[SLICE OF MIT THEME MUSIC]

ANNOUNCER: You are listening to the *Slice of MIT Podcast,* a production of the MIT Alumni Association.

JOE This is the *MIT Alumni Books Podcast,* and I'm Joe McGonegal.

MCGONEGAL:

Lana Swartz is coeditor of *Paid-- Tales* of *Dongles, Checks, and Other Money Stuff,* coedited with Bill Maurer, published this spring by MIT Press. Swartz, who earned MS in comparative media studies from MIT in 2009, is assistant professor of media studies at the University of Virginia. This book is a celebration of all things material in finance and payments.

Lana, in your introduction you write that the book is an effort to freeze the world of transactional things in order that we may marvel at them. What's special about 2017 about freezing payments and look at them?

LANA SWARTZ: The idea of a cashless society has been around, really if we consider cash as a consolidated state-issued currency, it's been around longer than cash itself has been around. So the first descriptions of a cashless society came from Edward Bellamy's book *Looking Backward* in the mid-1800s. And in the United States, a consolidated national currency didn't really come into its own until well after the Civil War.

The dream of the cashless society has been a part of kind of the idealized modern future for a very long time. And that's especially true in the 20th century when cashlessness was as much a part of an idealized modernity as the jet pack or the flying car or the robot house maid. But cashlessness has never really been achieved. Like the kind of paperless office, classlessness- and other paper technologies, cash sort of lingers on.

But beginning in 2008 I would argue, we really saw an explosion of innovation in the stuff of money in everyday life. The iPhone came out in 2007, 2008. For the first time we're all carrying around pretty sophisticated computers in our pockets. We saw the launch of M-Pesa, which was the largest and probably still the most successful mobile money system in sub-Saharan Africa.

And 2008, 2009 was also a time marked by financial crisis when the state and the financial institutions' monopoly over the issuance of currency was being called into question, from

whether it was Occupy Wall Street or various [INAUDIBLE] movements and that sort of thing, which we're still sort of feeling the political effects of now.

Around that same time, beginning in 2008, there were tons of new startups, whether it was person-to-person payment companies or what would wind up being called the sharing economy, that really begun to rethink how we do money in everyday life. Of course cash hasn't gone anywhere. And I'm certainly not arguing that it is. In fact cash is still, according to Federal Reserve data, the most commonly used payment instrument. It's used for the most transactions of any other payment instrument. But we are starting to see a decline.

So between 2012 and 2015 when the last data from the Fed came out, the use of cash in terms of transactions declined by about 8%. So cash is still king, but maybe not as much as it used to be. And while cash probably won't go away completely, we are starting to see new technologies being used.

So the other piece of the puzzle that I often get asked when I talk about cashlessness, people often say, but so money is becoming dematerialized. What does that mean? And so for Bill and I, just because the stuff of money is changing, just because we're using phones, just because we're using new infrastructures, some of which are visible to us because we're starting to see crazy things like bitcoin emerge, that doesn't mean money is becoming dematerialized. It means it's becoming rematerialized. New technologies are coming into play. And with those new technologies, we see new cultural meanings, new social practices, and new politics.

If we can consider a cash a almost public infrastructure like the public city bus for money that's pretty much free for consumers to use, supported by and subsidized by tax payments and that sort of thing, these new infrastructures are private. But by looking at these new technologies, we can begin to uncover what the future may hold.

- **MCGONEGAL:** Talk about your own chapter in this and what inspired you to investigate the history of the Diners Club card.
- **SWARTZ:** So the Diners Club card was the first third-party universal payment system. For a long time, department stores and gas companies had issued lines of credit and little metal charger plates and that sort of thing to regular customers. Diners Club was the first company in the business of payment, allowing people to use one card at a variety of different restaurants, stores, services, et cetera.

And Diners Club emerged in the 1950s with the advent of the interstate highway system, democratized jet travel, the corporation and the business trip. Suddenly people are moving much faster and further than their money could. So Diners Club came out around the same time the word motel, portmanteau of motor and hotel, was coined. It was around the same time as the rental car emerged. But at the same time the US banking system was relatively provincial. So in order to travel easily, people either had to carry a lot of cash, rely on travelers checks, which weren't very good for small purchases, or just do a lot of planning. So Diners Club allowed people to use their card and be able to spend money anywhere the card was accepted.

I became interested in it just in part because it was first, but also because it really does have this amazing kind of swinging '60s aesthetic in all of their marketing material. Several people have joked to me that it's kind of like *Mad Men* money, and it really is. So it was a lot of fun to kind of get in the archive and collect the lot of Diners Club materials and learn how people were imagining this new money technology when it was new.

So in my piece though, I talk about how Diners Club really was a club and afforded what could be considered like country-club-style billing anywhere the card was accepted. There were interesting exception and exclusions. In another article I've written, which I published a couple of years ago, women cardholders often found that-- this is kind of an interesting thing. Women who were the first generation of women who had corporate jobs often found that if they were taking a male client out to lunch and they were the vendor-- in typical business etiquette, the vendor pays for the meal. But if a woman is taking a male client out in the '60s, that male client may feel uncomfortable if a woman pays for the meal.

And there are lots of suggestions and columns with names like white collar girl that gave career advice to working women that said, don't be afraid to use your Diners Club card because then your client will feel like it's your boss taking him out for lunch, not you. Or another great one which came from Helen Gurley Brown, who later went on to be the editor of *Cosmopolitan* magazine, described how for young working women, bosses were, quote, unquote, miserable misers about raises but, quote, indulgent sugar daddies about expenses. So any working woman who is struggling to make ends meet should not be afraid to make ample use of her company's Diners Club card in order to get by.

Another article that's out now about many of the interesting and surprising social uses of this

new money technology-- in the chapter for the book, I talk about the role that race played and how many successful business people who happen to be African American would find themselves turned down. And there's numerous descriptions of this in the African-American press and newspapers at the time where businesspeople complained that if they showed up having made a prior reservation at one of these newfangled motels without cash, they'd be turned away.

Because unlike cash, which as it said, is legal tender for all debts public and private, the motel was not obligated to accept a Diners Club card. So instead of turning them away and sort of being overtly discriminatory, the hotel clerk could sort of say, well, if you could get cash we'd be happy to accept you. But we're not able to take your Diners Club card at this time. So the chapter in *Paid* sort of traces the racial dynamics and kind of the somewhat discriminatory practices that emerged around the private payment system that would not have been as much at play for a public payment system like cash.

- **MCGONEGAL:** It was exclusive in some wrong ways.
- SWARTZ: Yeah. And I think that's important to think about. Every time we create new infrastructures, new communications system, how did they map to existing systems of exclusion and perhaps create new ones?
- MCGONEGAL: Flashback to Benjamin Franklin and you include the shoutout to this other alum in the book, Whitney Anne "Tret-i-en"--
- SWARTZ: Whitney "Tre-teen".
- **MCGONEGAL:** --her chapter on printing on leaves as a form of thwarting counterfeiting.
- **SWARTZ:** Whitney Trettien and I met as student in CMS. We were in the same cohort. She's now a professor at the University of Pennsylvania. And she was working on early modern and medieval systems of thinking about paper. And she found that Benjamin Franklin thought that nature was the greatest inventor of anticounterfeiting systems and created these kind of mimicking leaf prints in order to hedge against counterfeiting.
- **MCGONEGAL:** Tell me about co-edited a book and what got in the way of writing it, of assembling it, of publishing it?

SWARTZ: Several years ago now when I was early in my doctoral work, I discovered the work of Bill

Maurer. And I was actually introduced to him via MIT faculty member Heather Paxton, who is in the Path program, who was on my thesis committee at CMS. And she said, you're really interested in money in media and rethinking money as a form of media technology. My friend Bill who is a dean of social sciences and is an anthropologist at UC Irvine is one of the only people working on that.

And we got together and we instantly found that we were on the same page. We talked for hours. And we received a little bit of funding to put together a conference on the few other people in the world who were thinking about money in the same way that we were. Brought them together, historians, a couple of journalists, a couple of industry people or people who had been working in payment for decades, anthropologists, English professors, a fascinating cohort of people who didn't necessarily know that there were other people out there who were thinking about money in the same way that they were.

We brought them together, had a great-- we kept calling it the payments party, but we try not to take ourselves too seriously-- a great couple of days in Irvine. And at the end of the conference, we decided we would publish a book. And we also decided we would publish this book that would be interesting to a variety of audiences-- popular, academic, as well as industry.

Editing a collection can be like herding cats. It can take a little while to get all 20 contributors together, get every single image sourced and the rights acquired and all of that. But it was pretty smooth sailing. I think a lot of the people contributing to our collection were just really excited about it. And once we pulled everything together and were able to trace the different resonances across the different chapters, it was a really exciting project. And as my first academic book that I'm one of the people primarily responsible for it, it's just been so exciting.

MCGONEGAL: What else is to be written on the topic? What else are you working on right now in this space?

SWARTZ: There is a lot that needs to be written about money technology as in its cultural dynamics and social components in everyday life. Bill, of course, my coeditor as I mentioned, he's the dean of social sciences at UC Irvine. He also runs a gate-funded center called the Institute for Money Technology and Financial Inclusion that primarily looks at financial practices in everyday life in the developing world to develop a research agenda with the goal of poverty alleviation.

Well his center has produced a ton of fascinating research. There is less work done from an

academic perspective on money technologies and practices in the US and in what we call, quote, unquote, the developed world. I actually have a book that I hope will be coming out in the next year or so, drawn from my doctoral work, looking at the way money technology has changed in recent years and what impact that it might have for how we do money.

- **MCGONEGAL:** I heard an interview last night with PayPal founder, or CEO Dan Schulman saying that the average American has less than \$400 of savings in their accounts right now. Meanwhile, a digital currency like bitcoin, I'm talking you at a time when its value is \$2,500 or something. There's certainly work and research to be done on the way Americans behave with money.
- SWARTZ: And I think one of the things that's most important for me is to include in the conversation not just they are saving practices or just say the way that the distribution, the equal distribution of money in the United States or unequal access to bank accounts, but to actually also think about money as a communication technology. So where is my money accepted? Where is my money not accepted?

Increasingly, for example, particularly at airports, we're increasingly seeing cash being not accepted. So there are several airports in the US that are completely cashless. And there are many other airports that have it in their 5 or 10-year plan to get rid of cash entirely. And this, of course, makes things go a lot faster. It helps with security. But what about all of the people who work at airports who may be unbanked, who may not have a debit card, and who, for the most part, like many Americans spend most of their financial lives in the cash economy? Suddenly they're cut out from the place where they're able to work. They can't spend their money where they work. So I think that it's important to think about the kind of infrastructural politics of new technologies and the potential for injustice that may arise.

Another example of this, of course, thinking about PayPal, one of my favorite websites that I go back to again and again as I'm keeping up with this topic is called paypalsucks.com. And paypalsucks.com is just a message board full of people trying to figure out why their PayPal account got frozen, why they were caught up in the kind of fraud-detection dragnet or terms of service enforcement dragnet that led to their account getting frozen and how can they figure out how to get their account unfrozen and get access to their money? PayPal, at least according to a lot of the users that I interviewed, has kind of a bad reputation, can be very frustrating for these sort of false positives in their kind of antifraud detection things.

But PayPal is by no means alone. At least once a month a news story bubbles up about some

new error that a fraud-detection algorithm has produced. So with Venmo, which is very, very popular among my students and just about everybody under 25, which is a person-to-person payment app-- we go out for pizza. Instead of putting it on two cards, you send me-- you Venmo me for half the pizza.

So there's a pretty much constant stream of complaints. There are kind of new sensational stories of someone who say sent a payment to their friend whose name is Ahmed and they just write the name Ahmed on their transaction. And all of a sudden it turns out that they got pegged for possibly supporting terrorism. This is a story that happened last year. There are just constant false positive and mysterious account closures that can be a real hassle for people. And if you're in a kind of vulnerable time or an inopportune time when all of a sudden you don't have access to whatever money that you have in a particular account, it's pretty frustrating. So I am really interested in thinking about how we might imagine good systems of governance and accountability for new payment systems as they emerge.

MCGONEGAL: This is all brand new to me. I never touched Venmo of course. I'm of, you know--

SWARTZ: There's fascinating stories in some of the interviews that I've been doing, but also just in casual conversations with my students. Venmo is creating-- there's not just these governance issues. There's also all kinds of new social protocols, manners, embarrassing situations that are emerging around Venmo.

For example, there's this one genre of Venmo horror story that's been going around-- which I haven't met anyone whom it's actually happened to, but every single person I have interviewed who uses Venmo a lot has heard about this happening. So say a young couple goes out on a date, a new date, and then one person on the date pays for the meal. Then, let's say, the date doesn't end in the way that that person who paid hopes that it would end. And the next morning the person who didn't pay wakes up with a Venmo invoice for their half of the meal, which is horrifying.

And then the question is, do you pay? And you're just like, well, forget you. I'm happy to just give you your money. I don't need pay for my meal. Or do you not pay and say, forget you. I'm not paying for my half. So there are all kinds of new social protocols that young people who are using Venmo for an increasing number of their everyday person-to-person transaction are trying to figure out.

MCGONEGAL: Tell me what else you're reading right now.

- SWARTZ: The book that I'm most excited about, which I've been able to read part of, which is called *Creditworthy* by Josh Lauer, which is coming out this summer from Columbia University Press, which is a history of financial identity and financial surveillance traced through the history of credit bureaus. So he looks at how credit worthiness and credit bureau information was originally obtained by interviewing your neighbors. Or little old ladies that would come over to greet you when you moved to a new town and ask you questions about yourself and your life and try to get a read on your character would then go back and basically get paid to report to banks about who you were. He looks at that kind of surprising history and then as it has ramped up into increasingly dependent on machine learning and new automated system for determining our credit worthiness.
- MCGONEGAL: The book is *Paid-- Tales of Dongles, Checks, and Other Money Stuff,* coedited by Lana Swartz and Bill Maurer, available at you favorite local bookstore or online. Lana Swartz, thank you for joining me.
- SWARTZ: Thank you.

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