

**Demetri Kofinas:** 00:00 Today's episode of Hidden Forces is made possible by listeners like you. For more information about this week's episode or for easy access to related programming, visit our website at [hiddenforces.io](https://hiddenforces.io) and subscribe to our free email list. If you listen to the show on your Apple podcast app, remember you can give us a review. Each review helps more people find the show and join our amazing community. And with that, please enjoy this week's episode.

**Demetri Kofinas:** 00:48 What's up everybody? My guest on this episode of Hidden Forces is Camila Russo, the host of The Defiant Podcast, and a former Bloomberg News reporter responsible for covering emerging markets, European stocks and digital assets. She's also the author of "The Infinite Machine," the first official account of the rise of Ethereum. A story full of determination, ingenuity and intrigue.

**Demetri Kofinas:** 01:17 In the first half of our conversation, I asked Camilla about her experience working as a journalist in Argentina, how she got interested in covering cryptocurrencies as well as her process for writing such an ambitious book. The rest of the episode deals mostly with the book itself including a conversation about the ICO craze of 2017 and the impact that it's had on Ethereum, its developer community, and investor appetite for funding new ventures and initiatives in the space.

**Demetri Kofinas:** 01:49 This part of the conversation continues into the overtime where we also debate whether or not the ICO model itself is the ideal mechanism by which to fund, early-stage, open source innovations. We also discuss what it's like to be a journalist covering crypto today, how the media industry in crypto has changed in the years since the onset of the 2018 bear market and the opportunities for more sophisticated high-quality journalism in the space going forward.

**Demetri Kofinas:** 02:20 And with that, please enjoy this week's episode with my guest Camila Russo.

**Demetri Kofinas:** 02:31 Camila Russo, welcome to Hidden Forces.

**Camila Russo:** 02:34 Hi, Demetri. Thank you so much for having me.

**Demetri Kofinas:** 02:37 It's great having you on. How do you feel?

**Camila Russo:** 02:40 Good. I'm excited. A little bit nervous. A little bit over a week ahead of the launch of my book. So, it's an interesting time for me.

**Demetri Kofinas:** 02:49 So, does it publish on the 13th or the 14th?

**Camila Russo:** 02:52 The 14th.

**Demetri Kofinas:** 02:53 The 14th. So, Tuesday of next week. This episode is going to publish in all likelihood on Monday of next week, so people will be listening to it right before the book publishes. But we live in the internet age now, so you can just pre-order.

**Camila Russo:** 03:07 Yes, please do.

**Demetri Kofinas:** 03:08 So, before we get started, maybe you can give our listeners a sort of brief background although I am interested in kind of probing into your background a

little bit because you lived in one of my favorite countries. You're from South America and it seems that a lot of people that have origin stories in crypto have strong intersections with Argentina specifically.

- Camila Russo:** 03:31 Yeah, yeah.
- Demetri Kofinas:** 03:31 But why don't you tell the listeners your background, where you're from and how you got into the space.
- Camila Russo:** 03:36 Sure. So, like I mentioned, I'm from Chile, from Santiago. I'm a financial journalist. I did, most of my career at Bloomberg News. I was there covering markets, started out as an internship in New York then I went to Argentina for over four years and Madrid, then back to New York. And that's when I was in New York in 2017, I really started covering crypto and I was completely fascinated by the space, and pitched to write a book on the history of Ethereum in end of 2017.
- Camila Russo:** 04:15 In 2018, I started writing the book with HarperCollins. And 2019, I left Bloomberg to finish the book and also because I wanted to do something on my own. Once I turned in the first draft of my book, The Infinite Machine in June of last year, I founded The Defiant which is a newsletter that's becoming more of a media company focusing on decentralized finance. So, that's me.
- Demetri Kofinas:** 04:46 Well, that's exciting. Now, you open up a whole new front of questions. So, you started The Defiant and you said in June 2019?
- Camila Russo:** 04:52 Yep.
- Demetri Kofinas:** 04:53 And when did you leave Bloomberg to focus on writing the book?
- Camila Russo:** 04:56 January 2019.
- Demetri Kofinas:** 04:58 January. So, you're very ambitious. Where were you in the writing process at that point in time?
- Camila Russo:** 05:04 When I started The Defiant or when I-
- Demetri Kofinas:** 05:06 No, when you left Bloomberg.
- Camila Russo:** 05:07 Oh, I was probably like halfway done through writing the book.
- Demetri Kofinas:** 05:12 So, you already felt pretty confident about how long was it going to take you at that point?
- Camila Russo:** 05:15 Yeah, yeah. Like I had the goal of turning in my draft by June. I didn't want to delay it any further. I really wanted to publish a book as soon as possible and I wanted to do it in the best way possible, so I just thought I don't want to be doing my job at Bloomberg halfway. I don't want to be doing the book half way and so that's why I decided to leave. Honestly, after eight years in the same company, I thought it was time to start something new.

**Demetri Kofinas:** 05:50 Yeah, people say Bloomberg is like the Borg. So, get assimilated.

**Camila Russo:** 05:54 Yeah, you get wrapped in.

**Demetri Kofinas:** 05:55 Yeah. So, I normally ask my guests when or how they got the idea to write their books. But in your case, the idea itself as you wrote in your own book it was something that it seemed almost very obvious, why hadn't it... The only question was why hadn't anyone done it?

**Camila Russo:** 06:12 Yeah.

**Demetri Kofinas:** 06:13 But I wonder maybe then the appropriate question to ask is when or how did you get the idea that you were the person to write the first official story of Ethereum.

**Camila Russo:** 06:23 That's a good question. First, I want to give like a little bit of background of when I became interested in crypto and it was back in Argentina. Like you said, a lot of people who are driven to the space have this kind of intersection with Argentina at some point in their lives and that was the case for me and it was in 2013 covering Argentine markets, seeing how people were really being hurt by double-digit inflation and currency controls.

**Camila Russo:** 06:54 I wrote about how people were using bitcoin to protect their savings and skirt these currency controls. And so since then, I was always really interested in this space. And then in 2017, like I said, I was back in New York and really had the opportunity to cover it more like full time because of the huge interest there was at the time to write about crypto.

**Camila Russo:** 07:17 So, I was at this boom in crypto at Bloomberg News like one of the biggest financial news organizations and I was one of the few reporters covering the space there. So, it really kind of gave me like a crash course in crypto writing about the space every day and with really good access to the best sources there were because I was at Bloomberg. So, it was an incredible place to be at the time.

**Camila Russo:** 07:46 So, at the end of the year I really thought first, it's amazing what just happened like this explosion in crypto, and I thought it really needs to be documented. Writing a book is something that I had always wanted to do so I thought this is kind of my opportunity to finally write a nonfiction book. And so I knew I wanted to do it in crypto because that's the space I had been covering and the space that I was fascinated about.

**Camila Russo:** 08:22 Thinking about what the best story was, like I said, it was pretty obvious like Ethereum was a great story to tell, which hadn't been told before. And as to why me? I think it's interesting because I think that this highlights something that I think attracts many people to crypto which is how new it is and how ripe for innovation it is. And because it's so new, it feels like nobody really has ownership to it.

**Camila Russo:** 08:54 At least that's how I felt at the time because like I was in Argentina, I covered this space for five years almost, but it didn't feel like it was my place to write a book on Argentina because there are better end reporters who have been

covering Argentina their whole lives who are Argentine, who I don't know, have so much more experience than I did.

- Camila Russo:** 09:17 But when I was in crypto, it just felt like I was in a good spot relative to other journalists. Maybe some had a couple years more covering this space than I did, but it didn't feel like I was like at such a disadvantage to others. So, I think that's a great point to highlight that because the space is so new and open and decentralized and nobody owns it, but I felt that I can tell this story too.
- Demetri Kofinas:** 09:43 Although, you'd be surprised. The only English book written in English on the economic history of Argentina that I'm aware of is Paul Blustein's book and that was, I think written in 2003 and it was titled, *And The Money Kept Rolling In*. In fact, he cited Casey. He mentioned Mike Casey. He cited Casey in that. So, there actually hasn't been that much written on Argentina, believe it, which is shocking because it's such an interesting case study.
- Camila Russo:** 10:12 Maybe I should look into that for my next book.
- Demetri Kofinas:** 10:12 Yeah, that's your next book. Well, so back to Argentina though. Why do you think that so many people have caught the bug who were either in Argentina or had some intersection with Argentina. Is it because of how dysfunctional their particular government is and how dysfunctional their currency is?
- Camila Russo:** 10:33 I think it's a mix of things. I think for sure people in Argentina instantly get the value of an independent, sensorless, monetary system because of how dysfunctional their own system has been for decades, almost for their entire history.
- Camila Russo:** 10:53 People in Argentina, it's funny because they're everyone like you talk to a taxi driver and everyone is super financially literate. Everyone will know the rate of the dollar a day. Everyone understands what inflation is, which is obviously very different than countries where you don't need to know all that stuff. But in Argentina, it's kind of like an everyday topic to understand.
- Camila Russo:** 11:18 Even like the bond risk premium is something that makes headlines. So, it's something that people get, how much irresponsible monetary policy and irresponsible fiscal policy can really directly hurt your pocket. So, when people listen to what bitcoin is, they get it. They get why it's important and significant. And I think another aspect which is maybe not as talked about is that I think Argentines are really innovative people. And I think it's-
- Demetri Kofinas:** 11:54 They have to be. They're constantly stifled.
- Camila Russo:** 11:56 Yeah. It's true. I've talked about this with different Argentines and people who have lived there and it's like, it's interesting, the amount of innovation that comes out of of Argentina and under great entrepreneurs like the few big blue chip stocks that have come out of Latin America have come out of Argentina, Globant and Mercado Libre, they're both Argentine companies. So, you have all these examples of Argentines being great entrepreneurs and great innovators.
- Camila Russo:** 12:29 And yeah, it's exactly that. It's because they have to be, because they constantly go through these crises, cycles where they lose everything then there's like a big

boom usually fueled by populism and then they lose everything again. So, they have to constantly be reinventing themselves. And so I think that's another reason why they're kind of open-minded to try something new like crypto.

- Demetri Kofinas:** 12:56 I can't remember now what the saying is, but there's some kind of saying that relates to like there's always a way, how they always find a way in Spanish. How important, and then we'll move off of Argentina, but how important was living in Argentina in terms of your sort of interest in crypto? I don't know if you kind of answer that already. And I looked on my own to see when you first started writing about it. It looks like you first started writing about it in 2013 covering Bitcoin, but give me a sense of your personal development and your interest in this space. How did that kind of happen?
- Camila Russo:** 13:32 Yeah. Like I mentioned, I think living there was really instrumental in my interest for crypto. And I think maybe to add more context to this, my own background coming from Chile before Argentina. So, Chile is a little bit of... In some ways, it's the opposite of Argentina and that it's very conservative or at least it was. It's changing a little bit. But it's usually one of the more conservative Latin-American countries when it comes to monetary and fiscal policy.
- Camila Russo:** 14:13 It's been traditionally a pretty stable country switching between two center right, center left parties. And so I came with this context and having lived myself that having this more conservative way of handling finances and currency, it usually works out like Chile has done pretty well compared to its neighbors. And then covering Argentina with Bloomberg, which meant being constantly looking at markets.
- Camila Russo:** 14:49 So, I was looking at how the black market dollar was spiking while the government hid the real rate of the dollar and tried to control the rate by having an artificial official rate, how all these populist policies were the government just printed money to subsidize people, just cost huge inflation which ended up costing people in the end. They say an inflation is a way to tax the poor and that was definitely the case in Argentina.
- Camila Russo:** 15:22 I was constantly covering the different ways and very creative ways that Argentines were doing to protect against inflation and it was very frustrating to see that the government really could come and tell you what you could and could not do with your own money. I lived that firsthand because I was earning Argentine pesos when I was working in Argentina. And when I first got there, there weren't currency controls and the first thing my co-workers told me was, "As soon as you get your salary, you need to buy dollars and just keep everything in dollars." And I was like okay.
- Camila Russo:** 16:03 So, when I did that, I got my salary and I just like online bank. I switched my pesos to dollars. And then one day, a couple of days after Cristina Fernandez was reelected and I was covering this at the Bloomberg office, she went on TV and said people aren't allowed to buy dollars anymore, and that was it. No warning, no debate. It didn't have to go through the Senate, nothing. She just announced you're not allowed to buy dollars anymore.
- Camila Russo:** 16:35 And sure enough, I went into my bank account and the option of converting my peso account to my dollar account just wasn't there anymore. That just really

Illustrated to me how frustrating it can be when a government just dictates what you can do and you can't do with your own money. I just couldn't believe it. So, I think that really kind of... The same thing when I heard about Bitcoin that it was this independent currency, that that's not controlled by any government or any central bank, it really did make sense to me and I thought it was a really powerful idea.

- Demetri Kofinas:** 17:17 Are you surprised that Bitcoin and other cryptocurrencies haven't gained more traction in the developing world or in countries like Argentina?
- Camila Russo:** 17:27 Well, yes and no. Like I said, there's definitely a reason to own Bitcoin and other cryptocurrencies especially in countries with inflation and currency controls. So, I would expect anyone who can would own crypto. But at the same time it's still really hard to do. It's not a very intuitive process with having to understand how to handle your private keys and your wallet, and I don't know. I think it's still complicated and takes a few steps to do. I don't think we're there yet in terms of onboarding, and fiat, and off-ramps. So, I think it's understandable but not everyone kind of gets it.
- Demetri Kofinas:** 18:21 Well, we'll have time to get into all the contemporary stuff in the overtime, but I want to use the rest of our time today and the full episode at least to discuss the book because as I mentioned to you before we started it, I agree with you that this is one of those topics that is just strikingly book worthy and you couldn't have really gone wrong by deciding to focus on it. And it's very much kind of in the vein of a digital gold and so far as it follows a very sort of clear structure.
- Demetri Kofinas:** 18:50 It begins with Vitalik pretty much and it moves through to the post ICO boom period, which is kind of where we're in today. I'm curious, what was the process of writing the book like? How many people did you interview/ How did you keep track of all that material? And I also wonder, did you do all your research or most of it up front and then just kind of do whatever additional research you need to as you started writing? But was most of it done at the very beginning? I'm kind of curious about that whole process.
- Camila Russo:** 19:24 Sure, yeah. So, I started researching by first talking to the very early co-founders. I had like a preliminary conversations with a few of them. I spoke with I think Charles Hoskinson and Amir Chetrit, and I think someone like Steve Narov I think. I spoke with a few early people to just give me like a very broad overview of the early days so that I could structure the early days part of the book and know who I had to talk to. So, I did five very preliminary interviews just to get that rough idea.
- Camila Russo:** 20:14 Then with that and the basic structure kind of mapped out of the first half of the book like the early days part of the book, I went to... My goal was just to interview as many people as possible who were there, who saw things as they happened directly. So, my goal first was after talking with these early people, I got the sense that there was this group of eight co-founders. So, my thing was like, okay, first get the eight and then I go from there. I wanted to get Vitalik last.
- Demetri Kofinas:** 20:50 So, you didn't already have a pre-existing relationship with Vitalik?

**Camila Russo:** 20:53 No.

**Demetri Kofinas:** 20:54 Its very impressive. You must not have any sort of inhibition. You pretty much could just cold call anyone or go pitch anyone as an individual.

**Camila Russo:** 21:03 Yeah, basically.

**Demetri Kofinas:** 21:04 That's a good skill to have.

**Camila Russo:** 21:06 It's all that years at Bloomberg where you're just like pressure to get stuff out every single day. You can't have any in inhibitions. You just need to call people and get an interview. So, I didn't have any like any relationship with Vitalik at all and just like trust that I'd be able to get to him somehow.

**Camila Russo:** 21:24 So, I spoke with seven co-founders and in the meantime I was like trying to find a way like someone to contact me with Vitalik because he didn't initially replied to my email. So, I asked people to introduce me. And so as I was interviewing the very early people, I was also trying to contact Vitalik.

**Camila Russo:** 21:49 Usually the way I did the interviews was I tried to do them in person. So, I timed big interviews with conferences or times where I'd be nearby. An example of that is the interview I did with Gavin Wood. I did it in his Berlin apartment and I timed that with a conference or something. I'm blanking out on what was going on. Yeah, I went to Berlin for an Ethereum Hackathon or conference in Europe.

**Camila Russo:** 22:27 I timed it with a trip to Souk, to visit the Souk House. So, I was like actually there at the Souk House. I went to Berlin. I also went to Amsterdam to interview Jeff Wilkie, but that didn't end up working out and I had to do the interview over Skype, so that was a little bit frustrating.

**Demetri Kofinas:** 22:51 That's really exciting. You got to learn a big piece of the history of cryptocurrencies firsthand. It's really a special experience. You must feel very fortunate.

**Camila Russo:** 23:01 I am. It was an incredible experience. I'm really happy I decided to write this specific story because I think first, the characters are incredibly interesting. Vitalik himself is just such an amazing character. This 19 year old genius thinking of this platform, but beyond that, that stereotype, this really kind of mature leader, I think it must be really uncommon to see someone like him that's so young and leading such a huge project with so many different people behind him.

**Demetri Kofinas:** 23:49 Well, you definitely seem to have a high opinion of him or a soft spot for him in the book. How many hours did you spend with him directly in conversation in sort of preparing for the writing of the book?

**Camila Russo:** 24:02 So, I interviewed him for I think over two hours and then emailed back and forth for a lot of the fact-checking. And then have interviewed him since like... I interviewed him again at ETHWaterloo for another hour.

**Demetri Kofinas:** 24:22 I saw a recent Q&A that you did with him on stage. Was that the one?

**Camila Russo:** 24:26 I think the most recent one was for Ethereum.

**Demetri Kofinas:** 24:30 The one where you asked them what the... In fact, that's the same one that you closed the conclusion of the book with where you asked-

**Camila Russo:** 24:36 Right. Yeah, that's the one.

**Demetri Kofinas:** 24:37 ... him about the value of the network.

**Camila Russo:** 24:39 Yeah, yeah. So, I guess three hours with him plus emailing about fact-checking stuff.

**Demetri Kofinas:** 24:47 I mentioned to you, I think it was before we started recording that I had Vitalik along with Vlad Zamfir a couple of years ago to talk about the road map and the problem of scalability. And it was a very interesting experience to have him on the show and to engage him in conversation because he is so unorthodox in the way he thinks and in the way he speaks and communicates.

**Demetri Kofinas:** 25:12 So, that was a valuable experience for me. I'm curious for you, what was that experience like? When you first met him and you engaged him in conversation, what did you find most notable and what kind of insight did you glean in those early interviews?

**Camila Russo:** 25:30 So, I think what surprised me the most was that I always thought Vitalik would really focus on just the very technical answers and I think that's because when I had seen him do interviews with other people, that's what maybe the interviewees focused more on, but anyway. So, I was expecting him to not want to go into more personal aspects of his own life and I was a little bit nervous to ask him about his childhood and what was school like and things like that. I thought he would just brush off and not want to talk about it, but he was like really happy to go into that like just more personal, non-technical, like non-Ethereum related questions. So, that was a really good surprise.

**Demetri Kofinas:** 26:28 I mean, you wrote this in the book that he was growing up an introvert.

**Camila Russo:** 26:32 Yeah.

**Demetri Kofinas:** 26:32 In fact, I think you spoke to at least one of his teachers in Canada, right?

**Camila Russo:** 26:35 Mm-hmm (affirmative).

**Demetri Kofinas:** 26:36 And then as he got older, he got he became more extroverted. What accounts for that? Do you think it was just the circumstances of his role in Ethereum in particular that sort of forced him to grow up sooner than he would have otherwise?

**Camila Russo:** 26:52 That's one really remarkable thing about Vitalik that he was extremely introverted when he was a kid at least according to... I spoke with his mom and dad and his university professor, that it was tough for him to make friends at first, to participate in class and share different interests with other kids. According to his mom, he started to come out of his shell a little bit first when he changed schools to like a smaller more specialized school.

**Camila Russo:** 27:34 So, that allowed him to meet other people with similar interests. And I think really with Ethereum having been forced into this position of leadership, I don't think even if that's not what he liked really most love and loves to do like standing up on stage and inspiring people, maybe it wasn't what comes more naturally to him, but he was forced to be in this position because he believes in Ethereum so much. So, he just went ahead and did it and got on stage at that Miami conference when Ethereum was announced and had this huge kind of reaction, positive reaction to his talk.

**Camila Russo:** 28:29 From there, he kept evolving and improving and talking onstage, and I guess with time, he got good at it or at least... I mean, I think he's pretty good at public speaking now and he's very kind of loosened up and makes jokes. I think he's found his crowd and just maybe he's more comfortable. But it's definitely been a big evolution. I mean, according to what his parents said that he was like when he was a kid.

**Demetri Kofinas:** 28:59 Where did the rainbow unicorn come from?

**Camila Russo:** 29:04 Yeah, that's interesting. I think it's really hard to say, but I think where it comes from is-

**Demetri Kofinas:** 29:12 Not all of our listeners will actually know what I'm talking about, so maybe you can fill them in. Though I'm sure anyone in the crypto community already knows what I'm talking about.

**Camila Russo:** 29:21 Yeah. So, Ethereum has this very unique aesthetic filled with rainbows and unicorns, and just like mythical creatures all around. It's very kind of internet centric with memes and, I don't know, pixelated images and emojis, and that sort of stuff. I think it was born out of the Nyan Cat emoji. You know what I'm talking about? It's like a little flying cat on a piece of toast and there's like a rainbow shooting out of its tail? It's like this meme or emoji in the internet where it's like a flying cat.

**Demetri Kofinas:** 30:04 Yeah. It's like a low-resolution cat on a Windows 95 machine or something.

**Camila Russo:** 30:10 Exactly. And there's a rainbow flying after it. So, on the very early Ethereum t-shirts, there was one Ethereum t-shirt that had the word Ethereum and a Nyan Cat underlining Ethereum with the rainbow underlining the word Ethereum. So, I think that's one element that really started it. And then I've seen a couple of like YouTube videos by early Ethereans where they use the Nyan Unicorn. So, there's a different emoji. Instead of a cat, there's a unicorn.

**Camila Russo:** 30:48 So, I think it was just this internet culture picking up these different memes and it just seems like the unicorn and rainbow really stuck to this group of people. And I think it's partly because when you look at Ethereum developers, they're pretty much in a similar kind of demographic. They're mostly-

**Demetri Kofinas:** 31:11 Super geeky.

**Camila Russo:** 31:12 Yeah. They're obviously super geeky. They're computer scientists. They are mostly Millennials on the younger side and like 20-something.

**Demetri Kofinas:** 31:25 Zoomers.

**Camila Russo:** 31:28 Yeah.

**Demetri Kofinas:** 31:30 This thing about memes is just so fascinating to me. I have a friend who's in his mid-20s and he sends me stuff all the time and kind of educates me, keeps me up to date on the memesphere. And the memes that I'm following the most lately are actually memes of Sergey Nazarov which is super funny because I saw this one where they had him in what would look like a TV. Like he was on television with CNN scrolling underneath that he'd been killed in a car crash. Clearly an allusion to Vitalik and claims that he had died.

**Demetri Kofinas:** 32:08 And you see these constant sort of references to comparing him to Vitalik. But at core, they're meant to be funny. But they also clearly play a much larger role in terms of community. And community is such an important part. I mean even Vitalik talks about this. It's a part that for someone like me for example. I always could appreciate in general terms that having a strong community is great if you have open-source development, but it's much bigger than that in crypto.

**Demetri Kofinas:** 32:40 So, I'd love for you to maybe talk to us a little bit about what you've come to understand about the culture. I mean, we're talking a little bit about it now. But the significance of culture in Ethereum and how that clearly differentiates it from something like Bitcoin. And I should also mention one of the other things that is very obvious about Vitalik is that he's not ideological.

**Demetri Kofinas:** 33:05 And so ideology in particular Austrian economics ideology and sort of libertarian anarcho-capitalism is a big part of what bitcoin is about. And one of the interesting things about Bitcoin is that you see a lot of these internal schisms in the culture where people that come into it need to sort of adhere to some of these ideological framings. Vitalik obviously doesn't have that, and so as a result also Ethereum writ large is not really ideological in that sense, even in when it comes to the issue of the supply schedule. But tell me a little bit about what you learned about the culture and I'd love to know how memes play a role in that and why that's significant for the future of Ethereum.

**Camila Russo:** 33:53 Super interesting topic. I think memes absolutely play a role in crypto because in the end they're a way to synthesize narratives. And so I think we are constantly looking for shortcuts of ways to understand the world better or easier or more easily and I think that's what memes help do. They really pack so much information in one image and a couple of words. So, I think that's why they're so powerful. They spread, they mutate like people make them their own and they communicate something very quickly.

**Camila Russo:** 34:40 Especially in a community like the cryptocommunity where everyone is online all the time in different forums on Twitter and Discord or wherever, these memes are particularly powerful like maybe more powerful than in other communities.

**Demetri Kofinas:** 34:59 Oh, definitely.

**Camila Russo:** 35:01 I think they're not to be underestimated. I think they can definitely be an incredibly powerful tool in a community. The LINK Marines have really excelled

at this. I think the synthetics community is great at memes too. Maybe not coincidentally but the tokens have done really well. Because in the end, they're a way of doing a little bit of propaganda like spreading the word on your project. So, it definitely helps.

- Camila Russo:** 35:36 About Ethereum culture, yeah so we talked a little bit about this, the whole unicorn rainbow aesthetic, and it does come from memes and internet culture. Like I was saying, it appeals to this demographic of really geeky millennial hackers. I think that's what really differentiates the Ethereum community from the Bitcoin community is that a lot of the people I spoke with within Ethereum come to Ethereum because they're excited about what they can build on this platform.
- Camila Russo:** 36:16 So, For those who don't know the Ethereum network the way it's different from the Bitcoin network is that it's Turing-complete which means it can process anything that a computer can process, whereas Bitcoin is more limited in its capacity to do that. So, different developers who were may be attracted to crypto and had looked at Bitcoin but we're disillusioned with it because they couldn't really build anything on it, came to Ethereum because of this flexibility.
- Camila Russo:** 36:50 And so because Ethereum attracts people for a different reason than bitcoin is that we don't see this ideology there. People usually go to Bitcoin because they are attracted to this sound money idea that's very appealing to libertarians, but in Ethereum, it's more like people go to it because they're geeks who want to build stuff. And so they can be libertarians because it's still crypto. It's still the case that many people in Ethereum will be libertarians, but you also get tons of liberals. If you're like developers, a millennial developer in a big city, you'll likely find tons of liberals in that kind of demographic too. So, you get more of a mix of people there.
- Demetri Kofinas:** 37:41 So, if you had to choose, although this might be unfair to choose one chapter or one story. So, maybe you can give us a few of them, but what are some of your favorite stories that when you were researching them and then also writing them, you just felt really exciting and you were excited to share them with readers. Was it stuff that had a lot of personal drama or was it things that got more technical, for example?
- Camila Russo:** 38:07 Yeah. Let's see. I think it's really hard to think that.
- Demetri Kofinas:** 38:11 I mean, the DAO fork is obviously like a great story because it involves a lot of high stake decisions and a lot of stress and a lot of unhappy people.
- Camila Russo:** 38:20 Yeah, yeah. I think the DAO fork is an obvious one, but I think there are lesser known stories that are super interesting like the chapter I called The Red Wedding is I think really dramatic.
- Demetri Kofinas:** 38:38 The reference to the Game of Thrones blood scene.
- Camila Russo:** 38:40 Uh-huh (affirmative). And it's when the eight founders and other people working on Ethereum at the time congregated in the Souk House. Some people thought they were going there to sign documents to turn theorem into a

company but in the end what ended up happening was that two of the founders left or were kicked out depending on who you ask.

- Demetri Kofinas:** 39:08 Amir and Charles.
- Camila Russo:** 39:10 Exactly, yeah. And Ethereum ended up becoming a foundation or Vitalik made that decision after much deliberating in the past few months, but it was a really intense moment where the people in the room kind of decided that this would be done. So, I think that's not as well-known as the DAO fork but probably equally dramatic. And what else? I think the chapter on the Miami houses, I really liked researching because this is one of the few moments where all of the Ethereum co-founders were in the same place. Well, not all of them, but Jeff Wilkie and Mihai couldn't be there.
- Camila Russo:** 39:56 But it's really odd that there weren't really many moments where you had most of the founders in the same room and the Miami house was one of them. And it was really exciting because Ethereum was just a project, so it was really easy to dream and everyone was on board and not fighting as much. And Vitalik made this announcement at the conference. So, Gavin was there thinking it would be a hackathon to build Ethereum and he was really disappointed to find people in the house just drinking and dreaming of going to the moon. So, that's another interesting one.
- Demetri Kofinas:** 40:43 So, this story, The Red Wedding was in particular one that I pulled out and put quotes from in my rundown for today's conversation because the way you told that story... First of all, it felt like you had a certain amount of admiration for how Vitalik handled it at the time as well as the role that he played in deciding that Ethereum would be a non-profit and an open-source project. And also how that changed him. I mean, you actually said Vitalik was only 20 years old at the time, explicitly made at that point.
- Demetri Kofinas:** 41:15 He looked like any other young geek in his worn-out jeans and faded T-shirt and rail-thin frame. That kind of goes back to that point about his leadership and his evolution. You've dealt with a lot of these other characters in the book and some of them weren't particularly... Well, it didn't seem particularly magnanimous. Some of them already have a reputation for not being. But what was that like dealing with all of these different egos and each of them have different expectations about how you're going to describe them, their role and what you think their role was.
- Demetri Kofinas:** 41:55 And I'm sure there have been instances in the book where the stories didn't converge. Charles may tell you one thing, Vitalik will tell you a completely different thing and Gavin will tell you something in between. So, how did you manage all of that? What were some of these individuals like? Can you give us some insights about that? Because that's super interesting.
- Camila Russo:** 42:18 Let's see. It's tough. About the process of the book which I guess, I never really finished telling you about. Right. I did all the interviews starting with the founders and then leading to everyone else. I did over 100 interviews, those of ours. And once I had that, I sat down and started writing the story and then I often went back and did second interviews, when I was missing information. Once I completed the entire book, I did fact-checking where I took out like I did

bullet points of all the facts where I mentioned the different characters in the story.

- Camila Russo:** 43:00 I emailed them to them so that they could check what I was saying about them. But they haven't really... I don't think they've read the full book yet. So, I'm not sure. Maybe ask me this question in a month and I'll tell you if everyone-
- Demetri Kofinas:** 43:20 If I was one of these guys and you were writing a book about Ethereum and I was in it, if I had reason to be anxious about how you would depict me, I probably would be. So, I just imagine that some of these characters whose reputations are not stellar post Ethereum, I just wonder what that might have been like? Where any of them particularly controlling about the image that you would paint of them? Were they concerned about it or did everyone pretty much just give you what you wanted?
- Camila Russo:** 43:55 No. I actually had a relatively good experience in that sense. Nobody was particularly controlling because in the end there was not a lot of opportunity to control anything. What I did is like I said I did most of these interviews in person. I spoke with them for several hours, couple of hours and I had everything recording. I just asked them, tell me the story as it happened. I then went back if there were anything that wasn't exactly like somebody else said with the fact-checking. So, I don't know.
- Camila Russo:** 44:35 The only thing I gave them space to change was the facts that they told me. And in the end the story I tell is, is the story that came out of all these different interviews. So, if one of their stories didn't exactly match in the end, I went with what most people who were there told me happened. So, I think that's how I handled kind of those differences in my perception of what happened.
- Demetri Kofinas:** 45:13 We're going to spend the period of the ICO boom and craze, and bust. We'll probably talk about most of that in the overtime, but I'd at least would like to start during the full episode because it's so interesting. When we're living in the aftershock of that period and the hope is that a lot of really great work and building has been done during the bear market with a lot of the money that was raised during the boom.
- Demetri Kofinas:** 45:42 And there's a lot of controversy around this. A lot of people raised a lot of money rather because during this period, the big story on the technical front that I remember and this is what I talked to Vitalik and Vlad about when they came on the show and that for listeners I think was like episode 49 was the problem of scalability and we discussed sharding, we discussed state channels and other solutions both layer one and layer two. And proof of stake obviously, FFG and CBC, Correct By Construction which was LADs. In your research, how much progress has the community really made here on addressing issues of scalability in the last three years?
- Camila Russo:** 46:28 I think progress and scalability has been really incredible in the past few years. When I started writing the book, there weren't really any scaling solutions being used by "consumer debts". Right now we have debts like loop ring using zero-knowledge proofs and optimism doing these tests with optimistic roll-ups. And Plasma finally launched and it has its state. It's a separate channel where it has disagreement to support BitFenix's tethered transaction. So, you have concrete

results of all these scaling solutions and all the research that's been done so far. So, I think progress has been amazing.

- Demetri Kofinas:** 47:23 what are you sort of most excited about. How much headway have they made? I've heard Vitalik talk about... I mean, for most of what I see, it's incremental solutions with the aim and focus being on something that you're also focused on which is DeFi which is basically scaling Ethereum enough that they can fulfill at least some of the hopes of creating a decentralized financial system, right?
- Camila Russo:** 47:49 Mm-hmm (affirmative).
- Demetri Kofinas:** 47:51 So, what about that sort of excites you the most?
- Camila Russo:** 47:55 You mean what about DeFi?
- Demetri Kofinas:** 47:57 Yeah, what about DeFi and also what about some of the sort of base layer implementations make that possible? So, in other words, I've actually talked with briefly on two occasions. Actually, not so briefly. The framework guys who have actually been on your show, Vance and Mike I think is the other guy's name.
- Camila Russo:** 48:15 Mm-hmm (affirmative).
- Demetri Kofinas:** 48:15 And we've talked about this because there are huge investors in the space. They're very educated on DeFi. And that was kind of one of my questions which was what has really changed in Ethereum in the last, let's say, three years that has created an opportunity in decentralized finance? Was it just on the distributed applications front or is there something... Has work been done on the network, on the base layer that has... And maybe on secondary layer solutions that has enabled or made possible some of these other applications? And obviously with the broader implication of what can we expect to see in terms of use cases and proliferation of stuff like this?
- Camila Russo:** 48:54 Yeah. It's a good question. I think for now most of these DeFi applications aren't using second layer to scaling solutions. Yeah, there's a couple that I mentioned but the large majority are transacting on layer one, which just tells you there's a huge potential for the space to keep growing as they kind of move to layer two solutions. And I think what really happened in the space to enable this DeFi explosion was, one, the amount of money and interest that was going to Ethereum during the ICO boom.
- Camila Russo:** 49:40 So, that funded many of the top defy projects today. So, Maker DAO raised money around that time. Kyber did as well. And many top other DeFi projects were created and funded because of the ICO boom. So, people kind of love to hate on ICOs and partly with good reason too. But a lot of good also came out from that. And then secondly I think the bear market and having kind of... Not having the distraction of the price mooning and then just constant headlines and people getting rich and scams and all of that. And just having to get their heads down and build and ship on what whatever they promised during the ICO days.

- Camila Russo:** 50:38 We're seeing the product of all that building right now. So, I think that's kind of the beyond whatever marginal improvements there were made to like the base Ethereum layer which I don't think there were huge improvements. I mean there were like a few forks during that time, but I think what really explains DeFi today is that the ICO boom and bust.
- Demetri Kofinas:** 51:08 It is. So, it's kind of dark bandwidth effect. It's the money that came in and the fact that a lot of these projects... It's interesting. I think that in a sense cryptocurrency is the success that the community is seeing in terms of raising money is actually itself an indictment of the profound failures of our institutions to properly fund academic research. The type of research that gave us the early internet protocols.
- Demetri Kofinas:** 51:36 You've got the private sector trying to fund this and it's been problematic. It's been problematic in terms of ICOs. Also, the ICO is another great example of the profound failure of our regulators. Again, it's almost like... For me, the larger issue is just how utterly captured and incompetent and corrupt our legacy financial system is. That is a bigger story in terms of what I see rather than the substance of the decentralized finance or blockchain at the moment.
- Demetri Kofinas:** 52:11 I think also this comes across in the conversations I've had with Vitalik and other developers in the space. These guys and gals are excited to build stuff, but what they're building takes a long time and it takes a much longer time to build than what the investors expected or hoped because a lot of people, most people that got involved in the space that funded it should never have been involved in the first place.
- Demetri Kofinas:** 52:36 They were just looking to get rich, most people that were speculating on the currencies. And so I think that's a big sort of story here which is that you've got a lot of these smart people trying to develop stuff. They'd be in a much better, I think, situation if they could focus on building and not be going through these booms and busts, right, which is what a lot of the open source development community had in the '60s and '70s.
- Camila Russo:** 53:03 I'm not sure I agree with that because I think these booms and busts, like I said, they're bringing money to the space and I think it's tough to rely on private donations and charity to get open-source protocols working. That's not always a sustainable business model. And I think that's the great innovation of blockchains and crypto actually that it has baked in this incentive which is the token which allows open-source platforms and applications to actually be sustainable in the long-term because they have these tokens.
- Demetri Kofinas:** 53:52 It certainly has attracted capital. There's no question about it, but I think it's attracted so much capital one because central banks have created a tremendous amount of liquidity. That's enabled that capital to flood into early stage and it's also because of the profound failure of governments and central banks and regulators both to keep white-collar criminals accountable and also to actually restrain their provisions of credit.
- Demetri Kofinas:** 54:18 So, anyway to kind of a larger... I know it's kind of heresy for this community. I used to be a much more of a proximate libertarian, but what I've seen in over the years I think in that sense I have a lot more in common with Vitalik and that

I've become much more nuanced in my thinking around this issue. And in terms of like nonprofits, I agree. I actually mean specifically that because we don't have faith in our government and understandably why we've lost faith in our government, we don't have the type of moonshot projects and initiatives and collaboration between the government and the private sector that we had obviously during the war, but then in the post-war period, the 1950s and 1960s in particular.

- Demetri Kofinas:** 55:04 That would have seeded these type of early stage innovation because this is very capital-intensive. And my point about the boom and bust is that simply something like this, I don't think is well served. And we'll get into this in the overtime because I want to ask you, this goes to the question of the legacy of the ICO craze because so much of what the ICO boom was, was ERC-20 tokens. It was stuff that was enabled because of Ethereum. A ton of these people were able to basically scam investors.
- Camila Russo:** 55:33 Right.
- Demetri Kofinas:** 55:34 So, how has that set back the community? There were a lot of people that got into this space that were excited about it and it became disillusioned, right? So, there are consequences to the bust. But we'll get into all of that in the overtime, Camila. And I also want to ask you something that you're, I think particularly qualified to talk about, which is journalism. Maybe journalism writ large, but also journalism specifically in the space. One of the things that I found really fascinating having come in or sort of gotten in deeply in 2017 was how the podcasting environment changed.
- Demetri Kofinas:** 56:08 And also just the media environment more broadly, there were certain people that had a bigger voice at that time and then we saw that dramatically change. And I think a lot of that had to do with the success of Bitcoin during the bear market. And a lot of the people that were covering Bitcoin really became the prominent voices in the cryptocurrency space. So, I'd love to talk to you about that. And just maybe a little bit more about DeFi and whatever else you're interested in discussing.
- Demetri Kofinas:** 56:33 For regular listeners, you know the drill. If you're new to the program, Hidden Forces is listener-supported. We don't accept advertisers or commercial sponsors. The entire show is funded from top to bottom by listeners like you. If you want access to our premium content which includes transcripts to every conversation we've ever had on the program, copies of my run downs, which are elaborate show documents created by me ahead of every episode, this one includes lots of rainbow colors, what looks like a hurricane, Ethereum DeFi liquidity vortex, a picture of Vitalik holding the... This was when he was pronounced dead, Camilla, right where he took a picture?
- Camila Russo:** 57:17 Right, yeah.
- Demetri Kofinas:** 57:17 Right. And finding new uses for blockchain rather than newspapers. So, my rundown as well and also the overtimes, which are the second part of my conversation with my guests. You can head over to [patreon.com/hiddenforces](https://patreon.com/hiddenforces) to access all of that and subscribe. Not only is the content worth it, but it's a great way of showing your support for the show and the work we do. Camilla,

stick around. We're going to move the second half of our conversation into the overtime.

**Demetri Kofinas:** 57:46 Today's episode of Hidden Forces was recorded in New York City. For more information about this week's episode or if you want easy access to related programming, visit our website at [hiddenforces.io](http://hiddenforces.io) and subscribe to our free email list. If you want access to overtime segments, episode transcripts and show rundowns full of links and detailed information related to each and every episode, check out our premium subscription available through the Hidden Forces website or through our Patreon page at [patreon.com/hiddenforces](http://patreon.com/hiddenforces).

**Demetri Kofinas:** 58:24 Today's episode was produced by me and edited by Stylianos Nicolaou. For more episodes, you can check out our website at [hiddenforces.io](http://hiddenforces.io). Join the conversation at Facebook, Twitter and Instagram @HiddenForcesPod or send me an email. As always, thanks for listening. We'll see you next week.