

**You're listening to Imaginary Worlds, a show about how we create them and why we suspend our disbelief, I'm Eric Molinsky.**

**Ever since COVID-19 spread around the world, one of the few silver linings is that emissions are down drastically. You've probably seen the dramatic before and after pictures of the lack of pollution in the air. It gives us a sense of what we could do if we acted collectively – except in this case, the cost is so tragically high.**

**I've been wondering when we finally come out of this – will climate change be a priority any time soon? And how much impact can we make as individuals if governments aren't willing to step up?**

**And that brings me to solarpunk.**

**Solarpunk is a very new environmental sci-fi genre that imagines a future where renewable energy is the prime motive for designing anything, big or small.**

**First of all, Solarpunk should not to be confused with steampunk. Steampunk imagines if modern gadgets were made with late 19<sup>th</sup> or early 20<sup>th</sup> century technology. Like there are steampunk computers made out of old typewriters and gramophones, but those are decorative objects. You wouldn't want to actually use them as computers. But imagining a solarpunk computer, and using it in real life, is the goal of the movement.**

**Although they are similar in the sense that they're both genres. There can be solarpunk artwork, solarpunk fiction or fashion or even card games.**

**In 2014, the writer Adam Flynn wrote a solarpunk manifesto for Arizona State University's Center for Science and the Imagination. He says it began when he was just talking with friends.**

**ADAM: I was having a conversation with, um, a coworker of mine who was also a young adult fiction novelist, and she had just published a, you know, her first novel and was thinking about like, okay, what are the genres that are going to be in next? Because at that point there was sort of a big upsurge of this sort of young dystopia as a genre. She said solar punk. And we're like, Oh, that's, that's a word. That's a word to think about.**

**Adam thought his friend had invented the word solarpunk – but they later discovered that people had the same idea around the same time, which shows that solarpunk is evolving organically out of the zeitgeist.**

**In fact, my listeners had been suggesting it for a while, but I wasn't sure what to say about it because the genre is so new. Then I put the hashtag solarpunk into Tumblr to see what images came up. That's when I got it.**

**The word punk sounds gritty, but the high concept futuristic paintings I saw were so refreshing and warm. Imagine architecture with impossible curves, lots of glass and greenery everywhere – like the number of trees you'd expect to see in park coming out of windows, balconies, or elevated walkways. One picture had a human-design forest contained in a series of skyscraper cones in the middle of an urban grid.**

**I also came across an artist who had created a series of images of a shanty town in a developing nation that had been transformed into a group of futuristic solar-powered circular habitats that were connected by walkways. The image was so believable; it took me a minute to realize it was a proposal for a mega-structure that didn't exist yet.**

SARENA: Most of the technology that's used in solar punk artwork and fiction already exists. But what we do is we take it and shine it up, look it, make it look real pretty, and then it makes it more appealing.

**Sarena Ulibarri is a fiction writer who edits a solarpunk anthology of short stories called Glass and Garden. It was the architecture that first caught her attention. At the time, she was at a writing workshop.**

SARENA: I had been writing a lot of dystopian stuff and I, I've always had environmental concerns and I was trying to, you know, work that into my fiction. But I was doing it from that grim, dark dystopian aspect and you know, it was exhausting and it, I wasn't doing it very well. Like, you know, there's a lot of clichés in that and there's, there's just so much of it done. So anyway, one of my classmates was from Singapore. He was describing the biodomes of Singapore and you know, this building that's shaped like a Lotus that like opens up, uh, you know, with the, the solar panel, solar panels that look like a Lotus leaf and stuff like that. And I was just like, what are you talking about? That sounds amazing. I like pulled up some pictures on my phone, like, this is what you're talking about. And he said, yeah, that's my hood. We live in the future. And I was like, what? The future can look like that?!

## Adam Flynn.

ADAM: The fastest way to describe the solar punk aesthetic might be um, secretly elves in the sense of a lot of organic forms, a lot of inspiration from art nouveau and uh, sort of the arts and crafts movement. William Morris, there's a lot of this idea of like, can we make infrastructure beautiful? Can we live in harmony with the things around us? There's a lot of lush green spaces, there's a lot of, you know, things kind of living and, and growing and interactive systems. So, it's not, you're sort of a stark white iPhone modernism.

***You know, it's interesting you when you mentioned art nouveau, yeah, I did notice that and I was thinking, Oh, that's pretty, but it didn't really think about it in terms of, uh, it's, it's much more pers purposeful it sounds like because it, it feels organic and it's so interesting that it's different from an iPhone which is sleek and probably has more of a corporate feel to that kind of design.***

ADAM: Yeah. There is a lot of solar punk being one of the sort of, one of the reactions against a sort of modernism and especially the kind of corporate slick modernist design that you might see in terms of, you know, a lot of visual clarity and grids and you know, sleek lines, but it not being that, you know, you can't fix an iPhone, they have deliberately engineered it to make it harder for you to repair it yourself. And it's also been engineered such that you kind of have to replace it every couple of years, and then you start asking questions of, well, okay, and what are the rare earth elements in this phone and where did they come from?

***And what happens to that phone once it's discarded?***

ADAM: Exactly. Exactly. So, the question of like, all right, well, what would a solar punk phone be like? It's not just what it looks like, but where it exists within an entire sort of chain of production and use and social meaning.

**And what would a solarpunk video game be like? Keisha Howard is trying to figure that out. She works in the video game industry and she gave a TEDx talk on solarpunk.**

KEISHA: When I first was writing my speech for the solar punk TEDx, my little brother, he asked me, he was like, what's so punk about solar punk? Because everything you're saying about it, it's nice.

***Did you ever come up with like a really concise answer to be like, you know what I thought about it and here's the answer?***

KEISHA: Yeah. The punk part is the sacrifices we will make now. And the people who wouldn't want to make those sacrifices. Like if we all did DIY, if we all like, you know, band together to do this, to have this solar punk future, not everybody is going to be into

that. So there are whole economies that need the production of things that harm our environment. Right? So to change that would be very difficult and that would be sort of kind of a fight. It would be bucking the current system of capitalism that we have now. And that's kind of punk, right?

**Solarpunk has a lot in common with Earth Day. This month is the 50<sup>th</sup> anniversary of Earth Day but when it began, it was an experiment started by a few people with high hopes.**

ADAM: It's creating something new, right? Like Earth Day was a new holiday and it tried to fill a need that people saw around, like, we need to celebrate and, and really have a day of, of reckoning with our relationship with this planet.

**We are entering a very uncertain, scary time in our history, and solarpunk is a ray of hope. I could use a ray of hope now. We'll look more into what's motivating the people behind this movement and why they're still optimistic about the future.**

That's after the break.

**BREAK**

**To understand solarpunk, we also need to know what it's reacting against, which is primarily cyberpunk.**

**Cyberpunk was pioneered by writers like William Gibson in the 1980s, where they imagined a future in which giant corporations use media to connect people through cyberspace, where hackers could live virtual lives, merging their bodies with technology in a way that feels punk and DIY but everything they're using to build their sense of identity is controlled and surveilled by giant tech corporations.**

**Yes, we are living in the future they imagined based on trends 30 to 40 years ago.**

**Cyberpunk also became the dominant sci-fi aesthetic from The Matrix to Ready Player One. Although the pop culture shorthand for cyberpunk is the 1982 movie Blade Runner – not the plot of the movie, but the visuals. In fact, everyone I talked with about solarpunk explicitly said they do not want to live in a Blade Runner future, even though Blade Runner took place in the year of 2019.**

**Adam Flynn still likes the classic cyberpunk novels.**

ADAM: To the credit of the initial wave of cyberpunk authors, like they were writing this as a, you know, a reflection and an interrogation of what was going on in the world around them. And in many ways like attempting to sort of warn people problem is if dystopia is really cool and people have robot arms, they're like that's going to infect people's dreams and you end up building that future anyway.

**Keisha Howard doesn't think that solarpunk and cyberpunk are mutually exclusive. In fact, if we are living in the world cyberpunk imagined, then she thinks we need to decide if we want to keep going in that direction or live in a different future of our own design.**

**To her, solarpunk is a reaction against another genre of sci-fi where humans terraform Mars or we have to figure out how to live on other planets because we trashed the Earth. That bothers her:**

KEISHA: Because all of us can't go move to Mars anytime soon, no matter what. Elon Musk saying, why are we not all moving to Mars? I don't want to move to Mars, even if I could, but like if we can just kind of pivot toward something where we're still living on Earth instead of like having to leave it because we've destroyed it with pollution or atomic bombs or whatever dystopic stories that we've been fed, like that would be kind of cool, you know.

**And because this movement is so new, Keisha feels like she could get in on the ground floor.**

KEISHA: Like when you, when you look at a cyberpunk story, right? It's like a thing if the lead is a woman or a person of color or just a non-white male and solar punk is so new and so fresh, like you really can be anything in this particular sort of speculative fiction. So, it's nice, and it's just like, wow, I don't have to worry about like telling a story and, and, and hinging so much of it on like my perspective as a woman or a person of color. I can just hinge on it as a human trying to live in harmony with the earth.

**One of the things I find fascinating about solarpunk is that it's a reversal of what I think of as the usual chain of events in sci-fi, where a writer imagines current trends going into the future with dangerous consequences. Or as the writer Fredrick Pohl once put it, "A good science fiction story should be able to predict not the automobile but the traffic jam."**

**Solarpunk does the opposite. It encourages artists and writers to imagine a specific type of future in the hopes that their work will inspire engineers to create that future.**

**Adam says there is precedence for that. In fact, he was inspired by one of the pioneers of cyberpunk: Neal Stephenson.**

ADAM: There was an essay by Neal Stevenson about, uh, sort of the idea of a hieroglyph and a science fiction as a hieroglyph, right? This sort of universal language that can be used across disciplines when you're building something really big or ambitious. The idea being that moonshots were easier in the 1960s because everybody had read, you know, Ray Bradbury and Isaac Asimov and all of these sort of like golden age sci-fi writers. And so they could say, Oh, you know, it's sort of like a X or Y or Z. It's sort of a problem that like we don't have that sort of optimistic Jetpack future anymore. And you know, we tried to think on it and tried to say, well, you know, I guess we just sort of have to make this a sub-genre and kind of a subculture to encourage people more towards historical pre enactment. You, you try and uh, have to imagine the world as it could be before you go about changing the way it is.

**Everyone I talked to said they are still waiting for their big cultural moment – a Hollywood solarpunk movie or TV show that captures people's imagination.**

**In the meantime, they've been retroactively classifying old novels as having been solarpunk – even if the authors aren't alive anymore. There have been a few new solarpunk novels – with more on the way from major writers like Becky Chambers, who wrote the Wayfarer series. But novels take years to write. A lot of the momentum right now is in short stories because they can react more quickly to the zeitgeist.**

**Scot and Jane Noel are a married couple who run a solarpunk anthology called Dream Forge.**

SCOT: I'm at this point 62 years old, so I grew up with, you know, science fiction being, Hey, we're going to, you know, have these marvelous inventions and spaceships.

JANE: It's the Star Trek future.

SCOT: Yes. You know, that's, that's kind of what we're going for.

**In fact, they think Star Trek is a perfect example of what solarpunk is trying to do because Star Trek inspired kids to become scientists and engineers when they grew up. And the things they invented look a lot like Star Trek from voice activated AI to the flip phone to the tablet computer.**

JANE: And I think like Star Trek is the future that we all want to get to. And it feels to me like solar punk is kind of the in between of how we get there. Like when we're talking about the social justice and the community working together, it's like it Star Trek's world. They already experienced that. They already got there and solarpunk feels like the step we need to take from here to Star Trek.

**The submission process for their magazine Dream Forge is fairly rigorous. They've gotten over 1500 submissions, and they're evaluated by readers around the world.**

JANE: We have a lot of readers and we really have that they understand the vision of what we're trying to do. So, these readers really say it's not a Dream Forge story. That's, that's a comment you'll see them put into the thing. It's a great story. It does this, it does this well, but it's not a Dream Forge story.

SCOT: We have had stories where, uh, they showed climate change for instance, from the point of view of, of really total devastation. Uh, at the end, you know, there's this, this little tiny bit of a feel of, Oh, some fish survived, and you know, it looks like life might be returning to the Mediterranean or something. And it's, and then I, you know, was even talking to the authors and it's like, well, we thought that was a bit hopeful, a bit too hopeful. We thought we were being overly optimistic. And it's like, no, that's not, that's not overly optimistic. Optimistic is that there's a point where, you know, people basically reverse damage and um, you know, change, change things for the better.

JANE: You know, one of the stories that we have, that was from Italy and he was a climate scientist at some point. He's a writer and translator now and his was of showing the devastation of climate change. But from the point of view of a time traveler who's coming back to our time, but it's our future actually. He's coming back to the time when, when the, the climate devastation is really terrible. And he's trying to find a way to tell them without saying, hey, I'm a time traveler from the future. But he's trying to find a way to, to say to, one of the women he's talking to in the story is, you'll get past this.

**That story she mentioned is called Sapiens by the writer Davide (da-VEE-deh) Mana. I asked the actress Vanessa Bellow to read that scene where the time traveler from the future tries to reassure a woman from our era that we're going to**

**get through this climate catastrophe. The story is told from the time traveler's point of view.**

*I looked at her. "If you know what's wrong, why don't you change it?"*

*She turned away, and looked at the sea, black water under black sky, the lights of the drones like distant fireflies. She shrugged. "You can't change people," she said. "Three hundred thousand years of history disprove that belief. Change is the only constant in the history of our species. We should embrace it, not try and stave it off."*

*She clicked her tongue and shook her head. "You have too much faith in humanity," she said.*

*"What if it's you that do not have enough? We are Homo sapiens, not politicians."*

*She chuckled, and her cheeks acquired a hint of color.*

*"My friend," she said, nodding, "would not like such talk."*

*I looked at the guy, surrounded by a bunch of hanger-ons. Some politico I was supposed to know. I would have liked to tell her we had lost the memory of such individuals, that she should not waste her time. "What if he doesn't?" I asked.*

*She stared at me. There was no longer fear, there, but curiosity. "Are you preaching anarchy?" she asked, with an impish smile.*

*"I am not a preacher," I replied. "And I'd rather preach survival, if I were."*

*"You can't change people," she repeated. It was the core of her belief. Her faith.*

*"People can change," I replied.*

*"That's the spirit!"*

*I turned. My friend's companion was standing too close, smiling the aggressive smile of one who's in control. He gestured towards the darkness, where the drone lights illuminated a chunk of the Gutzlaff Signal Tower, like a broken finger pointed at the sky, rising from the waters.*

*"We will rebuild the Bund better than before," he said. He squinted at me. "Are you an engineer? A designer?"*

*I shook my head. "A historian."*

*He snorted. "Fascinating subject. Useless, but fascinating."*

*Another wave crashed at the base of the tower. The structure creaked, people screamed. But I knew it would be all right.*

SCOT: We're looking for stories that basically show us people overcoming obstacles and that's, that's it. We're not, uh, Pollyannaish magazine. It's not like, um, you read these stories and it's like, Oh, everything worked out really happy and everybody was fine. And, you know, look how bright things are. You know, we want to be realistic about showing dire challenges. But the one thing that we always want is to show that people and communities can overcome those challenges. That you don't wait for government to save you. You don't, you know, wait for the hero. I would rather see a story about a couple of people or a community. I'm solving a problem then, oh there's the guy or girl who, you know, goes and slays the, the evil and we're all fine now. It's like everybody works together to make a better future.

**That is a good description of the story Sarena Ulibarri got published in the magazine.**

SARENA: My story in Dream Forge is called the Spiral Ranch is um, set in a futuristic Austin, Texas where there is a skyscraper with a spiral pasture, um, that they raised dwarf cows in this skyscraper in the middle of the city.

**She was actually inspired by a work of conceptual architecture she saw in a design contest. The imagine was of an open-air spiral farm-slash-skyscraper.**

SARENA: And I didn't know if it was realistic, but I thought I could tell a story in this, in the setting. So, I started thinking, who works there? You know, who, who runs this place? And then the characters and the idea kind of grew from that.

**In her story, two friends who work at the spiral ranch discover their cattle are being stolen by rustlers using giant drones to snatch the cows away.**

*Piper tore down the staircase four steps at a time, slamming the doors open at each pasture as she passed them. She had no plan, she just knew this was her herd, and*

*she would be damned if she let them be carted off into the forest. All the pastures that were supposed to have cattle were fine, until Pasture 3. It was empty, and the gate leading down to Pasture 2 hung off its hinges.*

**Eventually, Piper finds the cattle rustlers, and tries to stall them before they can leave with more cattle.**

*“Why are you doing this?”*

*“Cows ain’t supposed to live in skyscrapers. We just want to bring agriculture back to the land, back to the people.”*

*“By stealing our cattle.”*

*“Way I see it, we’re liberating them,” Mack said. “You know, we could use someone with your expertise. Pretty impressive, the way you hacked that drone. You could join us.”*

*He stepped backward. She was the one with her back to the wall, and he had only a few steps to make it to the trailer. Could she actually pull the trigger if he made a run for it? Piper had no way to know if any help was on the way.*

*“We want the same thing you want,” Mack said.*

*“No,” she told him. “The Spiral Ranch may not be the best way, but we can’t go back to the old ways either. The land has to heal, regrow.”*

*He took another step back. “That’s just propaganda, and you know it.”*

*She stepped forward, closing the distance between them. Someday, maybe people would spread out, start living horizontally again instead of vertically, but right now was a fallow time.*

*“Let’s go, man,” Mullet yelled. He herded the last two cows into the trailer and latched the gate.*

*“I can’t let you take our cattle,” Piper said.*

*“Then I’d say we are at an impasse.” Mack cocked the gun.*

**That story sound futuristic, but as Sarena likes to point out, most of the technology in solarpunk is available now if we want to use it. And it doesn't have to be something huge that requires a lot of money, like a skyscraper farm, but we can be solarpunk in the smaller choices we make. And she thinks the current crisis is already changing people's behavior.**

SARENA: You know what, I've seen a fair number of people talk about starting like backyard gardens or you know, showing their little window sill, you know, sibilings and such, and they're doing it as a reaction to this and realizing that they can't just go to the store all the time. So, I think that's, that's something, a little solar punk that's coming out of this as well.

**As Keisha Howard's been sheltering in place, she's also been thinking about how she can make her life more DIY.**

KEISHA: Right now, one of the things I decided to do this year is not just to make some of my own clothes so that I never really thought I would be doing, but like fast fashion is terrible for the environment. So, like what if I just made my own clothes or never bought anything new?

**And solarpunk clothes could look just as cool as cyberpunk or steampunk outfits – except they're more practical.**

KEISHA: What are some of the natural ways people can, can make clothing and it's like natural materials a lot more colorful than what you see in a normal like sort of cyber punk aesthetics, a lot more full of life and like earthy, you know, sort of tone. So, where it's like cyber punk, you're thinking of like blacks and purples and blues and neons and that kind of thing. Uh, solar punk has like greens and yellows and grays and like browns and it's really pretty, it's really like earthy and natural, uh, feeling when you look at solar punk aesthetic.

**We're at a time when even going to the grocery store feels dystopian. I've noticed for some people it helps to leaned into that fear -- watching movies about pandemics or reading novels about post-apocalyptic landscapes. I feel the opposite. I've been craving not just hopeful stories, but hopeful stories about the future. That's why solarpunk is my sci-fi comfort food right now, and it's healthy comfort food.**

**The good thing about Solarpunk is that it's not a utopia. At the very least, they just want to imagine a future where solarpunk ideas have a fighting change,**

where people can lead by example, even on a small scale – where there's a lot of power in a hashtag.

That's it for this week, thank you for listening. Special thanks to Scot and Jane Noel, Sarena Ulibarri, Adam Flynn, Keisha Howard and Vanessa Bellow. In the show notes, I have links to DreamForge magazine, Sarena's anthology Glass and Gardens, Adam Flynn's solarpunk manifesto and Keisha Howard's non-profit organization Sugar Gamers. I also have a slideshow on the Imaginary Worlds Instagram page of some of the solarpunk artwork I mentioned.

Now one of the established authors who has been retroactively deemed solarpunk is Kim Stanley Robinson. Apparently, he's quite happy to learn he had been solarpunk all along. And if you'd like to know about his work, I interviewed him for a 2017 episode about one of his novels called New York 2140, which imagines how New Yorkers would adapt to their city being flooded like Venice. It's a very positive vision of people coming together and life continuing on.

My assistant producer is Stephanie Billman. You can like the show on Facebook. I tweet at emolinsky and imagine worlds pod.

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