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Trace Mayer: So, I mean, we're just so early as an industry. And on the other hand, $50 million a day of pure proof of work for the magic internet money, I mean, that's nothing to laugh about. Like, Bitcoin's not going anywhere. Like, it's on the planet now probably forever.

Isabella Santos: We're here live at the Bitcoin conference with the one and only Trace Mayer. Trace, what is it like to see Bitcoin after all this time? You haven't been to one of these in how long?

Trace Mayer: Well, I've been to conferences here and there. But no, it's been like compared to say 2015, this is unbelievable. It's just so institutionalized, so much more professional, so many more people involved from across the spectrum of society, and we're at $110,000 which doesn't hurt either.

Isabella Santos: Which is super funny because you were advocating for it when it was like less than a dollar and now it's like insane new all-time highs. We have like the Vice President of the United States giving a speech.

Trace Mayer: Right. Yeah, that's what's kind of most different, I suppose. You know, we went from being nobody even knew about us, like on a cryptography email list, to, it's just like weird libertarians and gold bugs, to a magic internet money for nerds, like on the internet, to you know, a little bit more mainstream and then the altcoin boom and forks and everything. And then Wall Street has really come in over the last five years, I'd say.

Isabella Santos: And what do you think about that? How is your view on…Did you expect it to happen eventually this fast?

Trace Mayer: I didn't necessarily think it would happen this fast. I mean, we're only 16 years into this. Like, it's wild to think that, like, Satoshi came up with the new monetary good, and 16 years later, the U.S. President is like, we're gonna have a strategic magic internet money reserve. I mean, that's bonkers. And that BlackRock and strategy just allocating tens of billions of dollars to this. It is kind of wild to think of that.

You look at gold as kind of a meme. It's taken thousands of years to carve out its $22 trillion market cap, $500 or so million of daily emission. And Bitcoin's about a tenth of that, both the market cap and the daily emission. So to do that in 16 years, that's pretty amazing and extremely fast.

Isabella Santos: You mentioned the Bitcoin treasury reserves companies that are popping up everywhere. Do you think it's like a way of like just starting Bitcoin banks?

Trace Mayer: Yeah, they're going to be all different types of strategies to do with the Bitcoin or whatever they're doing. I think a lot of these companies are probably just looking for a hot thing or a hot trade. And it's not really going to be adding substantive value to the shareholders other than some hot money flowing in and out, just chasing the next thing. But kind of to your point about the Bitcoin banks, I do think that this Bitcoin, this nuclear reactor analogy that, you know, just able to turn out power and energy indefinitely, that's a real thing because there are natural kind of yield generation activities around Bitcoin. Market making, overnight repo, call options, for example, these can all add a degree of kind of yield generation to it. And so you have to take some risk with it, of course, but even like the basis trade where it's arbitrage, I mean you so now you've got you know fundamental way to like get this flywheel going, to bootstrap the new financial system. With Bitcoin is a kind of the core asset, just like we have gold underpinning all of our fiat currencies now.

Isabella Santos: So, you know, we haven't even opened like Fort Knox, for example. What are your thoughts on that?

Trace Mayer: Well, I mean, my blog was RunToGold.com, January 2008. was a consultant for GATA, the Gold Anti-Trust Action committee. I helped them accept Bitcoin way back in the day. So they cracked the case on the central banks and the gold price suppression scheme. The central banks, they have carried gold out on loan and gold in the vault is the same line item. Effectively, their accounting cash and accounts receivable is the same thing. So they're running their paper franchises and they own a lot of this physical gold,supposedly, but they're running a cartel to keep the price suppressed. And if you own a lot of something, why would you do that? It's because their ability to issue what we use as currency is infinitely more valuable than the price of that portfolio asset. And so this is where Bitcoin becomes very disruptive because the Achilles heel of that system is taking physical delivery of the gold.

And as I just talked about on stage with the discussion with Peter Schiff, running a gold full node is very expensive compared to running a Bitcoin full node. And so we can enforce and flex our monetary sovereignty with Bitcoin a lot easier than with gold. We can take possession of it, proof of key stay, we can run our own full node, hold our own private keys. These are things that were very difficult to do with gold and allowed them to engage in this suppression scheme on the price. They're engaged in shenanigans, they're selling the same thing multiple times. They're hoping nobody catches on to the trick. And at the end of the day, they don't have the physical gold they say they have.

Isabella Santos: What do you think is going to happen when people find out?

Trace Mayer: Well, I think a lot of people have found out. A lot of people in power have found out. Like Andrei Baikov, Putin's number two guy, came to the GATA conference in 2004. And a couple months later, Putin's in a press op holding a big gold bar, and the gold price went from $425 to $725 in three months. China has been buying physical bullion off the LBMA in London and Zurich, taking physical possession, melting the bars down, recasting into new one kilogram bars and flying them to Shanghai to get rid of the serial numbers. Because like they don't want, they want to make sure that nobody else has claim on that bar. This has been going on now for 15-20 years.

Isabella Santos: Do you think that we could eventually go back to like a gold standard?

Trace Mayer: Well, we've never left it. Professor Jastram's book, The Golden Constant, like gold is the center of the financial universe. It's the highest stock-to-flow asset, until Bitcoin came along. But Bitcoin is only $2 trillion a market cap. Gold's $22 [trillion]. As I said earlier, $500 million of new daily emission with gold. Bitcoin's at $50 million today.

Isabella Santos: But when you talk about gold, you mean like what, 24 carats?

Trace Mayer: Like LBMA gold bars that weigh like 30 pounds, you know.

Isabella Santos: What happens to the gold that has been infiltrated by other metals?

Trace Mayer: Yeah, so that's not really an issue like the tungsten, tungsten plated bars and stuff. That's not really an issue, I don't think.

Isabella Santos: Is that? Well, I mean, I'm not too familiar with the gold game

Trace Mayer: This is like, this is one of the reasons that the Chinese persuaded Singapore to get gold refineries, like operating in Singapore so they could take the gold bars from Switzerland and melt them down to make sure they're not tungsten. Don't trust, verify. So they split up their own gold full nodes, right? And so, I mean, the gold game, like it's been the game of centuries because gold is the ancient metal of kings. It's sovereign money. And Bitcoin's trying to get into that game.

Isabella Santos: When you say trying, you also…I want to go back to like the beginning, because you were one of the first to blog about Bitcoin when the market cap was under a million dollars.

Trace Mayer: Yeah, under a million dollars.

Isabella Santos: Yeah. What did you see that others didn't? And should we like, do you think, well, it's going to be like a competition to Bitcoin or like, how do you see that all playing out?

Trace Mayer: I see gold as the primary World Reserve asset. So if we were looking at search results, you know, the first search result gets like 55 % of the clicks, right? That's gold. Then it's probably the dollar.

And then maybe it's the euro or, we have the yen, the yuan. You know, there. But if Bitcoin can move up and enter the top three, and if the U.S. is running policy that's very favorable to the top three, like now the U.S. can control the top three search results. And so it's, you know, I don't think the U.S. is going to get rid of their gold. That wouldn't be very wise. But it can accumulate the strategic reserve with Bitcoin.

It can help Bitcoin become a store of value, which Treasury Secretary Bessent has said Bitcoin's becoming a store of value. It's not really a store of value right now. It's becoming one. But that's part of this network effect of going from financialization to world reserve settlement currency.

Clear back in 2015, I laid it all out in a presentation I did impromptu at CRYPSA, a CRYPSA event in New York. They asked me to speak because they couldn't find Andreas Antonopoulos, if you remember that guy. So I was like, sure, I can talk about something. I was like, how long? They were like 45 minutes. So I just got up and off the cuff, went through the seven network effects. And so now we've moved into financialization in 2020, and we've been building that out. And we're moving towards the seventh network effect of world reserve settlement currency. And that's where Bitcoin becomes something like gold. Is it in competition with gold? I mean, they're both monetary sovereignty tools.

And silver got demonetized because its stock-to-flow is like 17 versus gold's 55. And silver used to be, you know, this type of an asset. And it's increasingly lost its monetary premium due to being outcompeted by gold. Maybe we'll see a similar type of thing with Bitcoin, but it really depends like how the world fractures. China and Russia might fracture away. Like we have a Balkanization of the globe. Freedom of travel and movement and all this stuff might kind of go away.

We've lived in a very free period of time where it's easy to travel, where it's easy to send cargo ships around. Maybe that kind of goes away, and maybe the Chinese and the Russians use gold and the Americans use Bitcoin and who knows what the other people use.

Isabella Santos: What do you think about people using Bitcoin as a medium of exchange? Like do you is that a possibility or because you've been in for a while.

Trace Mayer: Yeah. So, you know, with the network effects there’s speculation, merchants, consumers, miners, developers, financialization, world reserves, settlement currency. With speculation, you need to be able to hold your private keys. You need an exchange. So I funded Armory. I funded Kraken. Third network effects of merchants and consumers. I funded Bitpay, who would build out merchant processing capabilities and stuff. This was 2013. We still don't really have merchant processing for Bitcoin as a medium of exchange. It's 2025. It's been 12 years.

So I don't know about those second, third network effects. Like, are they going to build out? Are we going to see them anytime soon? Tried to be a use case with the chivo wallet down in El Salvador. That didn't really get too much traction. I put a bunch of money into Wolf, the lightning incubator. We had a hundred companies kind of go through that, but we haven't seen like solid medium of exchange use cases come out of that. And that whole area, I think, is still up for grabs.

Look at all the different things, Google Pay, Apple Pay, Stripe, Venmo. There's a ton of stuff going on in that space. So, I think it's still very much up for grabs on what becomes kind of this currency day-to-day use case for retail. I don't know. It's a big question mark. But we haven't really done it with Bitcoin yet. And we've had 12 years to try and do it, but we're building out the other network effects. And we can always come back and work on these two later. So I think there's optimism that we could try to capture those. But even without them, look at what we're doing in the other network effects.

Isabella Santos: Yeah, no, we're still early. Like you said, Bitcoin has been like 16 years.

Trace Mayer: 16 years.

Isabella Santos: Where is it driving?

Trace Mayer: Yeah, another 16 years. Or another 160 years. Where is it going to be? You know, it's going to have a stock-to-flow way higher than gold by then. And it's got the shelling point, the liquidity, and the ETFs. You know, it's a big deal. And maybe it's another layer on top like a Visa or MasterCard that you just pay it off with your Bitcoin. Like there are different ways to get back to your Bitcoin bank kind of question, right? Like this is all going to be up for entrepreneurs to try and solve problems within the constraints set by regulators. You know, so it's going to be different in all the different jurisdictions, too.

Isabella Santos: Also, now that we developed Bitcoin as a medium of exchange, I want to go back a little bit in time through the Blocksize Wars. Because the new wave of Bitcoiners don't really know what happened or what was that about. That was such a huge monumental moment in Bitcoin history. Can you take me back to that time and sort of simplify it?

Trace Mayer: Yeah, so with Bitcoin, it's an internet protocol, which are just rules, computer networking rules. And we have some rules that help define Bitcoin. One of them is no more than 21 million Bitcoins, right? That's an easy one. But we have other rules, like the block size limit. And that, the block size limit…Keeping that smaller helps reduce the system requirements that are needed to run full nodes.

There was a faction, a very strong faction actually – exchanges, VCs, some large early holders and investors – they wanted to increase the block size, which would impede Bitcoin's scalability and increase the system requirements. So that would harm the decentralization nature of Bitcoin.

You know, then there's another contingent that is like, well, we don't want to do that. And the reason we don't want to do it is we want to keep the decentralization. But even more so, we don't want to have a hard fork. And so a hard fork is where you make rules less restrictive. If you make it less restrictive, like 25 million, that would be a hard fork. If you make it more restrictive, that would be a soft fork.

But the soft forks maintain backwards compatibility, so you don't just kick users off the network. So Bitcoin hasn't really done the hard fork thing, because we want to keep that continuity of the user base and the nodes and the network. And so that's really a lot more the kind of the philosophical argument was we don't want to do a hard fork. And we really don't want to do a hard fork that's going to potentially damage Bitcoin's decentralization kind of characteristics by increasing the cost of running a full node by raising the block size limit.

So then it became less of a technical debate among developers. And one particular person, Roger Ver, he took it out to the public and retail and started stirring up the public conversation about it. And so then it became acrimonious and political and eventually they decided to launch BitcoinCash as a response, and there was a fork and all the Bitcoin holders got Bitcoin Cash also and so you got to sell some of that and make plenty of money. And we've seen BitcoinCash is at like an $8 billion market cap and Bitcoin's at $2 trillion. So sure, some of those users went over there, focused on that, built that thing. But the market hasn't really rewarded it.

And I was in the middle of all of this in the public sphere, flying down to meet with Roger face to face to try and diffuse the tensions and move stuff forward and being the ambassador between different factions. And then helping articulate, you know, the tradeoffs and put it out on my podcast and things like that so that people could run the nodes that they wanted to run based on whether they wanted to do this or do that.

Isabella Santos: Were you in the middle or did you have…?

Trace Mayer: No, like literally in the middle of the whole thing.

Isabella Santos: Were you the mediator?

Trace Mayer: I went up to Toronto and Gavin Andresen was there, who was kind of on one side, and Adam Back and Greg Maxwell were there and we all went to dinner together and kind of hashed it out, and it was pretty tense because Greg Maxwell's like, no, it's digital gold. We're not doing this. And I really respect Greg Maxwell and I align on his digital gold thesis to kind of my position in the situation. But then the next day, I hosted the discussion between Adam Back and Gavin Andresen and it was like a two hour podcast.

You know, we delved into all the issues. Because how else do you try to govern...a decentralized open source software community. It's hard to get everybody to even understand the issues. And you all want to talk with each other because you're working on code together and doing pull requests. And yeah, it became a very heated area. Roger really kind of poisoned the well in a lot of ways. Personally attacking Greg, casting aspersions on his intentions to the point that Greg retreated from helping build Bitcoin because of the kind of mental anguish that was... There were death threats towards Greg. I mean, and if anybody's like probably one of the top three people for helping build Bitcoin into what it is today, I don't think he deserved any of that. And it was, in my opinion, that was very much out of bounds. So that yeah, that was a very, it was an interesting time for Bitcoin because we hadn't had a contentiousness like that before and how is the network going to survive that type of a contentiousness. And it did [survive], just fine.

Isabella Santos: What would you say your biggest takeaway from that would be?

Trace Mayer: I mean there are a lot of different important takeaways. There's also a lot of tribalizing that happened as a result of this in factions. And I don't think that's necessarily been helpful for the kind of the community either, because experimentation and innovation needs to be able to take place. And if we don't do that, like where's the test bed? And it's good to have a test bed where there's actual economic value at stake, like Litecoin.

You know, we got to test lots of stuff in Litecoin. But now, you know, it's so tribalized, it's like, oh, you know, and can't like Litecoin at all. It's like, why not? Like, we're able to test stuff in there and it's also a monetary sovereignty instrument. It's never going to be like a world-reserve settlement currency, but we can still do stuff there and then take the lessons that we learn and apply it to Bitcoin if we want to.

And there's nothing like a real live fire experience. You can test stuff like in the lab, but until you actually put it out there, you don't know what's going to happen. I think that that's kind of harmed a little bit of our ability to test and innovate and stuff like that.

Isabella Santos: And especially because there's also other Bitcoiners that don't even want to try like using the Lightning Network and then they expect hyper Bitcoinization. It's like you can't go from zero to a hundred without going through one, two, three, four, five all the way.

Trace Mayer: Yeah, and I was having a dinner with Peter Todd, Adam Back, and Nick Szabo in Columbia, and we were just talking about this iterative nature, this innovative nature of what we're doing. Inventions like build on top of each other. And so, like you said, you can't just go zero to 100. You have to kind of go through all the things. And being able to have free flow and discussion and live fire experience, actual economic experiments in the wild, you know, when an exchange tries to list an altcoin, they're going to learn a whole bunch of things about that. You know, and what if it's an altcoin that has Schnorr signature transaction schemes in it that we want to put into Bitcoin, but they're not in it currently? Like, we can run that test here and see, like, perhaps learn some things from it.

Isabella Santos: And now I want to go back to…you created Proof of Keys.

Trace Mayer: Yeah, it’s super fun.

Isabella Santos: Super fun. What are your thoughts on Saylor just being like we shouldn't have proof of reserves?

Trace Mayer: Yeah, Bitwise has proof of reserves on their ETF. MetaPlanet puts out their proof of reserves. I think Saylor, Saylor, that argument that the institution of strategy shouldn't do proof of reserves, I don't think it holds water.

If you're an individual, sure, I agree with a lot of his argument there. But if you're an institution, I mean, to carry out your fiduciary duty, you should be figuring out how to properly and safely secure these things, which means that you could post the address. And so if you're not posting the address, why?

Well, is it because they're being held in Coinbase? Is it because there are liabilities attached to the coins because of the custodian that you're using? Like, I mean, what, like, why, why are you not posting the addresses? Because it would sure be nice to have all those addresses posted as a shareholder and as a potential plaintiff's attorney if you're doing anything shady with them, right? Like if they're being encumbered or whatever, it'd be great for a plaintiff's attorney to be able to have all those addresses and assertions from MicroStrategy that this is where the Bitcoins were at, at a particular time. That becomes great evidence in a potential court case.

Isabella Santos: And it's interesting because El Salvador used to not have it for a long time. Now they finally got it.

Trace Mayer: Well, and part of it was because they were not custodying it like themselves. They were using a custodian. And then, you know, the news release came out that they brought all the Bitcoin onto the sovereign El Salvadorian soil. So it's nice to see El Salvador flex their monetary muscles and exercise their proof of keys. That's a great thing about Bitcoin. Like, you can assert that you have whatever just in the Bitcoin here.

And Proof of Keys Day has been wonderful.

Isabella Santos: 100%.

Trace Mayer: You look at all these exchanges that have failed, like, shortly after Proof of Keys, because they can't process the withdrawals.

Isabella Santos: What do you think has changed since the day that you created it? Like, do you think Bitcoiners are sort of living up to it?

Trace Mayer: When I came up with the idea, and it kind of comes out of Murray Rothbard's anti-banking league, like, let's just all withdraw our deposits on the same day and cause bank runs. Like, that'll get rid of these fractional banks. So I made the video, like, I think a couple, like three weeks before January 3rd, and I just published it and stuck it out on Twitter. And it goes viral.

And it stirs up a whole bunch of discussion. This is irresponsible. Blah, blah, blah, blah. You know, it was one of them. It's like, this could cause a bank run or failures of different companies or whatever. And I'm kind of like, that would be good, actually. It would be good to decapitate those companies because they're running fractional reserves. Like, just because you're calling them on their BS, like, not your fault, it's their fault. They don't have the coins, right, to send you. Like, four days later, Coinbase does an on-chain transaction with 600,000 bitcoins that they had never previously done. To the point that they actually put out the pressure release also, oh, we moved a bunch of coins, they didn't get hacked, like everything's fine. Like, oh, that's interesting. Are they getting themselves prepared in case there's a bunch of withdrawals?

Isabella Santos: That's super funny.

Trace Mayer: We can actually move the coins, see we just did it. You don't have to do the proof of keys. Ah, we'll do it anyways.

But I think that, I think that that helped change a little bit of the general ethos, because if it's…You know, there is a social movement in all of this, right that we're doing. And it's like we just take all of that social energy and concentrate it on one day, and attack the Achilles' heel of bad actors who say they have Bitcoin that they'll send you but don't actually have it. Like just stand for delivery. Send it. Now.

So I think it's been great at weeding out a bunch of these companies that are like just not good actors. And we've had several failures after Proof of Keys.

Isabella Santos: It's funny you mention that because obviously you have like the Bitcoin Strategic Reserve, and they want to use Coinbase for it to have like…Can you please tell me what your thoughts are on that?

Trace Mayer: Yeah, one, think this is a terrible idea. Back, I think it was 2013. I was at a, no, 2014, I was at a Bitcoin conference in New York and I'm at the Armory booth. Now, Armory, we innovated cold storage. We innovated hierarchical deterministic wallets that later became seed phrases. Like we innovated multi-signature cold storage also. So, fundamental custody software that we built from scratch. Because before these HD wallets, the Bitcoin software created a hundred private keys at random. What happens if you did a few transactions? Do you still have a backup? You don't get to just have a seed phrase that you can derive millions of addresses from. Like, you had to back up every hundred keys. And anyways, we're at this conference in 2014 and this big stocky guy comes up and he's like, "Are you guys with Armory?" We're like, "Yeah, we're with Armory." He's like, "I'm from the United States Marshals. We need help custodying our Bitcoins." Because they just ceased all the Silk Road Bitcoins. And so it's like, we're 11 years from then. The US government custodies these nuclear launch codes. Why would they take their strategic Bitcoin reserve and outsource it to Coinbase?

Isabella Santos: Yeah, why?

Trace Mayer: Like the military or the NSA should be in charge of custodying the US strategic reserve. Stick it in the football with the nuclear launch codes. Like the seed phrase, right? Put it in there.

So that's kind of my thoughts on that. I mean, 11 years ago, they wanted to custody their own coins. You know, why would they not do that now?

Isabella Santos: Where are the coins now? I feel like I've heard a couple people talk about, like, that they can't find all the Bitcoin that apparently the United States has.

Trace Mayer: Well, I mean, it's not like there's been an audit and it's not like they have to disclose every time they confiscate some. And who knows if they've been buying it? You know, the President's Working Group on Financial Markets, they have plenty of latitude to intervene in markets for any type of reason. Actually, GATA put out an article, you know, we don't have markets anymore. We just have manipulation by this President's Working Group on Financial Markets. So, you know, they can... We have no idea how much they have, nor do we have any idea what the gold at Fort Knox.

Isabella Santos: Crazy time to be alive, huh?

Trace Mayer: Yeah, is a wild time to be alive.

Isabella Santos: But let's say if you zoom out, what role do you see Bitcoin playing in the next global monetary shift?

Trace Mayer: Yeah, well, like I said, top three search results, you know, gold, US dollar, Bitcoin would sure be great. And then box out the euro, box out the yen, the yuan. It'd be proof of work. Maybe it eventually displaces gold in terms of market cap and liquidity. I mean, we got to keep in mind it's a long ways away from doing that. $500 million of daily emission versus about 50 [million dollars] for Bitcoin. $22 trillion market cap versus like $2 trillion for Bitcoin. So I, mean we're just so early as an industry. And on the other hand $50 million a day of pure proof of work for the magic internet money, I mean, that's nothing to laugh about. Like it, Bitcoin's not going anywhere. Like, it's on the planet now probably forever. It's got serious economic mass and gravity to it, like whole different orders of magnitude than Dogecoin or Litecoin or BitcoinCash.

Isabella Santos: What would be your hottest take on Bitcoin?

Trace Mayer: I think it might be the tension between innovation and ossification, would be kind of a hot take. Because in some ways, man, ossification is nice because as an investor and allocator of capital, you know the thing's not going to change anymore.

Isabella Santos: I love it.

Trace Mayer: But the innovation, like do we have everything in Bitcoin that we want before the cement completely dries? And I think we made a lot of, with Taproot, I think we've got a lot of things in there that we want to have 50 years or 100 years down the road.

Isabella Santos: Thank you so much, Trace.

Trace Mayer: Yeah, thanks so much for having me.