

This is Studio Radicals with dCS Audio.

Kate Hutchinson: Welcome back to Studio Radicals, a new podcast series that celebrates the musical pioneers who are breaking new ground in their field. I'm your host, Kate Hutchinson. Join me and dCS Audio as we meet with some of music's most innovative minds, exploring how leading producers, composers and engineers approach their craft.

Today I'm with Suzanne Ciani, an influential composer, modular synthesis master and neo-classical recording artist, who was once-nicknamed "the diva of the diode".

Her home studio on the California coast has one of the most stunning vistas going, stretching over the Pacific Ocean as far as the eye can see. It's no wonder it's inspired many of her albums.

Suzanne Ciani: The ocean is slow. It has a rhythm, but it's not a rhythm that you can beat out. It's a rhythm that is reassuring and constant and endless and sensual.

Kate Hutchinson: Suzanne's set-up reflects the two sides of her career: on one side, by the window, there's the grand piano on which she's composed several of her serene albums that have been five-times nominated in the Grammy's New Age category.

On the other, a modular synthesizer known as a Buchla, which sits under an endless tangle of coloured patch cables, beneath a computer screen. In the 1960s and '70s, Suzanne was one of the few students of this futuristic – and exorbitantly expensive – instrument, and one of the few women active at the dawn of electronic music, fullstop.

At the time, the Buchla's outer-space noise flummoxed people. Famously, you can see Suzanne on the David Letterman show on YouTube, demonstrating her beloved instrument to the bemused chatshow host. But Suzanne used her trusty machine to become a trailblazer in commercial sound design, creating the definitive bleeps and bloops for Coca Cola and the Xenon pinball machine.

In the '80s, analogue synths formed the basis of her first two albums, *Seven Waves* and *The Velocity of Love*, which have since become cult classics, and she used them on her Hollywood score for 1981 sci-fi comedy, *The Incredible Shrinking Woman*.

More recently, Suzanne's early electronic music experiments have been rediscovered and reissued. Now in her 70s, she's found herself touring the world and is an in-demand collaborator for a young generation of artists like Kaitlyn Aurelia Smith and Actress.

When Suzanne plays live, the stage becomes her studio, and her sound adapts to the space she's in. Her shows are at the vanguard of spatial audio: she uses quadraphonic sound – one of the earliest surround sound technologies that emerged in the 1970s and which Suzanne has rebooted all these years later. Her performances immerse the audience in the middle of her thundering soundscapes.

Suzanne Ciani: People really do seem to have a transformative experience. It's almost religious, in a way. It's kind of strange. There's something about being in that sound that is subliminal – I don't think it's a conscious thing. I think it has an effect that you may not even be aware of, but it's there.

Kate Hutchinson: When Suzanne started out 40 years ago, what she was creating with her synthesizer was totally radical – and still sounds groundbreaking today. It was such a great honour to spend time with her one afternoon in California, to hear how she's broken down

doors, defied easy categorisation, the extraordinary way in which she sees, hears and feels sound; and how she's still pushing that sound forward.

Suzanne Ciani: This is my home studio and it's like a cockpit. It's very compact. I moved out here 30 years ago from New York where I had a huge studio and I came here and wanted to just downsize and go into my personal space. And I have four speakers because I always work in quadraphonic. And so I can create a total space right here.

Kate Hutchinson: How did you end up moving from New York to the coast of California?

Suzanne Ciani: Well, you know, even before I moved here, my focus was always on the ocean, on the waves. My first album was *Seven Waves*. And it's just by maybe some sort of destiny that I landed here. I moved from New York at the height of my success there because I got an early breast cancer. And I thought that was a sign that it was too much intensity and that I needed to change my life. So I left. I left my million dollar studio and landed here at the end of a dirt road on the edge of the ocean.

I am impulsive. I go with the moment. I've done that in my work, and I trust that instinct. In life, it can be a little bit chaotic when you do that. I admire people who make plans and follow them and have a nice solid path. And mine is always, it seems, unpredictable.

Kate Hutchinson: I'm looking at this tangle of cables over the Buchla, your analogue synthesiser, and thinking, I can see the links there.

Suzanne Ciani: Right? There's order in this chaos. There really is. It's like a brain. The connections that you're making are kind of the same synapse connections that we have that give us our outlooks and ideas; the consistencies of the way we see things. And this is, you know, when I talk to it, I love that every time I perform, I have to plug in a hundred cables. Because it's like a process of relationship with the instrument, you know? And there's something very intimate about that.

Kate Hutchinson: Mmm, and also maybe ritualistic in a way.

Suzanne Ciani: Yes, meditative.

Kate Hutchinson: Let's go into this incredible relationship that you have with this instrument. What was the start of your relationship with the Buchla?

Suzanne Ciani: When I was in graduate school at the University of California in Berkeley, getting a master's degree in traditional composition, I met Don Buchla. I went to work for him. Don Buchla is the inventor, he's actually credited with designing the first analogue modular electronic music instrument. And he never used the word 'synthesiser', because it had inappropriate connotations. People thought of it as a keyboard instrument that made sounds, and that wasn't what it was about. What he was making was a performance instrument.

So as a performer, you're designing the composition and playing it in quadraphonic. Quadraphonic is basically four speakers. And we label them, say, A, B, C, and D. And then with voltages, I can move the sound automatically from one speaker to another. And I can create different patterns of movement and different tempos of movement.

It was quadraphonic because Don Buchla understood that the domain of electronic sound is movement. Just as we think of sound in its parametric components, pitch, volume, timbre,

etc, he put spatial movement as one of the primary descriptives of a sound. So the sound moved. And the beauty of this instrument that's very special is that the sound can move in rhythm with the music. So it's not putting a sound in a space, it's the movement of sound integrated into the rhythm of the music.

Kate Hutchinson: With the music that you're making now and the projects that you're working on, what's the starting point for composing something? Are you envisioning the shape of the music that comes out? Are you painting that canvas like a painter, and thinking about the shapes?

Suzanne Ciani: Well, that's where the wave comes in, because right from the beginning, this idea of a wave shape was not just a sound of waves, but the shape of the wave. And I thought that was a very feminine architecture. It was a very slow – if you look at it, very slow growing – and then a release. And I use that as the compositional energy system. I start with the waves. For me, it's a good, grounding place to start. White noise. White noise contains all frequencies. It's the crucible of all sound. It's soft, and spatial, and introductory. And out of that comes pitch.

My performances now are... you know, certain parts of them are identical because I go through this process. I start with the waves and then I literally introduce the four sequences so you can hear them. After that, I start messing with them. They're there, but they do all kinds of things. They go into random reliefs of sound. Then they go into, you know, there's this jungle sound where they're sliding from one note to another. Different operations based on those sequences. So there's this sense of mutation that your ear can follow. And it's very satisfying. I start with a percussion and then I gradually lengthen those sounds and suddenly they become waves. And you feel that.

So here's... this one is on A, and if I put my finger on the keyboard you'll hear the sequence. And then I move to B. It has a subliminal impact. I might do random motion, which might make you feel a little less comfortable. I might do very slow and sensual motion. So you can control the emotional impact of the movement. It was always about immersion.

Kate Hutchinson: At the time, how ready were people for electronic music? I mean, how radical was what you were doing?

Suzanne Ciani: Back then, there was no audience that understood what this was. They could hear it, but it washed over them. They couldn't grasp it. They didn't know what it was. They thought, well, where is the sound coming from? Most people thought that it was pre-recorded. Even today, when I play my ocean waves, when I start, people think they're sampled. They think that I live on the ocean, I put a mic out, and those are the waves.

No, I *make* those waves. So, it was lonely. I was very lonely. And I started being very patient. I said, OK, my job is to explain this to people so that they understand it. And so I developed this teaching side to me that I never really lost. Because I needed to connect with my audience. Now I'm very happy because my audience understands what I'm doing. There's been this renaissance of interest, not only in electronic modular music, but in immersive audio. So here I am back after 40 years, doing what I did 50 years ago. And it feels very timely, now.

Kate Hutchinson: When you started out, what was your vision for the future of electronic music? How far did you think we were gonna take it and where did you envision us experiencing it?

Suzanne Ciani: Honestly, I thought that it would be every place. So, I lived with this machine in an immersive space with sound on all the time. And I could go up and tweak it and I thought it would be environmental, that everybody would have one. I designed furniture – these big, lounging beanbag things with sequencers that went all around and you could lie in this soft thing and tune your pitch and make music with people. Electronic music has changed, in a way, because we think of it as EDM. We think of the machine as putting out this beat and being this pounding rhythm.

And in the early days, it was not that. With the Buchla, it was immersive and it was like the air. It was a fabric of sound that you experienced and lived in and made you feel a certain way. Maybe it was like air freshener, I don't know. But electronics can sustain. They don't want to stop. This idea that you have a three-minute song, or a four-minute song, that is not in the vocabulary of this machine. The machine is alive and sustained.

Kate Hutchinson: The way you describe it, it sounds so sensual.

Suzanne Ciani: Yes, I did think of it as sensual. And that was always my feeling about this music. And what you might find as sensual was the slowness. So traditional EDM or beat music that's going at a tempo that is human, you know, the way we walk, the way we run, the way we move. But what this machine did was open up kind of an eternity.

Now, people talk about ambient music. And I think one of the fundamentals of that is this under-layer of sustain. And that comes from these machines. Traditional instruments could not sustain. The bow ran out, the breath ran out, the percussive sound died. The machine could play slow. The ocean is slow. It has a rhythm, but it's not a rhythm that you can beat out. It's a rhythm that is reassuring and constant and endless and sensual.

Kate Hutchinson: So you came from this traditional compositional degree that you were studying. And then you discover something that's almost a complete opposite. This limitless instrument. What did you love about what it allowed you to do? And how did that feel at the time?

Suzanne Ciani: It was liberating. It was freedom. I was in charge from beginning to end of my composition with this instrument. I knew that going forward as a female composer was not going to be an open door. Women were invisible to start out. And instinctively, I knew when I embraced this instrument that I was in charge.

Kate Hutchinson: As I understand it, you moved to New York and then instead of signing a record deal you actually started a sound design company, a production studio. Can you talk to us a little bit about that?

Suzanne Ciani: My process of getting to New York was that I was doing a live Buchla concert at a gallery, an art gallery, and then I never left New York. And I found myself in Soho, living on the floor of Philip Glass's studio and starving. So the genesis of all of that was that I needed money. And I couldn't get a record deal. That was my first foray into what I needed. And then I discovered that advertising embraced the new. Record companies looked backwards, advertising companies looked forwards. They didn't understand what I was doing, but it gave them an edge. It was different, it was new, and also technology was just beginning to come into products. Dishwashers were beeping, elevators were beeping. Atari was making noise. So all those products needed what I could do.

Kate Hutchinson: So you arrived in New York around 1974 and, like you said, you were sleeping on Philip Glass's floor. Did you ever teach him the Buchla?

Suzanne Ciani: Yeah. I did. I said, Philip, for God's sakes, you're working with all this repetitive patterns. The machine can do that. You don't need to have humans going crazy, repeating themselves, I said, a machine is happy to do that. But it didn't work.

Kate Hutchinson: Let's talk about the freedom and experimentation of your production studio. What was your studio called, by the way?

Suzanne Ciani: Ciani Musica.

Kate Hutchinson: What were some of the sound effects that you were pioneering there? What were you making?

Suzanne Ciani: I never call them sound effects, I call them musical effects. because I could control all the musical parameters of a sound. So if I were doing a commercial for, say, sports shoes, and I used the sound effect or the sound of a basketball, I could control the rhythm of the basketball. I could control the pitch of the basketball. I could control the accents and the volume. So I could use a sound musically, and that way I could integrate it into the fabric of the music. So it was another dimension of what you would call sound effects.

Kate Hutchinson: Did it matter what kind of sound you were making? Were you inventing the Coca Cola sound of the bottle being opened one minute and then performing in a gallery late at night the next, or writing your own music with the Buchla the next, or was it just all a sort of platform for experimentation?

Suzanne Ciani: I always say I worked as an artist in all those departments. So it was very personal. It was my intuitive response. The reason I had so much independence is that nobody knew what I was doing. So they couldn't control me. They didn't have the language. And they were happy, or not happy, with the sound I did. And even that didn't bother me. My attitude was, this is what I do. This is what I have created for you. If you like it, wonderful. If you don't like it, go someplace else.

Kate Hutchinson: I would love to know what it was like in the boardroom at Coca Cola when you went in there and produced the infamous sound that you made for them.

Suzanne Ciani: I give a great deal of credit for that production to Billy Davis. So Billy was from Detroit. He was a Black producer with Motown. Brilliant musician. Didn't read or write music. He taught me so much. It took me years to get to meet him in New York. He was the head of one of the biggest, if not the biggest, advertising agencies, the head of music at McCann Erickson. And his job was to bring new life into advertising music.

When we met, we couldn't have been more far apart. I was a Buchla artist. He was a Motown producer. I walked into his life at the moment that they were looking for a sound. And he said, well, can you do that? And I said, yes. And he said, what do you need? I said, I need my Buchla. He said, well, go get it. I went and got my Buchla and this guy who'd never seen anything like this before. Extremely calm, right? Very cool. And I'm doing all this wire stuff and moving stuff and the sounds are going by, and...

So we developed this working technique where, if he liked something, he would slap my hand and I would stop. But I think the genesis of that effect, really, was my thought process. Because I understood from all directions what this opportunity was. Then instead of making a sound that worked in the one place that they thought they needed it, I could make a sound that would work every place, not just in one commercial. And I designed the bubbles because they were musical without having a pitch centre.

I mean, it's just very practical design. You take a very, very low frequency with harmonics, and then you go through the filter and pick off the harmonics, and that becomes the bubbles going up. I designed it to work every place, they used it every place, and now I'm the Coca Cola bubble girl.

Kate Hutchinson: Well, somebody else who was making art inspired by or reinterpreting Coca Cola was Andy Warhol. Is it true that he wanted you to come and be part of The Factory at one point, in New York?

Suzanne Ciani: Yes. Yes, and I was just too straight, I think. It was a little edgy for me, but it was fun.

Kate Hutchinson: I wondered what's kept you going and what's pushed you forward, and where does that persistence that you have come from?

Suzanne Ciani: I think the essence of it is stubbornness. I grew up in a family with five women. I know my father was an Italian potentate. He didn't think women were worth very much. They were supposed to get married and whatever. And so I was aware of that bias, Italian bias towards women. But it also gave us freedom because I could do whatever I wanted. Didn't matter, as long as I got married. I think it had to do with some notion from the beginning that I was going to have to be responsible for my own life. And when I was in college, all the girls were getting married, and I didn't want to get married. I saw it as a closing down and I wanted like, whoa! I wanted to see what was out there. And in order to be independent, you had to stand up.

Kate Hutchinson: Fast forward to 1998. You had got a Grammy nomination for the album *Neverland*. This was a different period in music for you. Is this the period that you refer to as your romantic era?

Suzanne Ciani: Yes.

Kate Hutchinson: And did you enjoy that process of reinvention?

Suzanne Ciani: So my first self-produced album was *Seven Waves*, then *The Velocity of Love*. Then by the third album, *Neverland*, they actually had a category called New Age. And that was why I could be nominated in that category. Most of the time there's no category for me.

Kate Hutchinson: And when you were nominated for a Grammy in the New Age category, how did that sit with you? Did you see your music as New Age?

Suzanne Ciani: I was happy, honestly, to have a category that allowed people to find my music in the stores. If you wanted to buy one of my albums, there was no place for it in the store because I had *Seven Waves*, my picture was on the top, they would put me in vocals because I looked like a woman, and therefore I must sing. So once there was New Age, there was a place in the store. And that was great. And did I like the category? It was very controversial. Because, basically, it became a huge category of everything that didn't fit in. It became instrumental music, really.

Kate Hutchinson: When you're creating music like that, how much are you thinking about the response that you want to get out of it? What's your approach to songwriting, I suppose – are you thinking about that end goal, or are you just going on an exploratory voyage into sound?

Suzanne Ciani: I mean, I was completely shocked at what happened with 'The Velocity of Love'. That song, of all the things that I've done, hit a nerve. And I don't think you can know how to do that. And the experience of making that piece was very interesting, actually. It's very troubled, that experience. Because in the production, I mean, it's just completely bizarre. It was the first time I used piano. So I was doing all-electronic production. And for that one song, I used piano.

Kate Hutchinson: You cheated on your Buchla! You had an affair.

Suzanne Ciani: And I guess I was scared that, and there was a lot of disagreement during the production about the piano. Just some turbulent things. But it didn't matter because the piece had its own life and that life came out anyway. And I've never had another song to that degree of resonance with the public.

I have two audiences. My classical music, neoclassical music, is still very listened to. I don't pay attention to it right now, but I know it's out there and people are listening to it.

Kate Hutchinson: But when you're composing now, or making new music, are you pulling on both of those worlds, or do you keep them quite separate?

Suzanne Ciani: They're really separate. Because the fundamental compositional, it's different. This is not piano. As you can see, there's no keyboard. There's no chordal harmony. I have a piano here, and I ignore it because when I worked for Buchla, the keyboard was the enemy. The reason nobody understood what he was doing was that Moog put a keyboard on the instrument and people thought you played it like a piano. And so in honour of that horrible problem, I would not touch a piano.

Because this is not played as a keyboard. It's controlled with voltages. And the voltages are very powerful. And can be designed very precisely to do things that are meaningful. So composition is architectural organisation of sound over time. And traditionally it's been done in ways that we understand the symphonic form and theme A, theme B, the exposition of that, the return, and the coda. And maybe, based on harmony, the tonic, the dominant, moving it around and then coming back.

So in the 20th century – I know I'm going on and on about this – but there was an interest in finding other ways to organise sound that didn't come out of classical music or romantic music. It became more and more atonal. And this machine gives you control in a whole new way that's very meaningful. So I can use randomness – controlled randomness – to shape the composition. And I'm aware, because I was trained as a composer, that the languaging of composition, it's part of the music, but it's also imposed on the music. And this has compositional power.

Kate Hutchinson: With your career now, you've sort of been reborn, or reinvented, as an electronic composer, in a way. How unexpected was that, that those early recordings would be what took off?

Suzanne Ciani: Very unexpected, that I find myself where I am now. And I couldn't be happier because in my sense of history, I was aware in the '60s and '70s and early '80s that we had missed the boat, that there was a possibility with the Buchla and electronic music that just didn't happen.

What I'm talking about really is the live performance of these instruments. Not as recorded instruments, you know, a lot of people, myself included, have done a lot of studio recording, where you use electronics and you add things in and you record layers of sound and you

create production. What I'm doing is weird, in a way, because I insist on doing it all at once. It's not post-production. It's in the moment and all I care about is the fact that this instrument allows that. It was a performance instrument and that's what I care about. You can take a piano and perform on it, and do a complete composition on the piano and you can do that with any instrument, solo instrument. And doing this has just a little bit more dimension to it. It has the immersive spatial quality and a lot of variation.

Kate Hutchinson: All of your albums and releases are coming out of these live performances. It's like the stage is your studio, in a way, depending on where you go, and it's different each time in each country, each performance... So all of the detail and all of what goes into that has to be created live.

Suzanne Ciani: Yes. My albums are mixed live. So even though I'm not conscious of it, when I do a performance, I'm mixing it at the same time. And how do I do that? I listen. I've been mixing my whole life in a studio, right? I mean, really, to the nth degree, because when you do a studio album, you go down that tunnel of perfection, and you're doing all this stuff when maybe you have automation, so you can bring up this or that, and you get into that mixing perfection mode, and what I'm doing really, it's intuitive, it's interactive, live in the moment, listening, creating. You know, it's just magical. It's special.

I like risk. I like feeling uncomfortable. I like feeling that I'm doing something that I haven't done before. You have to be yourself, but you have to be open at the same time. And you don't know what it's going to look like until you actually just have to do it.

This is Studio Radicals with dCS Audio.

Thank you for tuning in. Studio Radicals is co-produced by dCS Audio and me, Kate Hutchinson, with audio production and editing by Holly Fisher. The theme music is by Anna Prior. This episode starred Suzanne Ciani. Head to [dcsaudio.com/studioradicals](https://dcsaudio.com/studioradicals) and you can listen to playlists featuring all of the music we've talked about in the series and hear more episodes too.