only possible, it can be better?" Really?

We are often told that the climate crisis will mean that we will need to do without a great deal: cars, planes, spacious houses, beef, scores of appealing consumer goods, and so forth. At face value, this sounds like a bland life of deprivation, especially when we think about the people that have all this – people who, as we say, “have it all” – like some people in my generation in wealthy countries.

Moreover, influencers – the people that we are encouraged to want to be – unabashedly flaunt the fact that they have mountains of this stuff.

Consequently, it may seem that the road to happiness is paved with carbon. Or more accurately, that you need to be responsible for the release of literally tons of carbon per month if you want it all – if you want happiness.

Peter Kalmus, in his own humble way, boldly suggests otherwise. That, in fact, we have it all wrong; this stuff (and our preoccupation with it) will not make us happy. In fact, such preoccupations will likely have the opposite effect.

I know, this runs completely counter to what the companies hourly selling us all this stuff tell us: that having it will make us happy – and not having it will make us miserable. And all those images of contented influencers posing in private jets confirms it.

Not only does Peter Kalmus believe – from personal experience – otherwise, a range of people are now coming to the same conclusion.

The film *Tomorrow* (in the original French it is titled *Demain*) documents the lives and efforts of some of these people. Here is what the filmmakers have to say about it:

"TODAY, we sometimes feel powerless in front of the various crises of our times."

"TODAY, we know that answers lie in a wide mobilization of the human race. Over the course of a century, our dream of progress commonly called “the American Dream”, fundamentally changed the way we live and continues to inspire many developing countries. We are now [however] aware of the setbacks and limits of such development policies. We urgently need to focus our efforts on changing our dreams before something irreversible happens to our planet."

"TODAY, we need a new direction, objective... A new dream! The documentary *Tomorrow* sets out to showcase alternative and creative ways of viewing agriculture, economics, energy and education. It offers constructive solutions to act on a local level to make a difference on a global level..."

"TOMORROW is not just a film, it is the beginning of a movement seeking to encourage local communities around the world to change the way they live for the sake of our planet."

I am curious to hear your thoughts on *Being the Change* and/or *Tomorrow*. Is this indeed “the beginning of a movement,” the beginning of a profound change in the way that our species inhabits this planet?

Class discussion of Being the Change and Tomorrow

Note that the following observations, which are in italics, have not been paraphrased or altered, though I do correct the occasional typo and, because of space concerns, often just part of the comment is reproduced here along with my reply. In working through these, I will first quote a student’s observation, followed by my thoughts.

This week’s film truly made me rethink the way I live. Seeing such a happy, mentally healthy family living their lives in a very sustainable way was eye opening for me. The most eye-opening part of the film for me was just the simple fact that Peter went to Harvard, works for NASA, and has all the brains and probably money in the world to live in a massive mansion with ten cars, yet he lives in a quaint home in Pasadena with his vegetablemobile of a car and his happy little family.

Many people shared this sentiment. Here's another example:

Peter Kalmus is the perfect example of living a happier life without fossil fuels. His life isn’t a situation where he is simply making the best out of what he has. In fact, he has the brains and the resources to make a lot of money, especially with his Harvard degree. He had the opportunity to drive a nice car, live in a big house, and do all the things that we think will make us happy. Instead, he gave up a potentially lavish lifestyle to live one that involves less things, and more happiness. More relationships, mindfulness, peace, and joy.

Peter Kalmus is an inspiration in more than one way.

First, the fact that he dramatically reduced his individual climate footprint is certainly inspirational.

Second, as these comments note, given his obvious gifts and education, if Peter Kalmus had aspired to the American dream, it is likely that he could have gone to someplace like the Silicon Valley and "had it all." Although many people pine for it, few of us (myself included) actually have the ability to fully realize the current supersized version of this dream. All indications are that Kalmus could have been one of the lucky few.

However, as a climate scientist, Kalmus knew full well that the American dream is a climate nightmare. Consequently, acting on this knowledge, he turned his back on it to instead imagine a new, environmentally sustainable dream.

In this sense, Kalmus is a shining model for many of us in wealthy countries like the US. While we are in a position to pursue the American dream, we are equally in a position to, like Kalmus, reject it.

To many Americans, voluntarily walking away from the dream and the hope of having it all may simply be ridiculous. However, as Peter Kalmus explains, he was instead walking toward a better, happier, and more sustainable life.

Finally, and perhaps most intriguing here is the fact that Kalmus does not focus on technological solutions, as we fully might expect a scientist would do, but rather on simple little changes to our everyday lives. In this sense, Kalmus's profession really had little to do with the film. In other words, it could have been a film about a person of virtually any other profession who set about to live a sustainable life.

This is a rather profound message coming from a scientist.

It also means that we do not need to hand over the future of the planet to scientists and technological solutions. Rather, anyone can make the sort of lifestyle changes that Kalmus did. In fact, for these changes to make a difference, everyone (or nearly everyone) needs to meet them, as just one person (or one family) is not enough.

After watching the documentary, I was fascinated by how Peter Kalmus reduced his emissions by more than a factor of ten yet still kept an average lifestyle.

Although I also drew attention to this fact in the introduction, it is worth focusing on this rather altogether achievement.

To quote this person's succinct comment, "Peter Kalmus reduced his emissions by more than a factor of ten yet still kept an average lifestyle." As this person notes, it is not just that Kalmus was able to reduce his emissions by such an extraordinary amount, what is in some ways even more amazing is that he still kept a pretty "average lifestyle."

In some sense, that is the real story here.

I suspect that most people believe that it's possible to reduce your GHG emissions by a factor of ten. But what would such a life be like? One of the reasons that few people attempt to go all in and do something like this is because they imagine that it would be a pretty horrible life, deprived of all sorts of things that make life worth living.

But Peter Kalmus subtly but powerfully makes a counter argument: the things that we have been told will make us happy simply don't. And the little things that we take for granted, like time with friends and family, are a far more reliable source of happiness – and, as a terrific bonus, generally do not require significant GHG emissions.

When watching the film "Tomorrow" I was reminded that there are many good people in this world who want to make a difference. Sometimes I get really discouraged, not only by the

damage that we are inflicting on our planet, but also by the number of people who are willing to do nothing and watch the world fall apart – or worse yet, continue to actively support the systems that are causing all this harm. It was refreshing to hear people discuss their solutions. I love how the film took us to different places around the world and showed us how people are making real changes in various locations. One of my favorite little changes was the public space gardens they introduced in the U.K. Not only do these gardens provide sustainable foods, but the fact that they are out in public on busy roads allows space for people to open up in conversation about them. Their public appearances spread awareness. I like this change because it doesn't seem difficult to do. People in the US seem to be resistant to major changes, but I feel like many would support a small change like the gardens.

The documentary on Peter Kalmus is, in a certain sense, bittersweet.

It is terrific to see what this one family has done, but this is, after all, just one family. Yes, we do meet a few of Kalmus's friends along the way, but this hardly seems like a social movement.

This is why I paired the film on Kalmus with the documentary *Tomorrow*.

All across the planet, all sorts of people are making all sorts of changes in order to mitigate the climate crisis. These people are not generally high-profile influencers, which is, of course, deeply unfortunate. It is provocative to think about what would happen if just one A-lister abandoned their opulent life to live like Peter Kalmus and his family.

They may not be A-listers, but the various groups and individuals documented in *Tomorrow* are definitely making a difference.

As this comment aptly notes, even small projects, like public space gardens, can have a larger impact if they, to quote this person, "open up a conversation" about the issue. In essence, this is a form of communication, though there is no need for a single word to be spoken, as the project itself gets the conversation going.

This person also focuses on an important point: While "[p]eople in the US [and elsewhere, do indeed] seem to be resistant to major changes," they may well "support a small change like the gardens." And this may be the beginning of something bigger, as little steps can often lead to greater change.

Watching Peter Kalmus' day-to-day routine was really inspiring to me! Where he lives, in Pasadena, is about 20 minutes away from my hometown! Seeing him in Pasadena really opened my eyes to how possible it is to live an incredibly climate-conscious lifestyle, while still living in a desirable place, and having different aspects of the so-called "American Dream." While it was inspiring to see Kalmus so close to my hometown, it was also a bit disheartening, because I realized how little I know about the efforts toward mitigating the climate crisis in my community! Peter spoke about collecting veggie oil, free fruit stands, and going to community meetings, none of which I even knew about! And they're right in my backyard!

This coming hits on a number of other important points.

First, the sort of changes that we need to make to mitigate the climate crisis can be made anywhere, even in our own hometown, places like Pasadena, California.

Pasadena is an intriguing example, as it is, generally speaking, a pretty wealthy community. Wealthier than most communities in the US and certainly wealthier than most communities across the globe.

Consequently, it might seem that this sort of wealth and environmental sustainability are not compatible. In other words, we might imagine that wealthy communities are filled with big houses, lots of cars, tons of consumer goods, etc. And some of them no doubt are. However, Peter Kalmus provides something of a blueprint for how even wealthy communities can become sustainable.

This is especially inspiring, as it makes clear that, as this person aptly notes, it is possible "to live an incredibly climate-conscious lifestyle, while still living in a desirable place, and having different aspects of the so-called 'American Dream.'" As such, in his modest way, Peter Kalmus is offering up a new version of the "'American Dream.'" One that is as desirable as it is sustainable.

[T]he American education system needs to do a better job at teaching people life skills so that they can have confidence to try acquiring other skills. I used to live in Mexico and over there they start teaching kids in middle school about mechanics and electricity amongst other useful life skills, which I have noticed mostly no one here has and it is no surprise that most people here just wait for someone else to fix the problem rather than attempting to contribute to the solution and that is a big problem.

This apt comment points to a subtle message from *Being the Change*.

In our consumer culture, we often rely more on our ability to purchase solutions than our skills to fix the underlying problem. This can have profound environmental implications, as we often throw away an object that doesn't work rather than simply fixing it. The problem here is twofold, as 1) objects aren't designed to be repaired and 2) most of us are not skilled enough to do the repair.

Throughout the documentary, Peter Kalmus (and many of the people to whom he introduces us) display a real roll-up-your-sleeves approach to problems. Instead of trying to purchase some sort of high-tech solution, Kalmus jumps right in and works through the problem. However, to be able to do this, he needs to acquire a host of skills, which he does.

As this person notes, the contemporary American K -12 educational system does not generally teach these skills. If you did, perhaps more people would, like Peter Kalmus, jump right in and start building a more sustainable life.

As I scrolled through these comments, I noticed that many people said the most interesting part of the film, "Being the Change", was the connection between meditation and the climate crisis. I can't help but agree. I first thought, why is this part of the documentary so long? What does it have to do with global warming, and why am I watching it? But now that I think about it, the connection is rather obvious. We have learned in this class about how in the US, often the idea of happiness is linked to the American Dream and consumerism, which drives our carbon footprints through the roof. Meditation, as well as other practices (such as religion, lifestyle changes, minimalism, etc.) help us to detach from the idea that happiness must come from owning more stuff, having a bigger house, driving a nicer car, and flying to extravagant places.

When Peter Kalmus Zoomed in to speak to one of my large lecture classes a few years ago, he noted that the section of *Being the Change* that raised the most eyebrows was on meditation. Peter was in fact surprised that meditation drew more attention within his advocating of humanure (i.e. the composting of human waste - which he thought would be the most controversial section).

In fact, many of the student comments focused on meditation.

Peter Kalmus begins the chapter on meditation in the book *Being the Change* with the following observations:

"Whereas the immediate physical cause of global warming is our greenhouse gas emissions, the deepest underlying cause of the broader predicament is our wanting. Wanting drives both consumerism and overpopulation. We endlessly want more: more money, more sex, more prestige, a faster car, a bigger house, fancier furniture. And when we get something we want, the relief from our desire is fleeting. In a short time, we again want more. Wanting is a bottomless pit."

"Not only is our wanting straining the biosphere to its breaking point, it's causing us to suffer. When we want something, it's because we're not satisfied in the present moment. Indeed, the entire purpose of the advertising industry is to cause us to feel unsatisfied with what we have. When we want, we feel agitated, unable to appreciate the miracles right in front of us."

If wanting and dissatisfaction with what we have is the source of the problem, what is the solution? To Kalmus, meditation is part of the answer, as it focuses us on the present moment, which is where true happiness can be found.

As the Buddhist monk Thích Nhất Hạnh notes, meditation "is an opportunity to take time to sit down and figure out what true happiness really is. We discover that we already have more than enough conditions to be happy, right here, in the present moment."

Simply put, once we realize that true happiness can be found right here, in the present moment, then there is no need to pursue it through an endless array of consumer goods.

To someone who does not have a meditation practice, this may sound paradoxical, even a little ridiculous. How can not having anything give us happiness? Don't we need things to make us happy? In this approach the answer is decided "No." Things only add to our suffering.

If you stop to reflect on this insight for a moment, you realize the profound implication that it has for the climate crisis: a lavish lifestyle filled with things both exacerbates our suffering *and* the climate crisis. Meditation thus promises to make both our lives and the planet better.

The film "Tomorrow" reminded me a lot of my childhood. I grew up in Louisville, Kentucky which is the 15th largest city in the United States (despite people assuming there's nothing in Kentucky). A big part of my summers in elementary school was "Garden Camp" which was hosted at a church run by some of my parents' friends. The entire day is spent learning how to grow food, how to harvest it, and how to turn it into yummy meals. We picked tomatoes to make into pasta sauce, we ground up corn to make into fun dishes, and we learned about edible flowers to make pretty cakes. This was such a fun experience for me but because I was so young, I didn't see the value in these skills and just saw a way to get dirty...I really appreciated this film because it did more than just show us everything we're doing wrong. It showed us more than just "be vegan." I think it's extremely important to see how interconnected our society and culture is with environmentalism. Being able to see these examples of communities doing their part brings me lots of hope that we can hopefully implement this in the United States more. Yes, it feels small. But if more and more small towns and cities are able to implement this, I feel like our larger government might start listening.

There were many comments of this sort, including this one:

This week, I watched Tomorrow since I already saw "Being the Change" last quarter in Engl22. After watching it I'm honestly inspired. I feel like I want to go down to my local garden supply shop, go out into the backyard, and really get my hands dirty. Having grown up in a more rural place before moving to the suburbs at a young age, my family farmed and grew crops on the side while working their other jobs as a hobby (and took it as a supplementary income after retirement). I have fond memories from being a kid and going to the farmers market and selling our crop, and I still love going to markets and picking up whatever fresh produce looks good or whatever artisan goods look tasty. ..To be fair, the way that the whole urban farming movement has been brought to the public sphere has been pretty pastoral. It's being made to seem super simple, and to be fair, it is inherently simple as a facet of nature. But the interactions that happen between the crops, trade secrets, and the general finesse that goes into producing crops is a serious skill (like that farm in France that was working on their biodiversity). I'd be lying if I said that I hadn't killed my share of crops, since my thumb isn't very green. But farming is just like any other skill. Understanding what goes into it, what works, and what doesn't work, are really the most important facets to success. As time goes on and you work to improve the skills, you can really hone your craft and turn it into something successful.

Most people in the US have a somewhat disconnected relationship with our food. For the most part, there are quite a few intermediaries between us and the food that we eat. Consequently, we generally do not grow our own food, or even buy it directly from the person who grew it (with the exception, as the above person noted, of some farmers markets), but rather from stores that have little to do with the actual production of food.

Globally, the situation is very different. [Nearly three out of four farms on the planet are small \(usually family\) farms that are approximately 2.5 acres in size. Nearly 2 billion people, which is roughly a quarter of the earth's population, are subsistence farmers that grow their own food](#) on such small farms. This is common [throughout areas of Sub-Saharan Africa, Southeast Asia, parts of South and Central America](#), and elsewhere.

As the film *Tomorrow* reveals, there is a growing movement (pun intended) to reconnect people in wealthy countries like the US to the food that we eat. As both of these comments make clear, this can be "a fun experience" that creates "fond memories" that can last a lifetime.

The largest crop in the US is not soy beans or corn, but rather the turf grass that makes up our suburban lawns. The average US lot size is a little over 1/5 of an acre. An enormous amount of water, herbicides, and fertilizer is used to raise this crop. It also requires a great deal of time, which often means that suburban homeowners spend a significant chunk of their weekends maintaining their lawns.

What if, instead, we devoted this time and resources to raising food in those yards? Similarly, there are a range of open lots and other spaces in all sorts of communities that could be used to grow food.

Ken asked if this is the beginning of a movement, I personally feel like it is. I think that there are more people than before that care about saving our planet and are finding simple and even creative ways to reduce their carbon footprint. It really doesn't seem that hard to do so, we just have to remember it's not about owning more, but about owning less and just living a simple life. Walking or riding a bike to places instead of driving there, growing some of our own food, using less electricity, buying less stuff, wasting less food, and switching to a plant-based diet are not impossible things to do like older generations make it out to be.

This comment applies to both of the films that we had for this week. Both Peter Kalmus and the various people that we meet in the film *Tomorrow* found, as this person notes, "simple and even creative ways to reduce their carbon footprint."

As this person further aptly notes, "[i]t really doesn't seem that hard to do so, we just have to remember it's not about owning more, but about owning less and just living a simple life. Walking or riding a bike to places instead of driving there, growing some of our own food, using less electricity, buying less stuff, wasting less food, and switching to a plant-based diet are not impossible things to do like older generations make it out to be."

The fact is that none of this is impossible, or even undesirable, providing that you approach it with the proper mindset. As the two previous comments noted, activities like growing food can actually be "a fun experience" that creates "fond memories" that can last a lifetime.