Sushi: From necessity to ubiquity

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Eric Rath, a professor of Japanese history at the University of Kansas in Lawrence, Kansas. has been researching Japanese food and history for the past 20 years or more. The latest fruit of that research is a new book called Oishii, which means delicious. Although that's true, it's also pretty vague. The subtitle tells you more. The History of Sushi.

Everybody thinks they know what sushi is. So rather than asking Eric Rath to describe or define sushi. we just got stuck in to the history.

Eric Rath: First references we have are from China. They refer to a dish in the third century BCE, that's made with salt and fish. In the third century Common Era, there's another dish that appears, and that mixes fish and salt and rice. These traditions are so closely related that about a century later, they're referred to as the same thing. It's a very simple dish: fish, salt, and rice.

We have a sixth-century Chinese recipe that tells us how this is all put together. Basically, the fish is salted, it's put in with the rice, and the rice helps with the process of lactic acid fermentation. Over a period of weeks or months, or perhaps even years, the composition of the fish completely changes. The flavour profile changes, it becomes a pickled food. It's sour, like yogurt.

It has a bit of a fragrance too, as you can imagine, from sitting in a bucket for months or years on end. I think if people were to try this today, and if this was the only kind of sushi that was available, we probably wouldn't be talking about sushi, because it would just be some strange or very unusual dish. Not that strange, but very unusual dish.

Jeremy: Is that what the ancient Japanese Funazushi is, is that the closest equivalent to it?

Eric Rath: There's varieties today that emulate this ancient process. The one that you mentioned, the Funazushi; funa is a type of carp that lives in waterways in Japan, fresh waterways like Lake Biwa, in Shiga Prefecture. It's quite distinct. There's a sour profile to it but what's really remarkable, what really blows me away, is that it also takes on the characteristics of a cheese or a sausage, depending on how you slice this fish. It's got this meaty flavor to it that you would not expect from sushi.

Jeremy: But very sour.

Eric Rath: Very sour and very salty. I spent a couple of days just eating funazushi alone when I was doing my research, I had to try it. A lot of people had written about funazushi and hadn't really talked about the flavour profile of it. I was really curious and went to Shiga and made the most of the opportunity to just eat funazushi straight with every meal for three days. It was a bit much, but I had a chance to experience it and enjoy it. It totally floored me how a fish could be turned into something that tastes like a summer sausage or like a prosciutto.

Jeremy: Funazushi and others like it are essentially regional specialties. They're not that widely appreciated in the rest of Japan. But they are real, traditional forms of sushi. There's another traditional sushi whose history is a bit fishier.

Eric Rath: There is this story in Japan. Certain types of fish will self-ferment if they're just left alone in a medium. There was this type of sushi that people wrote about in the early modern period 1600 to 1868 called osprey sushi, which many said, "This is the origin of sushi."

What it was, is people observed osprey, these birds of prey that live on the coast, they observed them gathering fish and putting them in a nest and urinating on them. Based upon that, the fish with the saltwater and the interaction with the bird urine was supposed to turn into a type of fermented dish. I think this is more of a made-up story, but it's a fascinating one. The birds apparently did that because it kept their enemies from eating their own sushi that they made. Apparently, according to the legend, some humans liked it. As I said, this is just a story.

Jeremy: I wouldn't really want to fight an osprey for its sushi.

Eric Rath: Not especially after it's been urinated on. Yes.

Jeremy: When do we start getting this transition from it being fish in rice to fish with rice?

Eric Rath: Sometimes you don't want to eat that rice, because, after a period of months or years, it becomes like a paste, like a glue-ish paste, it loses all of its ricey consistency, and it becomes extremely sour. A lot of people who eat funazushi today won't eat that rice. They'll replace it with other rice so they'll just focus on the fish.

If sushi started off as a means of preserving the fish and the rice is essential to that, you have to realize rice is a very valuable thing and especially in Japan, where it was also used as a currency. You could see why people wouldn't want to use rice in this way only to have to throw it out or to have it putrefy and come to the point where you may not want to eat it. They started eating the lactic acid sushi sooner, where the rice hadn't gone through all this fermentation and the sushi wasn't fully preserved, it was half preserved. That happens in the medieval period.

Then, the early modern period, there's attempts made to speed the fermentation process further. Chefs would introduce vinegar, or sake, or koji, which is a type of mould that's used in sake-making that helps to release the sugars in grain as a way of mustering them for fermentation. They use all these different techniques to try to speed the sushi-making process. In the process of doing that, they changed the flavour profile of the rice, they made it in essence more palatable. Eventually, they hit upon just using vinegar.

With that, you could just take your rice, mix it with vinegar and salt, and then you can make your sushi right away, like your nigirizushi or your old makizushi.

Jeremy: Originally, you're preserving the fish. Today, when I think of sushi, it's fresh, and it's raw.

Eric Rath: Over time, in the 19th century, as people changed the recipe for the rice, they turned sushi into a street food. Initially, that street food had a very short shelf life. You might have people who put out some ice and put out some fish, and then have some rice, and then sell hand-formed nigirizushi on the street. That's something you'ld want to do just in the mornings with a bit of ice so just a bit of

care. Of course, using smaller fish that are more easily manageable, people could probably have sushi for a few hours, at least, to sell to their customers.

With refrigeration, which really happens after World War II, then that raises the possibility for having new types of fish, like bluefin tuna.

Jeremy: We'll get back to tuna, I promise! But I wanted to know more about how sushi was eaten as a street food. Was it a snack, or more of a meal?

Eric Rath: I think it's like getting a hotdog is, today in the States. First of all, the nigirizushi that we have today can be quite small and delicate. Indeed, I think they seem to be getting smaller and smaller, depending on what your experience is. The last time I went to a Japanese restaurant, I was quite surprised by how small the nigirizushi were. Iimagine that nigirizushi as being two and a half times larger. It's almost the size of half of a hotdog. This is something that you would queue up for at a stand, and it would be outdoors. You would order it and you would stand there eating it. Maybe there'll be some tea served, maybe not. It's a very informal street food. It remained that way up through the 1930s. Sushi really had its fame as a food that men would gather and eat standing.

Jeremy: It's interesting that before the war or around the war, it's a street food. It's not held in very high regard, it seems from reading your book. Yet you ended up with a place like Jiro shown in that documentary, Jiro Dreams of Sushi, which is as far from a casual street food as I can imagine. How did that transition happen?

Eric Rath: This is something that happens in the post-war period. I should qualify that by saying there were some higher-end sushi places even in the early modern period. There were some before the war, but certainly after World War II. Sushi, besides being a street food, it's something that's a special food, it's a higher-end food. It's not something that people eat every day in Japan. Most people don't. It's something for special occasions, so that allows for more higher-end restaurants to prepare it.

Sushi chefs become a little more professionalized after World War II. There's a licensing structure that's put in to be a sushi chef. Before the war, we read these guides to employment where anybody can almost open up a sushi stand. That becomes very difficult after the

Second World War, sushi becomes more professional. I think the quality goes up. With the quality rising, then there's room for higher-end sushi.

We culminate with Jiro, where you can't even get a reservation today. At least, I can't. You have to have connections to go there for one, and then you have to be able to afford it.

Jeremy: Is it really that skillful, making sushi?

Eric Rath: I think cutting the fish. That's the real art, I think a sushi chef would say, "well, there's an art to everything". And they're probably right about it. Certainly, there's special techniques to choose the rice and to prepare the rice, but I think most of the skills are the knife skills. Of course, having that knowledge to select the fish that's best and in season, there's also a whole skillset there. If you go to a sushi bar you do get your money's worth and that is a qualitatively different sushi than say in a conveyor belt sushi place, or something that you pick up at the supermarket.

Jeremy: That was going to be my next question, was this. The conveyor belt sushi places, they're amazing. There's this conveyor belt, the dishes come past, it's colour-coded, you eat what you want as much as you want and then they total up the bill, Whose genius idea was that?

Eric Rath: That started in Osaka in the post-war period and originally it was an innovation of a standing sushi place. The inventor, according to one story, he went to a beer brewery and saw all the bottles going around and according to another story, he was at a butcher shop and saw the meat going around on a conveyor belt and he thought, Hey, this is great for sushi. The place was called Genroku Sushi and it starts in the mid-1950s.

It's a lower-end place initially, but the idea catches on, and especially after the Osaka Expo, which occurs in 1970. And then later in the 1970s and 1980s, technology develops so that the sellers of fish will pre-slice everything. It comes to a place pre-sliced and they deskill labour and that reduces the costs for the conveyor belt sushi owner.

Jeremy: Is conveyor belt sushi important, how does sushi take off in America?

Eric Rath: They offer sushi in America, probably from the 1920s but it's isolated in Japanese communities in LA or in Hawaii. But it's really 1960s that sushi starts going out of Japanese enclaves and a lot of the movers and shakers in LA, the people in the film industry, become interested in it. Hippies become interested in sushi, that then it makes an initial inroad, but it's not really until the 1980s that we see the major sushi boom in the States and then sushi hits popular culture.

Jeremy: Which gives us unforgettable scenes in films like The Breakfast Club and Repo Man. It gives us John Belushi's Samurai chef. And it gives us Sushi Girl by The Tubes.

Sushi spread through America, Europe and the rest of the world. And as various cultures adopted it, they also adapted it. Like the famous California Roll.

Eric Rath: That's one of the great things about sushi and one of the things that I discovered in researching my book. I always thought to myself in the back of my head that there's some authentic sushi at some time, but looking at the history of sushi, it's been constantly changing and evolving. It's always been something that's constantly being changed through many anonymous chefs. Of course, when it comes to America, people are adapting it to local tastes.

The story of course, is that the California role is representative of that, where you have somebody in LA's Japan's town in the late 1960s, coming up with this idea of putting the rice on the outside of the nori, using pollock, using this imitation crab, using avocado, which has a nice fattiness to it, putting mayonnaise in there and selling it.

Was the reason for that, because they didn't have fish that day? That's one story. Or was the reason that this was supposed to be some kind of gateway food for Caucasian customers. That's another story. We really don't know why and how and who invented it, but it was invented and that inspired many invitations. Philadelphia roll with cream cheese and that opened the floodgates for all different types of sushi with all different types of sauces. It's hardly recognizable in some instances compared to the pristine Japanese dish.

Jeremy: Going back to the image of the classic sushi, tuna didn't use to be a favoured food. Tuna suddenly catches on and Japan is scooping tuna out of the oceans around the world. Is that mostly down to sushi?

Eric Rath: To a large extent, yes. Bluefin tuna really catches on after World War II. There are a lot of reasons for that. One is, before the war … These are massive predatory fish. Before the war, unless you had refrigeration, which few people did, it was hard to manage bluefin tuna. A lot of the bluefin tuna sold really cheaply, even as like cat food or dog food. It's not until after the war, what develops are new types of technologies of fast freezing, and Japan's ocean fleet develops these huge processing vessels that ply waters in the Pacific.

Of course, in the 1970s and 80s, there developed this global market of bluefin tuna harvested from the Atlantic and from the Mediterranean. A lot of it goes to sushi, but why bluefin? Why did it catch on?

I think because it's a very fatty type of food and there's a greater preference in the post-war period for more meaty, more fatty types of meats. People are increasingly eating more meat in Japan of all sorts and bluefin feeds into this. It's part of the story that changes in the Japanese diet as well in the post-war period.

Jeremy: Is there any awareness in Japan that maybe it's not sustainable? Is there any backlash against tuna?

Eric Rath: Not so much, but you do have local… There are some people who are very cognizant of it and work to try to change people's attitudes, of course, but I think there's a lot invested in tuna sales. I also think that there's a greater recognition among sushi specialists about tuna that's harvested more sustainably. Instead of being captured in huge nets, rather people who catch it with line fishing from small fishing communities in Japan. There's an effort to try to promote that type of tuna. In that way, they're supporting more sustainable tuna harvesting.

Jeremy: I think most people today would tell you that sushi is, it's a healthy choice, it's a good, healthy food to eat. You say in your book that you can now get sushi with twice the calories and sodium and cholesterol of a McDonald's hamburger. That's not too healthy. Are people aware of that generally, do you think?

Eric Rath: I don't think so. You're absolutely right, sushi has this image of being a healthy food, but if one were to pick up a package of sushi at a supermarket, at least where I live in Kansas, the packages aren't labelled, in terms of their nutritional content often. If you go

onto the supermarket's website, like I did for this story, I was amazed to see the high levels of sodium, the high-calorie count for a lot of these types of sushi. I should have known that, because if you look at the sushi, they're fried or they have some fried topping, they have all these types of mayonnaise-derived sauces on top. Just looking at it, if you think about it for a moment, this probably isn't a healthy food.

Jeremy: I said at the outset that, but I wasn't going to ask you to define sushi and we haven't mentioned Brazilian sushi or Peruvian sushi or Eastern European sushi or any of those various derivatives. Let me read you something from the last chapter of your book,. You say, "Two millennia ago, sushi or what the Chinese called *zhi*," … I hope I've got that pronunciation, right?

Eric Rath: I think you do as well as I do.

Jeremy: … *zhi* was fish fermented in salt with or without rice. Today, those same characters, as well as the English word, sushi, refer to a plethora of ways to prepare not just fish, but all foods, to the point that it's hard to understand what ties them all together, apart from their shared name."

That's astonishing. After all your exhaustive history, what do you think we learned from that?

Eric Rath: I took away that sushi, I think, is one of the greatest world cuisines. Now there's lots of ways to define cuisine and we could have that conversation. I think it's a way of serving food, and that's how we could think of cuisine in this instance, and it's a repertoire of cooking techniques. It's just been fascinating to me to see how those techniques, which at their basic level involve some grain, some salt, and other flavourings, and some fish – or not, because you could have vegetarian sushi and in the ancient period, they had meat sushi, they had sushi made out of boar and deer. How do those ingredients, how can they be combined in various ways?

A lot of that depends on the level of technology, but also it's people's imagination. I was just reading early modern cookbooks, I was fascinated by the ways that people made sushi in various different ways. Like they would serve it warm, for instance. That's something I thought would be anathema for sushi but no, there are all sorts of experiments over time.

I think the takeaway here is that sushi is a global cuisine, and what people do in Peru or Brazil, all these different types of sushi are equally as valid and that's the amazing thing. We shouldn't turn our noses up at the sushi bagel, or the sushi pizza, or whatever is new. It's just all part of sushi's long story.

Jeremy: How do the Japanese feel about that?

Eric Rath: I don't know. Does it really matter? You can read Japanese chefs who go abroad, the so-called sushi masters and there's page after page of problems that they see in their travels, and they might have a point but I mean really does it matter? Do they really have authority over sushi?

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