

# Stone Carving in the Age of Artificial Intelligence



**Master stone carver Chris Pellettieri with students at Stephen T. Mather Building Arts & Craftsmanship High School, New York.**

Chris Pellettieri is the founder of Pellettieri Stone Carvers Academy based in New York City (<https://www.stonecarversacademy.org/>). In 2023 the Ddora Foundation began supporting apprenticeships to assistants for his stone carving classes at the Stephen T. Mather Building Arts & Craftsmanship High School's facility on Governor's Island in New York harbor.

As part of his efforts to promote stone carving and reawaken peoples' fascination with traditional craft, Chris Pellettieri was recently interviewed by Mark Hurst for his TechTonic program on WFMU (<https://techtonic.fm>), a nationally syndicated radio show and podcast radio. Chris visited WFMU's Jersey City studio with Arissa Ramoutar, his long-time assistant. In this highly engaging conversation Chris and Arissa discuss the experience of stone carving as craft and offer a few reasons why the advancement of robotic technology hurts humanity.

- [The transcript below has been edited for clarity.](#)
- [Stream the show: https://wfmup.org/archiveplayer/?show=148075&archive=264503](https://wfmup.org/archiveplayer/?show=148075&archive=264503)
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## Mark Hurst

Welcome to Techtonic (<https://techtonic.fm>). My name is Mark Hurst. I'll be your host for the next hour or so. Thanks for joining. Today our guests are Chris Pellettieri and his student Arissa Ramoutar here to discuss stone carving in an age of Artificial Intelligence.

I'm going to bring Chris and Arissa on mic momentarily but first let me say why I brought them on to talk about stone carving since I have never covered that topic on the show. I've done a couple of shows on AI generated music, most recently with Ken Friedman. We played a bunch of AI generated songs, some of them terrible, like a version of a Beatles song played in the style of Queen. That was the supposed design of that file anyway. Other songs we played, I'll admit, were more interesting. During that conversation, a company called Suno came up. Suno is a startup that makes generative AI audio (<https://suno.com/home>), what I like to call extruded musical product. Suno as well as other musical generators online using AI ask you to type in a prompt such as "upbeat country song with lyrics about shopping in the supermarket" and "add some violins." Which is one of the songs we played in that show. When you enter that prompt in the right way and maybe revise it a few times, then out comes a piece of musical glop conforming to whatever you requested. Well, the obvious flaw is that actual musicians are not participating in the creation of this music except perhaps having their own songs ripped off and

plagiarized. The training and application of these AI models raise the question of what kind of future we're headed into if people's audio streams are going to be flooded with this kind of AI generated dreck with no direct human artistry or craftsmanship. And it just so happens that a few days ago, the cofounder of Suno, a guy named Mikey Shulman, went on a Tech Booster podcast to talk about how his company works, what it does, and the business model of AI generated music. This was a podcast called 20 VC (<https://www.thetwentyminutevc.com/>), hosted by a guy named Harry Stebbins, who is himself a venture capitalist. I want to play. An excerpt of this 20 VC conversation because I think it illuminates exactly what people are concerned about. Routing around human artistry and craftsmanship, which is going to tie directly into our conversation with Chris and Arissa about stone carving. Chris Pellettieri is the founder of Pellettieri Stone Carvers Academy based in New York City and a student of his Arissa Ramoutar is with us as well.

## **Mark Hurst**

I wanted to start by asking you to just give us a little introduction. You've been a stone carver for decades, and of course you're the founder of Pellettieri Stone Carvers Academy. Tell us about you and the academy.

## **Chris Pellettieri**

I grew up in Manhattan near the Cathedral of St. John the Divine, which is an enormous stone building. Construction had been suspended during World War 2 but resumed around 1979.

## **Mark Hurst**

For listeners who aren't familiar with that part of the Upper West Side St. John the Divine is a Gothic cathedral which when completed will be the largest Gothic cathedral in the world. And yet it's unfinished, perpetually unfinished state. If you walk through, it's an amazing experience.

## **Chris Pellettieri**

And another important thing about it, it's built with load-bearing stone. Not like a steel structure with stone. It's more like the ancient way of building with stone.

Anyway, I was only twelve years when they resumed construction, and they couldn't find any people who knew how to do this craft anymore because the whole industry had withered. They had to recruit artisans from Europe to train local people. It was in the news, and it was a tremendously exciting thing, but I was only twelve years old. I went to high school and college and really did my best at academic pursuits but then felt pretty burned out after college and discovered I really like working with tools and making things. At that point I remembered what I had seen at the cathedral and became an apprentice. For two years I learned these ancient traditional techniques. Before that I was pessimistic, dreading a future where I wouldn't really like what I was doing. After becoming an apprentice, I really felt optimistic and there was enough work at the cathedral to keep people busy for the rest of their lives. Unfortunately, after two years they started embracing some mechanization and these ancient traditional techniques that I was learning were replaced by a machine that did 90% of the work automatically. The

workers had to clean and maintain it. Occasionally they worked on parts that the robot couldn't reach. The work became dreadful, and I quit. Shortly thereafter that they suspended construction again.

I became independent and for about twenty-five years I was a solitary, independent freelance stone carver doing commissions and trying to increase my skills and challenge myself to learn more. About ten years ago I decided to start focusing a lot of my energy toward promoting stone carving, training people, and helping them discover the same kinds of fulfilling and meaningful work I had experienced – work they could be proud of using hands and materials in a way that was not many people are doing anymore.

## **Mark Hurst**

And you're focused on the ancient ways of carving stone, you're not using any robots, you're not using the kind of mechanized tools that were being used during your time at the cathedral, right?

## **Chris Pellettieri**

I use some power tools. I'm not saying I'm a purely hand power person. I'm probably about 75% hand power, but I use electric drills and a pneumatic air hammer, but I don't use anything that you set up and walk away from and it does the work for you.

## **Mark Hurst**

Let's hear from you, Arissa. How long have you been stone carving?

## **Arissa Ramoutar**

I would say about 2 1/2 years. I found Chris through a high school program. And since I liked art, I decided to do a two-week program during the summer. There was stone carving, neon lighting, glass blowing. I put stone carving as my number one choice because that's everything that you see in shows, like they're always doing stone carving. In SpongeBob there's a scene where he's stone carving. I was young and it seemed like something I wanted to do. I took the two-week program during the summer, and it was fun and eye opening. And I had these two pieces at the end of the program that I thought looked amazing. The next year Chris invited me again to help with kids. Well, I was older but same two-week program, and I was helping them, and I also got to make another piece of my own and then after that during September, he asked me to work on my own pieces. Since then, I've been working on my own pieces. I'm still working on my own pieces and they're taking time. I go each week once a week on my own and I love everything.





**Apprentice Arissa Ramoutar working at Pellettieri Stone Carvers Academy in 2024.  
Apprentice Arissa Ramoutar demonstrates stone carving techniques.**

## **Mark Hurst**

Thank you for that background, Arissa. You just said that you love working on these pieces. And that stands in great contrast to what the tech pros were talking about. Just one of them, I should say, was the Suno guy was saying that musicians don't like going through the work and the pain and the time and the effort of learning a new instrument. Are you saying that you have enjoyed the learning process of stone carving?

## **Arissa Ramoutar**

You know, it's funny, but yes, I do. At sometimes it can get hard, so at that point I can understand why. But art in general is to create. Why would you say something like that when people take their time and learn all of that to create?

## **Mark Hurst**

What has your experience been in the learning process? Did you feel like you had to struggle through it or was it? What did it feel like going through those 2 1/2 years to learn up to the point where you are now?

## **Arissa Ramoutar**

In the beginning it was new and fun, but the things I choose to make now are somewhat more difficult than when I started. There are more ups and downs. I had to take some time away and move on to a different a different piece and then come back to another to come back to that same thing. In stone

carving there's like more than one way of thinking about making art. There's the stone itself, where you must break away everything, and then there's the more technical aspect. And when you're stuck on one side, like where you're just breaking apart everything, that's one part and then you must take the time and look away from all the references you made and just look at the piece and zone in until what you want to make out of it. It's a lot, but at the end of the day I enjoy doing it.



**“I go to work for 4 or 5 hours and zone in on the piece.”**

## **Mark Hurst**

It sounds like it's almost meditative for you to zone in on the piece. And focus just on that one thing.

## **Arissa Ramoutar**

I didn't realize that it was meditative until Chris and I went to the Metropolitan Museum and did a demonstration. I was teaching how to use the tools, and a lady remarked, this is very meditative. Then it clicked for me. When I go to work for 4 or 5 hours and zone it on the piece. Chris obviously does way

more than me, but I zoned it on the piece and the time just flies by. And then I come in next week and it just flies by and it's just zoning in and taking time away from online, TikTok, everything. I don't why you'd use AI to do those things.

## **Mark Hurst**

Chris, are you designing the program for young talents like Arissa to have that kind of experience?

## **Chris Pellettieri**

My main concern is stone carving, but a lot of what I do applies to any kind of traditional craft where people are working with material, be it metal, wood, leather, glass, whatever. Working with your hands in general is something that I promote. But when it comes to stone carving, I was trained in the most basic process first and it wasn't even a work of art. It was just we had a block of stone, and the instructor drew a pencil line around the top and said, takedown the surface to this pencil. Get rid of everything above the pencil line; just don't break anything below the pencil line. And that's a really great way to learn, to get skill with the tools. I always tell the students to look at it as a piece of scrap. You can experiment and take chances, and if it comes out not so great, you're not going to feel like my masterpiece is ruined. Even if it's just a flat surface people begin to feel it's precious after a couple hours.

Before I started working with stone, the longest I spent on anything was a research paper in school, maybe 15 hours of work if you squished it all together but spread out over weeks. Then I was in the cathedral, spending like 8-hour days for weeks on one piece. That's another great thing about working with materials, especially with stone you really see what you're capable of. I don't want to disrespect any other kind of work, especially important kinds of work, but it's rare that you get to see the cumulative impact of your effort and energy in a single piece.

## **Mark Hurst**

What would you say to this one guy from Silicon Valley who maintains that if we just allow Silicon Valley to build us the automated systems where we can tap or push a button or swipe, our lives are going to get so much easier.

## **Chris Pellettieri**

Without vilifying him I can totally relate to how that image of the future of progress. We feel like we've been kind of expecting it since we were kids watching the Jetsons – you push buttons and things get done for you. Progress. But it wasn't until I started working with stone that I realized hard work gets a bad name. Hard work can be really rewarding. If you're in sports or if you put your kids in sports, the coach is always like, you're a hard worker. It can be rewarding but there's a flip side where people dread hard work. Let's come up with a machine that will do that for us. Once I started working with stone, I realized I like hard work. That doesn't mean, for instance, just any hard work! If my wife says, we got all these clothes that need to be folded ... well, that's something else! If you love golf, you probably work hard at. If you love an instrument you're going to work hard at it. I give Suno a break to some

extent by saying we want to avoid certain kinds of work. Drudgery or dangerous stuff. Yes. But I really love what I do, and I'm glad I get to do it and share it with other people. That's part of my mission, to share it with people and help them realize, you know, why would you want a machine that would do that for you?

## **Mark Hurst**

We have Pellettieri Stone Carvers Academy that focuses on the manual work of stone carving. There are some power tools for certain steps, but even then you're involved guiding it completely right, and even that's a minority of the work. What are some of the tools?

## **Chris Pellettieri**

Hammer and chisel. Mallets. You mean like a gouge? That's like a wood tool. See your gesture is like scooping, yeah.

## **Mark Hurst**

Yeah, Arissa is showing me the hammering motion. OK, thank you. And by focusing yourself. And your students on manual work, as Arissa said, you can reach a meditative state over time. You develop as a skill, you zone in. I like that phrase, zone in on one piece of work and then in the end you have something that you're proud of. It seems to me that there are a lot of benefits for the craftspeople themselves.

## **Chris Pellettieri**

Right. I don't do anything technological with the computer, but I wonder about people who do coding, do they zone in? They probably zone in and similarly with kids in high school robotics class. Advanced schools have robotics clubs. The students probably love it partly because they're working with tools and making things and developing skill and a lot of the same benefits. I'm not sure they realize that the whole robotics culture is about depriving other people of those kinds of pleasures.

## **Mark Hurst**

Now that we've established the benefits to the stone carvers themselves. I want to play an excerpt a little more than a minute from a recent "60 Minutes" broadcast where they sent a journalist over to see something called Robo, made by a company called Robotor (<https://www.robotor.it>), that is a stone carving robot. You'll hear in the coverage in this little clip and then we can talk about robotics in stone carving.

## **Narrator**

Meet Robo, one of the brigades of robots taking over sculpture. We watched as Leonardo da Vincis trademark Hat was adjusted not with a hammer and chisel, but a thirteen-foot zinc alloy arm and a spinning diamond crusted finger. Water jets kept Leonardo cool. This was a week's work for Robo, with another two to go.



## **Speaker 1**

If you were doing this the old-fashioned way, hammer and chisel, how long? Would this take? At least ten times longer.

## **Narrator**

Massari told us his mechanical employees, 7 and counting, they don't sleep, get sick or take holidays. He took robots off the automotive line and gave them bigger brains. And the robot will work all these gadgets. Robotor's chief technician, also a sculptor, turns the artist model into a 3D file that generates a complex set of instructions that tells the robot exactly what to carve right down to the last half inch.

## **Mark Hurst**

All right. So again, that was "60 Minutes" covering Robo, the robotic stone carving machine, made by a company called Robotor. And you heard how it works. The human engineers or designers input a 3D file into the robot and then it uses its diamond saw or whatever and water cooling and takes a few hours and there's 90% of the work done. Then later in the piece they do say that human stone carvers come in and do some of the finishing work. There is some human work to be done, but it is a completely different approach from beginning to end.

Alyssa and Chris, what is your reaction? What comes to mind when you hear about a robot doing 90% of the stone carving work?

## **Arisa Ramoutar**

Well, when I think of when I think of AI and this robot, I just wonder, who asked for it? Nobody in the art world, in my opinion, nobody. Of all the people that I know, no one wants AI in art. I feel like they could put the AI to work on something useful like medicine. Go cure cancer! I feel like art is something that should have human interaction, should emerge from the human mind. When you see AI art, I went to the Whitney and saw AI art on the wall. I don't know why it was there. A girl with braids on clouds. There was the biggest thing there and I did not like. So, when I hear of this robot in its arm sawing ... Who asked for it? And is it really going to look that good? When you buy art, you just want that human touch in it. I don't agree with AI art.

## **Mark Hurst**

Good answer. Who asked for it anyway?

Just having watched the whole piece, there some stone carvers there who were saying, we're not abdicating. We're not sending everything over to an AI. It's just doing most of the prep work for us and then we come in and put the human touch at the end.

What do you think about the stone carvers and maybe know some of them in that piece where they're saying this is benign? Not to worry because humans are still involved.

## **Chris Pellettieri**

It's unproductive for me to think about this. Stone carving is so close to me it wouldn't be fair, but if there was some product that I really needed but didn't really care if it was like top level or anything and the robot version was cheaper then probably, I'd get the robot version. However, my focus is not the product as much as the experience. I don't train people in stone carving because I think their product is going to change the world. I train them in stone carving because of what it does for them internally. If it's a robot carving stone, there is no internal product. There's an external product. If I were building a casino and wanted 50 Roman gods in togas to decorate the place ... Where are you going to get humans to work that? So, getting a robot makes sense. But what I do, I do because I love it, and I teach people because I think they'll love it too. Not because of the product, but because how fulfilling it is to do that.

I like the idea that it's going to last, and people will see it, but when you talk about the robot's product and compare it to a human made product, that just seems like an argument that goes nowhere because there's so much human made art. That's undeniable, at least by today's standards it's art, not like some honor to bestow and withhold from a robot or a human. It could still be something that could decorate a place where nobody even really cares. I assume that they're going use robots for places where people just want to decorate and don't really care. But the whole thing to me is the experience and how fulfilling it is and how much it makes people happy to work with their hands and to be creative, something people have been doing for 100,000 years. But in the last 200 years only a lucky few get to work with their hands.

## **Mark Hurst**

Chris, going back to what you just said, I really like that you're bringing up, the eternal question of what art is. What does it matter if someone looks at a product and says this is art or this isn't. Saying that your benchmark of quality is your experience or what your students' experience was in putting the work in. The process of carving the stone to get it to that point, that's what makes it meaningful to you.

## **Chris Pellettieri**

Yeah, I wouldn't say that's a benchmark of quality by which I would judge the product. Sometimes an artist might have an unpleasant experience making something. But maybe I'd love the product and think it was a great piece of art. But that's how I judge whether I'm successful as a teacher or whether I'm successful as a carver. I get paid for my commission, so it's whether I enjoy it or not. That's not really a standard of success.

## **Mark Hurst**

This brings up the one person in this in this whole transaction or relationship that we haven't talked much about up to this point, the customer, the buyer, or person viewing the carving. Most people don't have the professional carver's eye and won't have the years of experience that you have to judge the product.

## **Chris Pellettieri**

And even with my eye and experience, probably in 10 or 20 years, they'll be making machines so advanced that I won't be able to tell.

## **Mark Hurst**

So, we've got Robo doing 90% of the work over there in Italy now, but as they said in the "60 Minutes" piece, maybe in a few years it'll be 95% or 99% and at some point, it may be indistinguishable. This is the same conversation that we're having about AI generated music and AI generated art like you saw at the Whitney Museum. What happens when all items and media artifacts including the stone carvings are made by AI power tools rather than artisans or humans who have some sort of artistic vision. How do you feel about that possible future, Chris?

## **Chris Pellettieri**

Well, that's a depressing future. Some people are already living in that future in artificially constructed buildings. They don't know what hand shaped them or they might spend time in spaces where nothing has been made by hand. That's sad. The idea that kids wouldn't have any insight into the possibility of working with their hands, and everything's on the phone or on a screen. Nobody's making money out of promoting working with your hands, so it's already hard. My mission is to promote it and offer an opportunity to learn it. But first to even show individuals working with their hands and using hand tools and materials is important to me.

## **Mark Hurst**

Chris, what do you think is the future beyond passing this along to the next generation? If someone out there is thinking of getting involved in a manual art, is there a way to make a living long term when the robots are advancing on not just stone, but everything else?

## **Chris Pellettieri**

That's a great question. When I started the Academy as a nonprofit, I would approach people for donations my first angle was to describe it as a job training program. But I never really felt very good about that because I struggle to find work myself and I've been doing it for 36 years. That was kind of dishonest. But I'm unashamed to say about that it's a worthwhile thing for people to donate money. For example, people put their kids in Little League not with the expectation that they're going to become professional baseball players. Or they give them music lessons not with the expectation that they'll be playing Carnegie Hall. It's just a recognition that those pursuits really improve kids' lives even if they don't have the kind of talent that they need to make it as a professional. It benefits their lives, they learn about focus, they learn about concentrating. If they learn how to learn through stone carving, then they can carry that to something else.

## **Mark Hurst**

I would argue that humanity needs to keep these skills alive.

Arissa, can you commit right now? Sorry to put you on the spot, and I'm halfway kidding here, but do you feel a sense of responsibility that you are going to be carrying the torch for the next generation? One of the few young stone carvers in the country right now.

### **Arissa Ramoutar**

That's not a lot of pressure. Sorry, no. When I first came to the Stone Carving Academy, I didn't have the intention of doing it long term. But after Chris invited me and I've been doing it for so long, I do feel I do feel responsible to keep going even if it's not like my profession in the future, just to have it there all the time, until I just pass it on.

### **Mark Hurst**

Because it's at some point there's going to be an outage of some kind and AI is going to go down maybe just temporarily, but people are going to suddenly rediscover skills and lost pursuits.

### **Arissa Ramoutar**

I'm turning 20 soon, so technically I've been born when computers and iPads and iPods and all that stuff came out. I know how important it is to keep all these manual activities alive.

### **Mark Hurst**

Well, you you're giving me hope, Arissa. You see the importance of this. You're you're going to remember and maintain those skills. The world is going to need them. So thank you for doing that. And Chris, thank you for teaching a Arissa.

### **Chris Pellettieri**

I believe that every animal on the planet has its specific characteristics and attribute. Dolphins can swim incredibly well. Humans can swim too, but dolphins are in another league. What do humans have? We have our big brains and language that we can share information and increase knowledge and accumulate technical skills over generations. Our hands are so agile, and we can grasp things and do things well with our hands. My comparison between the place where humans are at now with handcrafts and if dolphins had decided, for example, I'm done flipping around and jumping out of the water. Let's just be like manatees and hang there in the water and wait for stuff to come to us. You can't imagine dolphins or any kind of animals changing its behavior so radically, but that's kind of what humans are doing now. We've had 100,000 years of history using our hands to shape materials. And it's now, can we come up with a robot that can do that? Really, it looks like such hard work. Would you want to do that?

Listeners out there. Don't be like dolphins who are living life as manatees. To try to be your true dolphin self.

### **Mark Hurst**

And listen, if you're a manatee, no letters, please! I love manatees. You have your own beautiful essences that we love! That's a great analogy, Chris. Every creature has its innate talents, and humans



have some but not others. They have dexterity and range of motion and precision, right? And combined with an artistic mind that were able to use our hands to make beautiful objects. And we're going to let all that disappear and hand it over to a screen ...?

### **Chris Pellettieri**

The crazy part is that looking for easier ways to do things is also part of our nature. From windmills or water wheels we're constantly looking for ways to not sweat so much. Inventing robots is also part of our nature. 40 years ago, one might have said that's not going to put stone carvers out of work, it's just going to make their lives a little easier. We're at a point now however, where maybe it will make stone carving like a complete mystery. Without the machine we won't understand how they did things. Like with the pyramids, it will be a complete mystery.

### **Mark Hurst**

I like what you said before that it's worth avoiding drudgery. Nobody wants the boring or dangerous work that is just repetitive and without artistic merit. There obviously are some good reasons for leveraging power with automated tools, whether it's construction equipment or bomb disposal robots. They'll go in and defuse the bomb remotely. But there must be a dividing line where we say over in this area it's actually a net negative for humanity and our culture and subsequent generations, if we lose these skills.

### **Arissa Ramoutar**

Everything takes a lot of time to do, and it takes hard work, but you can't have a good day without having a bad day. It's about balance. If AI takes over, everything is just going to become monotonous.

### **Mark Hurst**

That's wisdom from Arissa. She's not even 20. We have hope. Arissa comes to studio A and there's hope. I'm dead serious friends, not grim and depressed all the time that AI is going to take over because Arissa is out there. And she knows about life and what's worth it, and she's continuing to learn how to carve stone. Chris, why don't you tell us how people can get in touch if they're intrigued by the idea of stone carving classes?

### **Chris Pellettieri**

Yeah, please feel free to give me a call at 646-229-6418 or go to the website [Stonecarversacademy.org](http://Stonecarversacademy.org) and you can click on and send me a message.

### **Mark Hurst**

Well. Thank you, Chris and Arissa.

Mark Hurst is the host of Tectonic (<https://tectonic.fm>), a nationally syndicated radio show and podcast at Jersey City-based WFMU. Hurst writes and consults at Creative Good (<https://creativegood.com>). Previously he was the host of the Gel conference, a creative event series that featured the first-ever presentation of Wikipedia by Jimmy Wales and hundreds of other talks.

