Peter Salovey: Hello, everyone. I'm Peter Salovey and welcome to Yale Talk. Issues of food and sustainability are of vital importance in the 21st century. These extend far beyond the dinner table to encompass environmental stewardship, health, ethics, public policy. And in recent years, the COVID-19 pandemic has both exposed and exacerbated food insecurity. Crises like the war in Ukraine and the climate emergency continue to lay bare the fragility of global food systems. So here with us today are two experts in the field of food studies and sustainability. Mark Bomford is the director of the Yale Sustainable Food Program. And it builds on the university's long history with agriculture and farming to produce food-literate students who will become food-literate leaders. Mark has focused on climate change and sustainable agriculture since the mid-1990s, and under his visionary leadership, the Yale Sustainable Food Program places the study of sustainable food systems in the context of a liberal education. I'm also pleased today to welcome Professor Hi'ilei Hobart to today's program and to the Yale community. Hi'ilei will be joining our faculty in the fall. She's moving to us from the University of Texas at Austin, where she was a faculty member in the Department of Anthropology. At Yale, she will be joining ER&M program: Ethnicity, Race and Migration. Her research interests include the intersection of foodscapes, environment, and indigeneity, and she is the author of a forthcoming book on the thermal dimensions of Native Hawaiian dispossession. So, Mark and Hi'ilei, thanks so much for joining me today on Yale Talk.

Mark Bomford: Thank you so much, Peter. It's a pleasure to be here.

Hi'ilei Hobart: Thank you so much for having me today.

Peter Salovey: I'd like to begin our conversation with the Yale Sustainable Food Program and the Yale Farm that it operates. For context, some of our listeners may not know that our work at the Old Acre reflects a rich agricultural heritage at Yale that dates to the 1800s. In 1846, Yale established our country's first professorship in agriculture, and soon thereafter became one of America's initial land grant colleges. People don't usually know that about Yale. So, Mark, tell us about the Yale Sustainable Food Program's work to produce food-literate leaders--their work on the Yale Farm, their work in the classroom.

Mark Bomford: Thanks. The origins of the land grant status at Yale, it's a little bit of a secret, probably because people are very aware that we are no longer a land grant university.

Peter Salovey: That's right.
Mark Bomford: That could be one of the greatest strengths that we have, actually, because it allows students to explore some of the questions, some of the problem, some of the opportunities that are often considered to be outside of the scope of food and agricultural studies and the conventional agricultural sciences, but nonetheless are of absolutely critical importance. These are the sort of missing questions, the underexplored areas. And what I'm really interested in are the problems that we don't necessarily know are problems yet in building what we would call food-literate leaders. That's a rather holistic emphasis. Literacy goes far beyond just trying to understand the language and know the facts and figures of the landscape that you find yourself in. Literacy is also about authorship and about playing that active role in building the future that you wish to be a part of. And so, it's that more encompassing form of literacy, which is not just about reading and understanding and making sense of, but also about playing that active role, and being the author of your own future, writing that future that we're interested in. And so, working in those hidden areas, taking a very wide-ranging view of literacy, which is so compatible with the liberal arts approach that the college takes. We have students going on the farm. We have them looking at the more theoretically rigorous elements of what they experience on the farm once they go into the classroom. And then we work with them as they go out into the world, both during their time at Yale as well as after they graduate.

Peter Salovey: So, in preparing for this conversation, I was looking up statistics that exemplify our food-related crises, I guess I would call it. In the first year of the COVID 19 pandemic, the number of food-insecure households with children in the U.S. doubled. It's now 28% of households, and worldwide there are 260 million people who are severely food insecure. That also doubled during the pandemic. There is the specter of famine looming in nearly 50 countries of the world right now. So, Mark, how do we prepare students to effect change when the challenges seem so profound?

Mark Bomford: I think this is the scale and scope and magnitude and seriousness of challenge that I think institutions like Yale are so essential when it comes to looking at different kinds of leadership, I think, in the way that our students work within the university. There's two superficially contradictory and uncomfortable facts that you might want to address when you hear statistics like that. The first is that your personal food choices, the things you choose to eat as a Yale student or as a Yale staff, a faculty member in New Haven, Connecticut, those choices are utterly meaningless compared with the significance and scope of the global-scale crises that you mentioned. Another thing is that those personal choices are the most profound, important, and highly impactful that you can make as an individual. Both those things are true.

Peter Salovey: Hard to rectify the seeming contradiction between them though.

Mark Bomford: But that is the kind of contradiction that institutions like Yale need to prepare students to be able to work within. Both those apparently contradictory facts are true, and even better, they don't have to be in direct conflict with one another. So many of the anxieties, I think,
that students feel about being overwhelmed by oppressive global statistics, and also being very driven and empowered and inspired by the impact of the change that they can make personally in their communities around them: a lot of those anxieties are because it's hard to square those things and it's tempting to put them in competition with one another. To say that what you do individually is of no importance given the scale of the problems in the world, and to say that anything that I'm not doing collectively is a distraction. We would maintain that that is not true. These things do not have to be in conflict with one another. And in fact, I think you can find a far more enriching and far more impactful way forward if you can actually stay with that troubling contradiction and say that both of these things are actually working towards the same common goals that you're sharing with everybody in the community and the wider global community. So, I think at a place like Yale, it's an excellent environment to come to terms with those apparently vexing contradictions.

**Peter Salovey:** You know, I was thinking of other troubling facts that students have to try to square. And here's a couple more, and maybe Hi'ilei, you want to jump in on these: Black children are nearly three times likelier to live in a food-insecure household than white children. Nearly half of American Indian and Alaskan native individuals are thought to be food insecure. So, there's drastic racial and ethnic disparities, as there are in so many other domains. What can we do? What can we do to address these inequities?

**Hi'ilei Hobart:** I think embedded in the question that you asked Mark a little bit earlier was: how do we think through troubling structural inequities in the food system? And I think the word structural becomes so important to this because of the way that food sits at the heart of so many of our political and social issues that we're facing today. One of the unique things about food is that every single person on the face of the earth has an intimate relationship with it. We encounter it every single day in our lives. When you look at food cultures and food systems, they are artifacts of the societies that they come from. So, this attends to questions of labor, questions of gender and sexuality, questions about politics, technology, environment.

**Peter Salovey:** And I assume by calling them structural inequities, you point us to the fact that it is structural change that's going to be needed to address them, that the individual decisions that Mark was talking about are still important, but they have to be part of something more fundamental, it sounds like.

**Hi'ilei Hobart:** I agree. And very often when I teach material on food studies, students will meet me with an enormous amount of frustration because we talk about all of the issues and their complexities, and then by the end of the course, they want to know what the answers are, and what the fixes are. And one of the things that I respond with is that complex problems require complex solutions that are multi-scalar. They need to be attended to from a lot of different angles. The first step becomes understanding them as truly complicated problems, which is where I tried to get students to go with me.
Peter Salovey: Well, let's talk about students a little bit. You're joining the faculty and you'll be arriving in New Haven for the fall semester, and you will specialize in native studies and indigenous land and food sovereignty. Talk for a moment about what made you decide you wanted to come to Yale.

Hiʻilei Hobart: Well, I think one of the things that has drawn me to Yale is the fact that among its peers, it's always had a robust engagement with agricultural studies and food studies and agrarianism. And so being in an institution that has historically taken that seriously, and continues to take that seriously, is really appealing to me. One other thing about Yale that folks listening may not be entirely aware of is that it actually has a long and rich relationship with Hawaii, dating back to early 19th century missions to Hawaii, and a number of native Hawaiians came to study at Yale in the early 1800s. So, I've always thought of it as being a place that is quite connected to my home community in unexpected, historic ways.

Peter Salovey: It's nice to hear, and of course, this connection to agriculture, it happens at so many different levels from the Yale Sustainable Food Program to Sterling Professor Jim Scott's Agrarian Studies program and the kind of research he does, and many others. Talk to me a little bit about the land and food sovereignty movement and what those terms even mean. And why is it gaining momentum around our country?

Hiʻilei Hobart: It's one of my favorite things to talk about. Food sovereignty is a relatively newly coined term that came out of peasant and agrarian labor movement in the 1990s and the early 2000s that really asserts the right of peoples to healthy and culturally appropriate foods that are produced through sustainable methods, and most importantly, the right of particular communities to determine their own food and agricultural systems. The reason why that's really important, particularly for native and indigenous peoples, is that a lot of them, especially in North America and into the Pacific where I primarily work, are living under conditions of a political formation of settler colonialism by which an outside group comes in and establishes political and economic and cultural dominance. Very often this comes with the loss of control over things like natural resources and land management systems that are traditional. When we talk about food sovereignty, it's really thinking about a community's ability to self-determine its own food system. It has everything to do with being able to control what gets imported and what gets exported from a particular place down to what lands on the dinner table. My approach to understanding why food sovereignty is so important is to really take a historical look at understanding how and why the broader food system looks the way that it does. Here in the US, I think a really strong argument can be made about the way that the modern American food system has emerged from quite a violent history of settler colonialism and racial capitalism, that our large-scale industrial systems emerge out of chattel slavery and indigenous removal from traditional homelands. And once you start to unpack the relationship between those historic moments and the way that we eat today, I think helps me and my students to wrap our heads around why it's so important to understand what self-determination might mean for a community.
Peter Salovey: I wonder if you can give us a concrete example. This is maybe hard to do, but what lands on our dinner table reflects this complicated history that you describe.

Hi’ilei Hobart: I think I'll answer your question by offering a little bit of a personal anecdote, and this is from when I was in graduate school during my coursework for my Ph.D. in food studies, and it was one of the very first conferences that I had ever been invited to give a paper at. And I get on the plane, and I happened to be sitting next to Psyche Williams-Forston, who is a really foundational Black feminist food scholar. She's been working in that field for a very long time, so she's heading to the same conference to give a keynote. We get to talking, and she asks me what I've been learning about in my courses, and I said, I'm doing a really interesting course that's looking at food deserts and I'm going into every single store that we saw in our quadrant to note down what kinds of fresh and available and nutritious foods were in each store. And then to map it out across Manhattan. And this was a way of finding the boundaries of what was at the time understood to be food desert. And food deserts is a term that refers to places in a community where there is limited access to fresh, healthy, and affordable foods. So, I said, 'Yeah, we did this project on food deserts. It was very interesting.' And Dr. Williams-Forston looks at me and she says, 'Now, this is a reason why privileged folks shouldn't be doing this work, because you might walk into a Family Dollar and see nothing to eat of value. And I walk into a Family Dollar and I look on the shelf and I look in the freezer section and I see the makings of gumbo. And that shut me down pretty quickly. And the lesson that I learned from Dr. Williams-Forston was really that we come to the table thinking about and looking at the food system with each of our own unique backgrounds and upbringings. And while we all have unique perspectives, we might not understand immediately how a particular community in place is provisioning themselves, using creativity, using their own sets of cultural values, and really working with what the system has offered them. And I'll never forget that lesson, because it helped me to understand that when we're thinking about solutions to issues in the food system within particular communities, the most important voices that we can listen to are those who live in those communities themselves.

Peter Salovey: Mark, you also help students understand the way in which exploitation has been a part of the history of the delivery of food in this country and in the world, but also the very good and generous and appropriate alternatives to that. Maybe you want to say a word about that polarity.

Mark Bomford: I think in Hi’ilei's comments about historical patterns of food production actually creating the current constraints on food production, the current kind of capabilities and affordances that the actual land has to produce food, that questioning the causality, I think, is one of the key insights that comes from food studies as it's developed as a field of study. When you tried to get all the people who associated themselves with being related to food studies to agree on one text, they could all say, 'this is an important thing to read,' it was Sidney Mintz's "Sweetness and Power," which is this long duration historical anthropology of sugar production in the Caribbean and how it was so tightly linked with the triangular transatlantic commodity slave trade.
Peter Salovey: In this very region of the country, in Connecticut and Rhode Island. This was the sugar trade.

Mark Bomford: Absolutely. And you can still actually see the material traces that are left behind of that movement of commodity, and chattel slavery. It goes right into the shipping routes, the transcontinental cables for telegraphs, and later, the Internet. As we're speaking right now, our bits may be flowing along the slave trade routes because these things sometimes have a way of becoming causal in the opposite direction that we might think. And this is one of Sid Mintz's key insights in that book that I think is sometimes lost. It challenges us to think about what we mean when we say factory farming or industrial agriculture. I think it springs to mind the idea of some kind of fall from grace or the idea that once upon a time there was a good, kindly agriculture, and it was subverted by factory logics, by Taylorist efficiency and production line systems and so forth, and they turned what was good farming into factory farming. Sid Mintz suggests, actually, the whole idea for factory industrial logics that came from the plantation system, that this was the origins of those kind of industrial logics of what Jim Scott would say would be fictitious commodities like land and labor. Treating those things as though they were real commodities which could be basically enclosed, standardized, and shipped around the world freely. So, it introduces this fundamental reversal in your understanding of where food comes from and where industrial logics come from. And I think that can be very powerful when you're looking at ways to embark upon programs of structural change, because it causes you to look much more deeply. And then instead of pointing the blame at Capitalism or the Enlightenment or something like that, you can actually look in the physical structures of agriculture itself and start to ask questions about everything from the way that we might design a combine harvester to the way that we might have appropriate land entitlements in different parts of the world, how we might draw boundaries, how we might bring up fences, how we might open or close trade routes, as Hi'iilei was talking about. These are all things that we do have the power to change, even if we don't have the power to change history. And so this, I think, is where it becomes very powerful as a piece of structural analysis to point students towards the structural changes that they can actually have an impact on regardless of their career. Yale's graduates, we do graduate a couple of wonderful farmers, but what you are more likely to see is right at some of those intersections and powerful levers of policy, of finance, of media and communications that might shift cultural norms. And those are the ways outside of the conventional view of agricultural transformation, that we have a huge opportunity for transformation of exactly the structural kinds that I think Hi'iilei is talking about.

Peter Salovey: These comments, Mark, put me in the mind of what Hi'iilei studies, which is the land and food sovereignty movement, among other related topics. Maybe you could take a little bit of time to tell us about that movement. What is it and why you think it's gaining momentum in the country right now?

Hi'iilei Hobart: Thank you, Mark, for that wonderful diversion to Sid Mintz. One of the other halves of Sidney Mintz's work that I think is so important and maybe speaks to your question, is
that he's not only interested in the triangle trade and plantation economies, but also how that ends up on the palates of people in the West. So, a lot of my work thinks about food sovereignty, but it's also about eating cultures and the way that eating cultures reveal food systems in very intimate and often unexpected ways. I'm finishing a book right now on the social history of ice and the cold in Hawaii, which is a book that has a lot to do with ice cream and cocktails and shave ice; things that might seem a bit frivolous. But actually, once I started unpacking it and looking closely, it actually opened up a whole world of understanding the ways that people thought about environment and race and the thermal dimensions of things like indigenous dispossession and settler colonialism, that desires for the cold in warm places help us to understand that connection between taste and the food system as a historical and a structural artifact of politics and social value.

Peter Salovey: Very interesting. I assume the converse is true too, the desire for warmth in cold climates. The desire to eat tropical fruit in New Haven, Connecticut, in the middle of the winter is part of the social and economic history of a place like Hawaii.

Hi'ilei Hobart: Yeah, I think there are all kinds of imaginaries about the world that end up on our plates.

Peter Salovey: Let me shift a little bit to the relationship between food systems and climate, and particularly the climate crisis. Obviously, food and its cultivation is affected by climate change, but food and its cultivation and consumption are drivers of climate change. There are models from about five years ago suggesting that food systems are implicated in about a third of global greenhouse gas emissions. So as land, water and soil resources are challenged in this era of climate change, what can we do to advance a more sustainable food system? What can we do as a community? What can we do as individuals? What can Yale University do as an institution? And ask each of you to address that question? And maybe we'll start with Mark.

Mark Bomford: When you talk about food and climate change, animal protein and meat is an inescapable part of any analysis. It really doesn't matter how you look at the boundaries, how you shift the functional units, how you challenge the assumptions that go into the model. Much of that is actually based on the land use changes that are required to increase supply, especially of cattle. So, when you see what's happening in Amazonia with the clearing right now, that is much more going to cattle grazing than it is going to be cultivation of crops like soy. And so talking about that paradox between food being both irrelevant and also being tremendously impactful, if you are decentering meat from the center of the plate and if you are thinking about those sources of food and about meats or about proteins as being much more about quality, much more about celebration and gathering and convening and respect, finding a way to get those in a way that is consistent I think with your own values, this is the biggest step that you personally can make if you're worried about sustainability implications of the whole supply chain of what you're eating.
Peter Salovey: You're not quite saying we should never eat meat again. We should be selective. We should treat it like the valuable resource that it is.

Mark Bomford: Yeah, meat is an incredibly valuable resource and you look at food cultures around the world, especially some of the ones that are really robust and embedded in a particular place and in particular people. It's not about elimination. I'm not a big fan of complete zero tolerance zealotry in any domain of food decisions, but it's hard to imagine a more sustainable food future where there is not less meat than there is produced today. On a larger scale, that's where all of the important shared actions come in, and that's where there's so many important pieces of work that I hope Yale graduates are going to be taking on. They are already in terms of some of the underlying incentives to produce or not produce in ways that are very greenhouse gas intensive. And there are some very exciting new techniques, technologies, practices that are being deployed in agricultural systems; some under the rubric of regenerative agriculture, others that are employing things that have been part of indigenous cultivation systems for millennia and are being rediscovered, sometimes with credit, sometimes not with credit. I think that these have a lot of promise for redeployment into agricultural patterns that are much more in conversation with what the land and place that a specific geographic context can afford. I do like some of the principles that come forward, bundled as agroecology, in part because it's non-prescriptive, just like the liberal arts. It does not say do step A, B, C, and D in order to have a sustainable agriculture in this location. It instead asks you to see what kind of principles are afforded by the land that you're in, and to reinvent what agriculture could be.

Peter Salovey: Hi'ilei, I was interested in your thoughts about the connection between food and climate.

Hi'ilei Hobart: Yeah, I'll jump in to build off of what Mark was saying, all of which I agree with very much. As individuals, we all have an opportunity to make significant choices about how we want to engage in the food system from what we buy at the supermarket to how we prepare food, to how we talk to others about the way that we eat and our dietary choices. Bundled into that, I think, comes with also recognizing what a privilege it is to have many kinds of choices in front of you when it comes to your food, and understanding that the choices that you might have are not the same choices that somebody else might have, somebody who is perhaps more disadvantaged than you are. Taking a prescriptive approach to what we should do comes with understanding that there isn't a universal 'we' so much as there are a lot of individuals that have lots of different types of constraints on how they eat and why they choose what to eat. Understanding, of course, that if we all had unlimited choices about our food, we would all choose to eat well.

Peter Salovey: Let me just ask a final question. And this is really about the Yale Sustainable Food Program and the way it makes an impression on the university community. How does the program bring disparate areas of the university together? People, town and gown, undergraduate and graduate student, extracurricular and curricular? How does it bring it all together? It has to
be more than simply homemade pizza on Fridays—but homemade pizza on Fridays is certainly a part of it, too. Maybe you could tell us a little bit about the program.

**Mark Bomford:** I don't want to undersell just how good that pizza is.

**Peter Salovey:** I have enjoyed it myself.

**Mark Bomford:** It uses a couple strategy to get good engagement across disciplines, levels of study, different parts of the New Haven community. One of the things we do is we only work in partnership. And so, for everything we do, whether it is choosing to plant a new crop or whether it is choosing to bring in a guest speaker, it's always done in partnership with another unit, either at Yale or outside. The other thing we do is we always are reinventing and reconfiguring and changing ourselves. So, you will never find the Yale Farm looking the same one year after the other. Every single year of the Yale Farm that's ever existed--what we have grown, and where things are, and what the thrust of our program is--it changes dramatically every single year. We're always working with new partners. We're always working with new disciplines. And I think building that expectation that it's always new shared conversation is how we've been able to accrete the breadth that we have over the years. Last year we were working with the School of Art, for example, asking all these questions about the aesthetics of sustainability: is the way that we have learned to see sustainability, is it predicated on all of these sort of European landscapes of control? Are we reading that into what we think might look like a sustainable farm today? What are other ways that we can learn about what a sustainable food system might look like? These are questions that we can ask at Yale. And I think it's these underappreciated, perhaps hidden questions, that we've got the greatest opportunity to move forward on. And I think these are some of the areas that have, I think, the most hope embedded in them as to how we might be able to think in more interesting ways in the future.

**Peter Salovey:** Wonderful. So, I'd like to thank you both for speaking with me today. And again, Hi'ilie, I want to extend a warm, warm welcome as you prepare to join the Yale community. We're looking forward to your arrival in New Haven and on campus. As we've discussed today, there's much exciting work happening at the Yale Sustainable Food Program to enrich education, life, community, all at Yale and in our community. It's a hub of food and agriculture related lines of inquiry for students, for scholars across several different disciplines and departments. Throughout the year, the Yale Sustainable Food Program also invites members of the broader Yale and New Haven communities to study the connections between land and food. And I encourage you to learn more by visiting sustainablefood.yale.edu. Sustainablefood is one word, .yale.edu. And of course, if you're on campus, please visit the Yale Farm. Also, you'll be interested in learning more about the program that Hi'ilie will be joining. That's our program in ethnicity, race, and migration (ER&M), which brings together scholars from many different disciplines who study the intersection of those issues and their formative nature in our country's history, and indeed in the world today.
To friends and members of the Yale community, thank you for joining me for Yale Talk. Until our next conversation, best wishes and take care.

The theme music Butterflies and Bees is composed by Yale professor of music and director of university bands, Thomas C. Duffy, and is performed by the Yale Concert Band.