



Lowenstein's Tech Group Podcast: Crypto Innovators

Episode 11 – NFTs and Ordinals: A Conversation with WenMint Co-Founder Leroy Ware

By [Eric Swartz](#), Leroy Ware

MARCH 2023

Kevin Iredell: Welcome to the Lowenstein Sandler podcast series. I'm Kevin Iredell, Chief Marketing Officer at Lowenstein Sandler. Before we begin, please take a moment to subscribe to our podcast series at lowenstein.com/podcasts. Or find us on iTunes, Spotify, Pandora, Google podcast, and SoundCloud. Now let's take a listen.

Eric Swartz: Welcome to the Crypto Innovators podcast, presented by Lowenstein Crypto. I'm your host, Eric Swartz, Senior Counsel and Vice Chair of Lowenstein Crypto. We're speaking with the most innovative founders, operators, and investors in Web3 to shine light on the technologies that fascinate us all.

Today, we welcome Leroy Ware, co-founder and blockchain engineer at Wenmint. Hi Leroy.

Leroy Ware: Hey, how's it going, Eric?

Eric Swartz: Doing great, man. Great to have you on the pod. We're super excited to chat Ordinals, but I think we should give folks a little bit of background first. Tell the listeners about yourself and your journey before Wenmint, you've got the coding experience to work anywhere, and yet you're a serial entrepreneur. What keeps you excited about founding projects and is there anything you'd like to share with first time founders that you wish you'd known at the beginning?

Leroy Ware: Yeah, that's a pretty packed questionnaire. No, I've been doing engineering I guess going on about 30 years. I've evolved through a bunch of different stacks, so it is really engineering and entrepreneurship, but if the combination of those two that have always been sort of a lifelong dream for me. And so basically I'm born and raised in Dallas, Texas. I lived in Silicon Valley for a few years and wound up working for a lot of really well-known companies out there. And while I was out there, I just kind of immersed myself in the startup scene and saw a bunch of incubators and accelerators and just really how important those were to Silicon Valley culture and essentially making Silicon Valley what it is now. And so after we came, me and my wife moved back here to Texas in 2017 after my first daughter was born, she was born at Stanford. I did some grad work out there.

I started investing in crypto and watching sort of the crypto space and this sort of boom bust cycle that happened from 2016 to 18 and again in 2020.

And then NFTs popped off and I was in a pretty good position at that point to kind of really just put everything I've got into building out what's now called Wenmint, which is essentially kind of borrows a lot of elements from these incubators and accelerators you see in Silicon Valley. I mean, we wanted to bring a big mentorship element to Web3 and we also wanted to build some software to automate everything around NFT collection launches to kind of reduce the risk involved in deploying smart contracts and DAPs. And so yeah, we spent about the last year and a half building a Web3 launchpad that specializes pretty heavily in launching NFT collections. I think we should be around generative and non-generative, I mean approaching 200 collection launches now. And yeah, that's been our focus up till now. We're expanding beyond that, but that's been our focus up till now.

Eric Swartz: Absolutely. I mean, that's plenty to focus on. There's plenty of work to be done. What makes it a great project? Is it the art? Is it the community? Is it the combination of the two? What makes the projects most exciting for you to work with them?

Leroy Ware: Yeah, I mean it's the same answer you run into in the Valley over and over and over again, which I mean, I think it's all important. I mean, great art is definitely important. I mean a loyal community that actually has some kind of grit and some kind of willingness to essentially dig in and let things happen over time where you don't expect it all to happen immediately. But I mean the number one most important thing is the team. I mean, that's what you hear in the Valley team, team team. And nothing has really changed there. I mean, you can have the most amazing art and you can have all kinds of crazy engineering around any collection or whatever, but if the team is not really top-notch, then I mean project will struggle.

Eric Swartz: That makes a ton of sense. And that wasn't necessarily what I think folks would've expected to hear. I think the analogy of a launchpad to a venture capital firm is hugely, hugely essential for understanding sort of how the NFT space is evolving and what these projects are going through. And I think it's super interesting to hear your perspective because frankly, I've been working in VC and private equity my entire life, and everything you say about NFTs reminds me so much of it and so much less of maybe the traditional art world or the traditional collectible world. And I think folks should know that getting into it, that these projects are going to require a lot of work and management teams need to be fully committed to them in order to succeed. And I think that's with any product, I mean whether it's digital or physical, you need a really, really special group of people to get that product out to your community and accepted and build that user base.

Leroy Ware: One thing, and anybody who's been watching NFTs over the last year and a half or whatever, ever since the Bored Apes launched, I mean the really early stages of it, the first few months of it was really nothing more than people launching sort of PFP pure art-based type collections. There was really no revenue model. It was more like, let's sell this 5,000 or 10,000 little profile picture characters, get that money and then figure out what to do from there. And there was this huge explosive kind of period, little euphoria period where those were just selling out constantly and anybody doing that was making money. But the market now is in a completely different place where it is starting to look a little bit more like say the Silicon Valley in very early stage

space, but the VC criteria where, I mean even collectors, so we're not even talking about big investors or whatever.

Vcs are smart enough not to have gotten into this stuff too deeply, but even collectors because there's been so much money lost, they're at a point now where you're starting to see them exercise more sort of really just a rigor and due diligence and so on and invest and buying into these projects where they just expect to see more. I mean, they really truly expect to see some kind of business model or something beyond just dropping some artwork and raising some money and making a bunch of promises. And so everybody says we're in a bear market. I mean, obviously there is a bit of that going on right now across all of Web3, including crypto, but it's really, you just had a big huge bubble sort of event. You had a big kind of pop and a washout where a bunch of these projects are going under because they're just not really realizing that an NFT collection is really a business and there needs to be a business model and a team capable of executing on a real roadmap and it's business strategy and it's getting more serious and it's getting harder to survive in this space for collection founders, which is a good thing in my opinion.

But it's also a tough thing when you're working with founders every day and having to deal with a lot of the stress and anguish and stuff that comes with them being entrepreneurs and having to deal with all this stuff.

Eric Swartz:

Absolutely. I hear that 100% representing founders is, it's an emotional rollercoaster for them and it's an emotional rollercoaster for all the teams involved. For sure. I mean, as exciting as the wins are as gut-wrenching and difficult as the losses are, and I totally hear that. I think so much of this space is giving these collection founders an opportunity to see that up close and personal at a much more cost sensitive way. Instead of having to have, I don't know, multiples of millions of dollars in order to get to a go-to-market strategy and launch a minimum client deliverable, you can actually get there quite a bit quicker and you can truly succeed. But as you said, I mean there's very few venture investors within this space yet. I mean, I'm only aware of a very, very few market makers within this space as well and traders within this space as well.

And so the institutionalization hasn't really occurred yet, but we're early and I agree 100%. And I mean, I think a lot of what will be exciting is the additional use cases for what folks will ultimately start to build ticketing when we see a lot more in-game NFT activity at the launchpad phase and when games are a bit easier to develop so that you can actually do that with a simple game at the launchpad phase and then perhaps build to something more in an additional iteration with a new collection, that would be amazing. So I mean, we're really excited about seeing those types of things proliferate and talking cutting edge. In the collectible space we definitely wanted to talk a little bit about the new Bitcoin ordinal inscription offering that Wenmint's working on and how Ordinals are different from NFTs and why you think Ordinals are skyrocketing in popularity these days.

Leroy Ware:

Ordinals are really an interesting, really a fascinating topic. I mean, I'll kind of like try to pack it all in here so I don't go too long here, but a couple things to

understand is the difference between an NFT and an Ordinal. So an NFT basically everybody probably knows it stands for non-fungible token, but the more important thing to think to remember is that an NFT, they have these certain standards that have kind of been developed around the sort of NFT concept, which is like 721 ERC 1155. And generally in layman's terms, you can think of it's a crypto token that kind of points to some kind of media file, like a image or animation file. It might be like a MP4 or MP3 or whatever. And so the crypto token, if you will, doesn't actually encode that image file or that video file inside the token, so to speak.

The image or the video is not necessarily stored on chain. Say if it's an Ethereum NFT, it's not stored on the Ethereum blockchain. Instead, the crypto token that sort of lives on the Ethereum blockchain, points, it has essentially what's called a base token URI or it's like a URL. It's sort of encoded into the token, that points out somewhere else. And so usually it's like IPFS or now the really newer, and in my opinion, really smarter way to sort of store NFT assets is on Arweave which is part of what's called the permaweb now, but the NFT points out somewhere. It doesn't actually directly encode the image data or the MP4 data and so on. And so that's kind of been a big, it's almost like the Bitcoin maxi versus non Bitcoin maxi.

When it comes to NFTs there's this debate should metadata and images and all the assets be on chain or should it be off chain? Because what if all of a sudden IPFS is no longer there, or Arweave is no longer there, or Cloudflare or AWS or wherever you have your assets. And so having a crypto token that points out to some external image, it's in some people's mind, it's just like, how can I believe in the long-term integrity of this asset when you have the crypto token sitting over here on Ethereum, and I believe that's going to be here forever, but maybe this reference out to this external image or whatever, just breaks all of a sudden somebody forgets to pay their credit card bill on IPFS, whatever. So that's one thing to understand is Bitcoin Ordinals are different from NFTs in the sense that an Ordinal, essentially the actual data for the asset, whether it's an image or whatever it is actually encoded directly on chain on the Bitcoin chain. At least the way it's being played with now, there's no external reference out to some other sort of file storage system.

And just one other quick thing is you talk about the word Ordinal and some people in mathematics, you have what's called cardinal numbers and ordinal numbers. Cardinal just means how many I have, 5, 10, 11, whatever ordinal means what place? And so the Ordinal protocol was introduced into Bitcoin to essentially serially number all of these satoshis and essentially make them so that you can identify or distinguish one from the other, and you can obviously inscribe your sort of data onto that satoshi and be able to identify which one you own and so on. And just in a nutshell, that's just a little bit of background around some of that stuff doesn't really go too deep, but-

Eric Swartz:

Yeah. No, that's hugely helpful. I think what's amazing about the fact that they're not references is the fact that it does actually have a distinction between what an Ordinal is and what an NFT is. And I just think it's useful for folks to get that idea in their minds because it isn't going to be a reference. And I think that that's the fact that it has some permanence is maybe a real beneficial fact, and it might make folks a little more interested in this ecosystem. I mean, for lack of a better explanation, that's one of the reasons

why I think it's become so exciting to everyone right now is just the fact that it actually has some permanence and some immutability, some of the true crypto and blockchain elements that maybe collectors are really seeking when they're investing in these types of collectibles on chain, but that they weren't really necessarily getting when they were buying the original NFT references that they bought, for instance, on Ethereum and on many other chains at this point, and on Polygon and other layer twos as well.

And so from my perspective, I think it's pretty fascinating to see that for whatever reason, these inscriptions have really taken off quite quickly and really seem to have completely changed some of the mining mechanics and the block space mechanics in the mining space, which is another thing I wanted to chat through with you. I know you, you're certainly in discussions about that with some miners and we're really excited for you guys on that piece of it. And then we're also just we're surprised to see, for instance, that Luxor Mining acquired OrdinalHub, and we'd love to hear what you're thinking about that maximizing minor extractable value, play that they're trying to essentially utilize via these inscriptions and utilize them in order to get what is essentially a higher transaction fee for the blocks that they're mining on Bitcoin.

Leroy Ware:

Yeah, no, I mean a lot of this stuff has happened so fast over the last few weeks. I mean, most of us haven't really even had time to fully process it. I mean, our response to it has just been to make sure that we're building around it and that that's not necessarily because we believe it's going to be the next big thing. I mean, you never know what the next big thing is going to be until it becomes the next big thing. And so it's just all about at least having some level of preparations. If the wave does kind of sweep you up, you wind up not drowning. So yeah, basically for the last few weeks we've been focusing on building, obviously we're a launchpad and we have a whole lot of really advanced, you got a bunch of companies out there that call themselves a launchpad, but our focus has been to build really advanced and highly flexible machinery around launching NFT collections and essentially a whole lot of stuff related to post-launch, like after collection launches, there's all these other needs like NFT staking and just all kinds of stuff.

And so we just built up a really flexible tool set around all that, and we just now recently took it cross chains. So right now we're on seven chains, we'll be on 10 chains by the end of this week. And of course then the Bitcoin Ordinal thing popped up. We're looking over there and that's kind of off the beaten path. But a lot of this same machinery applies to Bitcoin Ordinals. I mean, you essentially have entrepreneurs that are coming to say us and they're saying, Hey, we want to launch a collection on Bitcoin. It's a Bitcoin Ordinal collection. How do we do it? I mean, I don't know how much you guys have looked at this, but I mean for the last few weeks it's just getting to the point where you're starting to get some bigger players. Obviously you could try to do this, but I mean most of these original Bitcoin Ordinal collections that we're trading with at really high values where there's people like running auctions out of spreadsheets.

I mean, this is how primitive this stuff is. And so someone's serving as sort of a middleman or an escrow and facilitating deals and taking bids and putting them in a spreadsheet and all that stuff. And it's just pretty crazy. I mean,

even the method for collecting money, and I mean Bitcoin just doesn't lend itself to all this kind of just minting type kind of experience where you can say there's a thousand of these things available and people go there and they mint it out and it says sold out. And from that point on, nobody else can send money and so on. And so it's just the whole primary market around this stuff where you're initially dropping an Ordinal collection is still mean, just very, very clunky and nobody's really figured it out. And so that's part of what we've been focusing on is just kind of getting that user experience around it where there's several different ways to drop an Ordinal collection. I mean an auction style format versus maybe more of a mint style format. I mean, those are really the two ways that people are used to really being presented with primary art drop is either a min style drop where you say there's a thousand available or there's 5,000 available or there's some limited time period and it's open edition you can mint as many as you want in that time period.

And all of that sort of machinery should be available for Ordinals if people want to drop using that style, like a mint style drop. Or if it's really maybe a higher caliber drop, say the Bored Apes or doodles or something like that, you might say, okay, we're going to do it more of an auction format where people can put their bids in and so on, that kind of thing. And so we've just been really focusing on getting the machinery around that and figuring out the whole process for that and how it ties into secondary trading after the Ordinal's delivered.

And we haven't yet had time to talk and you already know some of the stuff sort of behind the scenes. And we have been getting some meetings on the books with some of, we've got our own nodes up that we're testing on right now, both main net and test net. And this stuff really requires two different things. I mean, it's not really just mining, so the miners obviously have to have Bitcoin nodes, but they also have to have some very simple special software on the nodes called the Ord Wallet. And the Ord Wallet is basically what, it creates an index on top of the Bitcoin data then that and that index is what sort of serially numbers all these satoshis and keeps track of which ones have been inscribed and which ones haven't been inscribed. And so it's almost like, I mean it literally the Ord Wallet, you can create your own wallets right there on the Bitcoin node, which itself has Bitcoin core wallets.

And so it's essentially a whole new wallet slash index that you install on a Bitcoin node that essentially sort of superimposes Bitcoin with this sort of numbering scheme for the satoshis and then allows you to perform all these operations on the Bitcoin blockchain in terms of injecting data into these satoshis and so on. And most miners have not yet probably put the or wallet on their Bitcoin nodes. I think they're still kind of exploring all that and trying to figure out, but I do think if this space takes off, you're going to start seeing scaling issues where some of this mining capacity could be repurposed towards inscription instead of just basic Bitcoin mining. And so I think you're going to start seeing a lot more of that, and that's probably what these miners are interested in.

Eric Swartz:

Absolutely. I think it's the first time we're seeing significant transaction fees and as a big Bitcoiner and a very avid follower of Bitcoin in general, I think it's amazing to see it as a solution potentially for one of the biggest problems of the Bitcoin software code base, which essentially is the fact that eventually

there are no rewards left for miners. And for a very long time, I think people who were less pro-Bitcoin or wanted to find fault with Bitcoin have pointed out the transaction fees will eventually need to take over. And this is one way for transaction fees to really be increased and to actually facilitate enough of a payment to maintain that security balance that we need for miners to be incentivized to continue to mine.

And then obviously I know very well all the counter-arguments from the larger Bitcoin community who see Bitcoin as a hard money and don't want to have any other use case associated with satoshis or Bitcoin. And from my perspective, I mean I think that we need to let the use cases fight it out in a very, very free market way and see exactly what makes the most sense at the end of the day. I mean, Bitcoin is an amazing protocol. It's got both potential use cases. From my perspective, we would be folding far too early to say that these inscriptions aren't incredibly important. And it's not simply, I mean it's not just for art. It's going to be all sorts of ways to integrate things into these Ordinals.

Leroy Ware:

They said, I mean we've heard this so many times, the whole necessity is the mother of all invention thing. And I mean we all know Bitcoin has had kind of really slow transaction settlement, but just a lot of other issues for a long time. I mean obviously it's the granddaddy of all coins and it's probably the one that we all look to as probably the greatest example of decentralized store value. But at the same time as it becomes more and more widely used, obviously it's energy hungry, the transactions are slow compared to other chains. The way I look at it is Ordinals is an opportunity to stimulate or serve as a catalyst in Bitcoin development because now you're dealing with all this sort of injection of big chunks of data in the blocks and that even further congests the network and so on. And so people could say it's a bad thing, which technically it could be.

I mean if the Bitcoin developers don't wind up jumping in there and sort of innovating and figuring out ways to make Bitcoin better than maybe it could be. But I mean in most cases, especially with something like Bitcoin, that's such such a part of history. Our recent Web3 history, we already know they're not, the devs that have been contributing to Bitcoin are not just going to walk away and say, "Oh, we don't care. Let Ordinals burn it all down." I mean probably it's going to be, I think Ordinals and other innovations like that directly on Bitcoin can actually improve Bitcoin over time. And I'm not a Bitcoin maxi. I mean I love all this stuff, but I feel like it might be some short-term teething pains, but it could potentially stimulate more development to actually make Bitcoin better at everything. And so that's kind of my little bit of my thoughts on it.

Eric Swartz:

I agree 100%. I mean, from my perspective, and I'm no Bitcoin maximalist either. I just love everything too. So it's far too exciting to eliminate anything, but obviously follow the Bitcoin space closely because it contains a lot of thought leadership within our industry. And for sure we have to give them their due for that. And a lot of what they're saying makes a lot of sense to me too. I understand the hard money thesis. It is a big part of the reason why I'm a crypto enthusiast. I think at the end of the day though, it's incredibly important for the use cases that are lucrative to exist on Bitcoin for the reasons that you suggest. I don't foresee there being a lot of development

activity on Bitcoin without things like these inscriptions and without things like the Lightning network providing-

Eric Swartz:

There has to be something exciting going on. Yeah.

Yeah, absolutely. And I mean I'm working with a project that's actually would like to have wagering on Bitcoin in satoshis, and I think those types of projects on Lightning, not on Bitcoin base chain. And I think those types of micro wagering and micropayments on Bitcoin are really, really logical use cases for Lightning because at the end of the day, it's first of all one of the only commodity confirmed assets in our space. We at least have an understanding of how it's regulated and therefore it makes it a lot simpler to have these transactions occur in a compliant way. And then on top of it's just incredibly exciting to see real use of the block space and the network because at the end of the day, I don't think that it is sustainable for any chain to have no utility beyond its simple monetary value.

I think that is sort of the death now for any project because at the end of the day, money is very, very hard answer to get to. Yeah, it's something that only will happen over a very long arc of time, and if you don't have interest, you're certainly never going to make it past the beginning phases, let's call it, of that long arc of time. So you need to encourage every single use case, every developer that we can get. I mean, when you told me that when it was building on Bitcoin, I was so excited because that's exactly what I want to hear, that projects like Wenmint are actually building on Bitcoin again. And I think that Bitcoiners should realize that some of the top projects have been far away from their ecosystem for a very, very long time, and that's not a healthy thing for that ecosystem.

And we are not anywhere near hyperbitcoinization, and it's very unlikely that we will be at any time soon. So we need to be super careful about pushing away utility because I think utility is our path to hyperbitcoinization if that's something that Bitcoiners are really seeking. And the last thing that we want is fast hyperbitcoinization in any case because that's just as Jeff Booth says, a path to geopolitical strife and potentially World War. So I don't think any of us want that. So I think these use cases, this utility, this is what we need to see and I am so excited to be helping Wenmint in the smaller ways that we can to bring this back to Bitcoin. And I also wanted to circle back, of course, we were talking about uLABS a bit, TwelveFold, they're releasing an Ordinals collection. That was very exciting to me personally. I was somewhat surprised by it actually, given that the fact that Yuga is such a huge name and they have been so associated with Ethereum and its ecosystem, but I was very excited to hear it and would love to hear some thoughts you have on it. Yeah.

Eric Swartz:

Yeah, and I think Yuga is getting to the point where they are really truly just embracing this moment in history where there's lots of interesting stuff going on. It's not about NFTs, it's not about crypto. I mean, people say the word Web3 in the NFT space, and usually when they say it, they're usually just talking about NFTs. But Web3 is this new decentralized web with all sorts of decentralized sort of alternatives to traditional software development and

infrastructure deployment. It's like it's a very big thing that's way beyond NFTs.

And I think Yuga obviously over the last few years has succeeded enough and raised enough money through various drops and obviously all sort of other stuff that they're just getting to the point where they got their eyes on the whole space and when they see something happening, especially something that catches the eye of their own community, I mean, you've seen it in the last couple weeks. I mean there have been some people who burned to Bored Ape just to create an Ordinal on Bitcoin. And I mean it's pretty insane. I mean, just to take this thing and burn it and put it on Bitcoin, you have no idea whether this, I mean really, truly, you really truly have no idea whether Bitcoin Ordinals are going to become a thing or not. I mean, nobody knows. Of course it's likely, but nobody knows. And so to burn 125, \$150,000 asset and move it to Bitcoin, that is pretty interesting.

But yeah, it makes sense to me that Yuga would've would drop some kind of collection as really just some kind of early exploratory effort to really see what's going on. I do believe there's some element of we can be the ones to attract attention to it and create dialogue around it and so on.

So I'm glad they're doing it. I mean, dude, the Bored Ape drop in the NFT space is pretty much what set us in motion with this entire sort of cycle we're in right now for good or for worse. And so I think there's a chance you might see something similar to that happen where Yuga drops this new Ordinal collection. Obviously it starts hitting media and obviously creating chatter across social and so on, and you get a lot of eyes kind of looking at it that weren't looking at it before or at least thinking more deeply about it. And so it's good to see them doing it.

Eric Swartz:

I'm equally excited and I can't wait to see what's next for the Ordinals ecosystem because I mean, frankly, the way the innovation that they have with this additional wallet and then well, the ordering of satoshis is just mind-boggling to me. I think it's got a lot of possibilities far beyond collectibles in my view. I think there's a lot of utility that could come from these inscriptions, and I frankly can't even anticipate what exactly it will be so much as I'm just excited about the community built and what might come out of this because I think from my perspective, this is much more exciting than a referent, like an NFT that refers. It's hard for me to get as excited about-

Leroy Ware:

I mean, my whole perspective on that. And there's several different positions you can take. I mean, I think what it is, if you go back, I mean go, we say go way back, whatever, a year and a half ago, it's kind of funny because it's basically... But if you go back like a year and a half ago, couple years, Arweave has been around for a long time. I mean not a long time, but I mean long time in crypto time. And their whole focus has been this completely new thing called the permaweb. And it's not just about file storage and being able to permanently store files. It's like it's a whole really new paradigm for software sort of deployment where you can deploy front end apps like say web apps, you can deploy the web apps, you can attach DNS, you can have your file stored there, you can have smart, your entire application can be deployed in permaweb. And the whole idea is having a reference out to

something like IPFS, which was not designed for permanent file storage is a problem because when people buy an NFT, they're buying an NFT on the assumption I have this thing forever. It's an asset. Just like Bitcoin. They're like, "I'm going to buy Bitcoin, it's going to sit in my wallet for the next 20 years and maybe I'll give it to my kids or something." And maybe they go buy their Bored Ape on that same assumption.

But the problem with an NFT versus a crypto token, a pure crypto token is that that NFT does reference out that external asset, and if somehow that asset is lost or deleted or whatever, then you just got some empty container that really has nothing in it sitting in your wallet. I'm just saying all that to say that I think that there are new alternatives for external sort of storage. I mean, you think if you're trying to build really cool sort of NFTs or Ordinals, whatever, I mean obviously especially Ordinals only so much data you can pack into a satoshi. So at some point you kind of get limited as to what you can do without either upgrading Bitcoin itself and packing even more data in there somehow or just breaking the network.

And so I personally do believe, again, I believe that the NFT concept of externally referencing these assets is probably from an engineering perspective, a better idea. But I can definitely see how the idea of the data is actually on chain seems to appear to some people because they actually mistakenly believe it's more permanent. And I tell you, it's just as easy just without getting into all the technical details of how Bitcoin works, I'm definitely not a Satoshi or anything who actually understands the stuff down to the level. I'm not a Bitcoin developer, but basically when are you inscribe a satoshi with data there, it is possible for you to essentially accidentally handle that satoshi the wrong way and sort of ultimately lose that satoshi. So I would be wary of thinking just because you inscribed something on Bitcoin, it's there forever and it's just sort of technologically better to do it that way than externally reference it because there's pros and cons to all these different techniques.

Eric Swartz:

Yeah. That makes total sense. And at the end of the day, I mean it's going to be a limitation as to space. We can't break the network and we've already found out we can't increase the block size and for good reason. And I don't think anyone wants to propose or even think that thinks that that's necessarily a good idea for Bitcoin anymore, especially because we saw how it played out. So I mean Bitcoin cash did not take off and here we are today, and from my perspective, it's just really exciting that there's a use case. And I agree with you. I think at the end of the day, certain pieces will always have to be off chain. I guess what I love about the Ordinals is that there is some element of the fact that it is on chain. Yeah, but I don't disagree with you at all. I mean, for instance, I don't think it makes any sense to host a video game on a blockchain. That's just-

Leroy Ware:

Somebody said this, basically the different chains were designed for different purposes. We didn't make a hammer to screw screws and we didn't make a screwdriver to hammer nails. I mean certain chains, when the engineering team or the group that came into building that chain, there's all these assumptions that were built into it. And so I think like Arweave, it's specifically designed for storage of documents for many years. It has a tokenization layer where you can prepay that storage in advance. It has this whole proof of

random access thing where like as long as that document is accessed, it's almost like a neural pathway in your brain. I mean, as long as that, that fire, that pathway is firing every now and then we're going to keep these two neurons connected. But if there's no electrochemical activity going over that connection for 10 years, then maybe those two neurons are not connected anymore.

Arweave in some ways kind of works like that as it's proof of random access where once you store the documents there, as long as they're being accessed, they'll kind of stay alive and they're there. But otherwise, if they're not, then over time that's evidence that humanity doesn't care about that document and it just eventually disappears. But that's what that networker was designed for. And of course Bitcoin was designed to be money. And so I do believe it's fun to explore these ideas of inserting images and stuff in the Bitcoin. And I'm not saying that that's not going to be a permanent part of, but it's just I also, the back of my head, because I'm an engineer, I'm always thinking, is there a better way to do this that's kind of always banging around back there. You know?

Eric Swartz:

There definitely is, there's no doubt in my mind that there's a better way to do it and that we will certainly see it soon and at least now we have some developers working on it. And that's what I'm excited about. I mean, from my perspective, I agree with you. I think this is a short-lived, I think at the end of the day, base chain type activity is never going to be a reality for collectibles as a general matter. And I think we'll see this move up to layer two just like we did in Ethereum, but at least there's now an incentive for that. And before we didn't even have that, and I was concerned about where's the utility beyond a store of value. Not to say that I don't believe in the store of value as a real utility, but I think that a network needs a lot of uses, money needs a lot of uses.

That's what money means, it means all uses really, and I don't think we should forego that possibility. I think it's so important, and I wanted to get the word out there for folks, and I really appreciate you coming on Leroy and educating folks and educating me separately of now and during this conversation on how all this works because I think it's really important for folks that are excited about Bitcoin and excited about crypto to understand exactly what's involved in these Ordinals and why they're different and what's exciting and hopefully what can come out of them.

Leroy Ware:

Yeah. No, it's been fun. I enjoy talking to you about all this stuff and hearing your legal perspectives on it as well.

Eric Swartz:

Of course. Thank you again for joining us today. Listeners, before you go, if you enjoyed today's episode, please subscribe and hit the like button.

Kevin Iredell:

Thank you for listening to today's episode. Please subscribe to our podcast series at lowenstein.com/podcasts, or find us on iTunes, Spotify, Pandora, Google podcasts, and SoundCloud. Lowenstein Sandler podcast series is presented by Lowenstein Sandler and cannot be copied or rebroadcast without consent. The information provided is intended for a general audience and is not legal advice or a substitute for the advice of counsel. Prior results

do not guarantee a similar outcome. The content reflects the personal views and opinions of the participants. No attorney-client relationship is being created by this podcast and all rights are reserved.