Oral History of Mark Mothersbaugh

Interviewed by:
Chris Garcia

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Garcia: It is November 13th, 2017. And today, I'm here with--

Mothersbaugh: Mark Mothersbaugh.

Garcia: Excellent. And let's just start right here. Where did you grow up?

Mothersbaugh: I grew up in Akron, Ohio. It was the rubber capital of the world at the time.

Garcia: And what college did you go to?

Mothersbaugh: Kent State University in neighboring Kent, Ohio.

Garcia: Okay, and Kent State of course, famous for the Kent--

Mothersbaugh: May 4th shootings.

Garcia: And were you involved with that protest scene?

Mothersbaugh: Yeah, I mean I had joined SDS (Students for a Democratic Society) a few days-- a few weeks before that. They had put out a pamphlet that said, "Watch us napalm a dog on the student campus--the student union." And I thought, "Wow, I've got to go see that. That can't really be true." And I went. And they had a dog in an area. And they had a box with their napalm. And they talked about the reason they were doing it was so that people could see what napalm did to a living organism. And then they described what we were going to see. And that was like the napalm would touch the dog. But it wouldn't go out. It would keep burning until it burned through the flesh into the internal organs. And everybody was kind of shocked. And they said, "Who's going to stop us?" And everybody said, "I am." And it was a very, very successful rally because they said, "Well, if you feel that way about this dog, how about all the people that our country is napalming in your name every day over in Vietnam?" And so, I signed up. And within a couple weeks, things escalated to the point of the shootings. They shut down the campus. It was May 4th. So, spring quarter wasn't over yet. They shut down the campus until fall, September. And I had all my art supplies-- I had all my art stuff there. But I couldn't really screen print. That's where I used to-- I was in love with screen printing at that point in my life and knew that was what I wanted to do forever, and ever, and ever, was to-- because it was like-- there was no computers yet. And there was-- or at least none that I could touch or had any awareness of. And so, I-- one of the other guys that I went to school with, we started writing music together. And we were trying to determine what it was that we had just seen happen and what was going on in our world with the Vietnam War, shootings at our school, killings at our school, and decided that what we were observing was not evolution but rather de-evolution. And so, we wrote music to that effect as good musical reporters that we were and enthusiasts of agitprop and wanted to be part of that.

Garcia: And did you see your-- sort of your early Devo work as being protest music?

Mothersbaugh: Well, we were questioning everything that we were seeing going on around us. And we saw our duty was to-- and what we wanted to do is use the music to talk about things. It's kind of what happened in the country after there was this summer of revolution in the U.S. And there were shootings at number of campuses. And there were riots at a number of campuses. But in American fashion, when it got too real for everybody, they all kind of put their heads in the sand. And everybody went to sleep. And there were no Bob Dylans in 1971. What-- instead, what you got was you got disco, and you got basically corporate rock. You got like White rock where it was like guys on stage that were singing, "I'm White. I'm a misogynist, and I'm proud of it. And I'm a conspicuous consumer." And then disco was just kind of a-- we described it-- I remember describing disco as a woman with a beautiful body but no brain. And so, we decided we wanted to do something different.

Garcia: Excellent. And that leads us right seamlessly into the music section. So, what were your early band experiences?

Mothersbaugh: Are you-- do you mean before Devo?

Garcia: Well, yeah, leading up to and--

Mothersbaugh: When I was twelve, I saw the Beatles on "Ed Sullivan." It totally was a revelation to me. And I realized why I'd spent my whole life learning how to play the keyboard and all that horrible music that I had to play was so I could be in a band like those guys. And so, at twelve, I decided I wanted to be in a band. And I had bugged the crap out of my parents until they finally bought me a two hundred and eighty-five-dollar Farfisa organ. And even then, it was like-- it wasn't always-- it wasn't a straight shot uphill, I have to tell you that. It's like I remember, I rented-- I bought sheet music. And my friend Ronny Wizinski, who played accordion, we started playing on this home organ that we had at my parent's house, a little Hammond M-3. And he'd come over and play on accordion. And after about a week or two of playing "Hard Day's Night" sheet music, I realized the Beatles didn't have an accordion or an organ in their band. And I was like totally distraught. I went I wasted my whole life learning the wrong instrument. I remember being really upset about it until about another week later. And Ed Sullivan goes, "And back by popular request, the Beatles." And they came out, and they did "Help!" I think was what they played the second time. And I remember watching them and being like, "Why didn't I learn how to play a guitar or a drum? How did I get-- why am I playing this stupid--" I was really depressed. And then they played two songs. Whoever was the music guest always played two songs in the show. So, they came back. And he goes, "Okay, now again the Beatles." But this time when they came out, there was something weird going on on stage because where they'd been in this exact same position with Paul and whoever-- two of them would lean in and sing on the same mic. And one of them had his own mic. And then there was a drum kit. And it was very-- they looked exactly the same. Except this time, somebody was sitting down at what looked like a card table. And we get in closer, and they're doing a song called "I'm Down." And you get in closer, and it's John Lennon sitting at a card table. And then the camera comes in and, wait a minute, that's not a card table. I didn't know what a Vox Continental was. But I'm like, "That not only isn't a card table, it's an electric keyboard. And only the Beatles would have one where the black keys were white, and the white keys were black. That's insane. Where did they even find something like that?" That was incredible. And then he did a solo in the middle. And being a good little White kid from Akron, Ohio in the

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'50s and the beginning of the '60s, I'd never heard of Little Richard or any of the American blues players. So, when John Lennon, in the middle of his solo, he's banging away. And then all of a sudden, he starts using his elbow. I just remember thinking, "Mrs. Fox never told me you could use your elbow to play." And as soon as it was over, I just called Ronny Wizinski up on the-- I said, "The Beatles had an organ. They did not have an accordion." And I was like-- that's when I set off on my quest for a Farfisa.

Garcia: And what sort of music were you playing early on?

Mothersbaugh: What kind of music, what?

Garcia: Were you playing early on.

Mothersbaugh: Early on I was just-- we were just doing Top Forty music. So, I played in bands that would play things like the music explosion, or they'd play Motown. We played-- we'd make an attempt to play Motown songs, or we'd play like the Leaves' "Hey Joe," and Question Mark and the Mysterians, stuff like that. So, I was playing just what I heard on the radio and thought was this incredible music at the time.

Garcia: Okay, and what kind of influence did playing with Gary Casale on you?

Mothersbaugh: Playing with what?

Garcia: With Gary-- Jerry, not Gary. Jerry Casale.

Mothersbaugh: Well, we were both artists. And so-- and he was a little bit older than me, but he was in a blues band. I had been kind of more experimental and was interested in stuff like John Cage and Morton Subotnick and prog rock even and people like Robert Fripp, and King Crimson, things like that. And so, when he was playing like bah boom bah boom boom boom boom boom, just basic blues things, I'd be playing like mortar blasts, and ray guns, and poisonous gas clouds. And so, we kind of like a Flintstones meets the Jetsons is the way we thought about what we were doing back then.

Garcia: Oh, wow. And so, actually, I want to talk to you a little bit about was your first introduction to Subotnick, "Green Apples of the Moon-- Silver Apple of the Moon?"

Mothersbaugh: Well, we had that. But I think even before that, he came to-- I think it was right before the shootings. He came in the spring of 1970 or even January/February/March area. He came to-- he visited my campus. And I saw him perform live. And so, that was my introduction to Morton, who's still around.

Garcia: Oh yeah, he's still doing great stuff.

Mothersbaugh: We had breakfast together a couple years ago at Moogfest.

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Garcia: Oh, excellent. Oh, wow. So, as an art student at that time, how did you see the influence of your work in-- your art studio work and such, on your music and vice versa?

Mothersbaugh: Well, they came from the same place. And even earlier than that, when I was seven, I knew I was going to be a visual artist. I got my first pair of glasses. And all of a sudden, I went from being legally blind, which I-- nobody even knew I was. But I was-- somehow made it all the way through second grade without even being able to see anything to, all of a sudden, I got these glasses on the last week of second grade. And I was like, “Oh, my god. That’s what a roof looks like. And that’s clouds.” I’ve seen photos of them up close. But I’ve never seen the real thing. And it was just this whole transformation that made me say, “I want to be an artist.” So, I always felt like both things were part of the same-- came from the same place, even from really young. And by the time I got to college, it was already-- there were-- conceptual art was like very accepted by then. So, it’s like the idea that the materials and the techniques were second to the idea, to follow the idea, and you could use whatever materials and techniques you wanted. I embraced that. And I loved printmaking, but I also loved making hydrogen bomb sounds on my computer-- on my synthesizer.

Garcia: Well, cool. Okay, and so, this is a bit of a conceptual question. What sort of influence did the state of technology have on the Devo concept?

Mothersbaugh: Well, I think it was-- we always had a healthy interest in technology. We loved new technology when we saw things. But we were also-- we were also fairly skeptical. And so, to me, there were artists that I thought their artwork looks like they worship technology. And there were-- especially in entertainment industry. I just thought that’s-- I just see it as something to use or to misuse and make it more interesting than it was intended to be. And because of that, it’s like when my younger brother-- my youngest brother, Jim, was playing-- he was the first drummer in Devo. And he was into electronics pretty heavy. And he used to take all of our gear and modify it and make it do things it wasn’t supposed to do just because he liked doing it. And then I loved the sound of that. I loved the way we sounded, especially in the very early days. It was really much more radical than once we started playing clubs.

Garcia: Yeah, and so, those were-- that would be seen as-- called circuit bending today.

Mothersbaugh: That’s exactly the correct term. What he was doing was primordial circuit-- I mean there were other circuit benders for real back then. There were other people doing that. We were part of-- there was a lot of people that were all curious about technology and how to use it, misuse it, pervert it, make it better, correct it. There were other people that were doing circuit bending. But Jim was a pretty honest, direct, interest that I supported and influenced because I wanted my band to sound like that.

Garcia: All right, and do you remember the first time you actually heard a synth?

Mothersbaugh: A synth? Yeah, and I didn’t really like a lot of the synth music that was-- that first came out. Early synth music was like maybe Rick Wakeman or Keith Emerson, who I liked before he had a synth. I liked him when he was in The Nice. And he was doing everything he could to deconstruct a Hammond B-3 on stage. And it was really interesting. And then he started Emerson, Lake & Palmer. And

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I thought the music sounded like aggressive calliope music but not that interesting. And the same with-- I thought these guys were like just making their keyboards sound like silly organs instead of sounding better. And the first time that somebody did something that really shocked me and changed me and changed my attitude about synths was Brian Eno. And that was a throwaway song on the first Roxy (Roxy Music) album called "Editions of You." And you know it's like, it's not a great song. And it's just this music playing really fast. And then it's a chance for the guys in the band to do this old like stage kind of thing where everybody's taking solos. But it got to his solo, and he did this thing where he went-- it was like smearing the sound. He went <vocalizing sounds>. Then at the end, it goes <vocalizing sounds>. And I was like, "How did he do that? How do you do that? What makes you able to play a synthesizer like that?" And I started investigating who this guy Eno was and found out he had something called an EMS synthesizer. It was the AKS Synthi-- Synthi AKS, it was called. And it was-- got one in the other room. But it was like a suitcase that looked like a secret agent's briefcase. And you opened it up. And it had all these patch pins that I hadn't seen before on an American synth. But it had a joystick, which was the controller that he used. And it was like, for me, knowing how he did that made me think about how I played synthesizer in another way. And I really-- and right about that same time, Devo opened up on a Halloween in Cleveland for Sun Ra. And I watched him play it like this. And he just had an electric piano. But I said, "He looked like a baby." It was amazing. He was just playing like this on the keyboard. And he sang, you know, "Twenty-five years 'til the twenty-first century, twenty-first century. Twenty-five years," or something, songs like that. And I was like, "This guy's pretty great." And so, I-- it made me purposely think about being wary of the keyboard on my MiniMoog because I got one of the first MiniMoogs just because I found out about them. And I drove to, I think it was Buffalo area, somewhere around Buffalo that was the first Bob Moog factory, which was actually a barn that had like fifty-- I walked in, and there were fifty MiniMoogs in the process of being built on these what looked to me like a mile-high tall wall. And I was like, "Oh, my god, this is amazing. I feel like I'm in a spaceship or something." And-- but it was a barn outside of Buffalo. And I came back and played that synthesizer probably more than any synthesizer I ever played since then.

Garcia: Oh, wow. And so, how did synth-- how did the incorporation of synthesizers change your musical approach?

Mothersbaugh: Well, it freed me up, and it made it easier to become really conceptual about it, conceptual about what you're doing. And you could talk about-- you could think of your songs as ideas. And so, when we-- depending on what song it was, I really thought about what I wanted my sound to be like. And I thought about sound effects and sound design. There was also this other thing going on where I remember Time magazine right around the time of the Kent State riots, about a year or two later, they were-- they talked about a CIA program where they were using sound to try to -- for crowd control. And in the article, they said that there were some studies that had been done that high-pitched frequencies affected your-- you in ways that were similar to orgasmic patterns. And then they-- they said in-- but in the same article, they said that subsonic tones could make you lose control of your bowels. And so, the government was experimenting with using these trucks with giant speakers that could blast out subsonic tones to try and have an effect on you know like a protest march or some sort of a-- something on campus that was getting out of control for them. They would just go, "Okay, let's make them all poop their pants." They go <vocalizes sounds>. And so, I loved the idea. And I just thought, "That's so great. This is

the perfect Devo concert." This is like 1974 or '75. I'm thinking the perfect Devo concert is going to be we're going to get a big tent outside. We'll-- everybody will come in. We-- instead of dancing, we'll have organized calisthenics that everybody does along to all the songs. And then somewhere along the line, we'll make everybody poop their pants. And then we'll make them all have an orgasm. And then we'll just hose them all down at the end of the night. And we just had all of these ideas of things we wanted to do that were going to involve electronics and that were going to make the concert experience even better.

Garcia: Oh, that's so great.

Mothersbaugh: You'd have to dress for the occasion, of course. But you know--

Garcia: Maybe all that water on the electronics might not be good.

Mothersbaugh: Well, you know, different kind of merch. Your adult diapers that say Devo on the-- on the backside.

Garcia: That's brilliant branding. So, what are your favorite synths that you've used?

Mothersbaugh: In my whole life?

Garcia: Yeah.

Mothersbaugh: Probably, my very first MiniMoog. It was like-- I would compare that to like somebody who just joins the Army, and they get an AK-47. And you learn how to put on a blindfold and take it apart and put it back together. I could-- to this day, I could take a MiniMoog, set it here. You could say, "Smart Patrol." And I could, with a blindfold on, I could, through touch alone, I would know how to set all the parameters to sound like the reverse sawtooth <vocalizes sounds>.

Garcia: Oh, wow, okay. And now--

Mothersbaugh: Which isn't to say that I haven't been unfaithful to the MiniMoog at times because I love new things in my life. So, both other retro synths and modern technology have amazed me throughout my life.

Garcia: Do you ever find yourself trying to recreate your MiniMoog in with your modern systems?

Mothersbaugh: You know, it's not as easy as you would think. And that particular song I just said, "Smart Patrol," there aren't reverse sawtooths on many synths. And it is-- as a matter of fact, when-- what's the one that Moog did like about ten years ago? Was it a Voyager, or what was it called?

Garcia: Oh, yeah--

Mothersbaugh: Voyager.

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Garcia: Yeah, I think it was Voyager.

Mothersbaugh: I got one of those, and I couldn't believe it that there was no-- I had them add a reverse sawtooth onto mine so I could still do "Smart Patrol" because I couldn't even perform it. But it involved using portamento and on and off switches, and it's a lot of hand-- constantly touching it to make it sound like that.

Garcia: Do you find it to be a different physical sensation playing a synth as opposed to playing just a regular keyboard?

Mothersbaugh: A regular keyboard?

Garcia: A piano keyboard?

Mothersbaugh: Of course. Yeah, yeah. There's-- and it is different. But it's different like in the way like oil paints and pastels or acrylics are different. It's like you bring to it what you have. And then whatever the right instrument is, that's what's important. And you can make as much a mistake by choosing the wrong keyboard as you can by just writing a crappy song in the first place.

Garcia: I'll have to remember that. That's a key note. So, you have an impressive collection of synths. And actually, we're going to look at some of them later, right?

Mothersbaugh: We can look at some of them, yes.

Garcia: Okay, but let me ask you about Bob Moog.

Mothersbaugh: Okay.

Garcia: And so, tell me about your relationship with Bob Moog, and certainly your admiration for the guy.

Mothersbaugh: Yeah, we became aware of each other-- I mean I knew about him long before he knew about me. But when Devo came out, we-- early on, he asked us to do ads for the company. And so, we did. We were glad to like-- what are the-- that-- the Liberation, which I never played on stage. I felt it was kind of a little too kitschy. But I liked us posing with it like we all had-- like we were somewhere between some weird sport and some sort of a soldier or something with these kind of strange instruments. I liked that. But we start off early on, and he would sometimes loan me things like the Moog Vocoder, which probably is one of the best-- the early ones-- the early Moog Vocoders were amazing, the filters in them. And then he announced that he was going to make a theremin. Do you want me to tell that?

Garcia: Oh, absolutely.

Mothersbaugh: Okay, are you editing this, by any chance? Good, okay because I'm-- okay so, Bob Moog announced that he was going to make a Moog theremin, which I thought was great. What a great

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idea, perfect company to do it. And when in the article, it said that he was going to add midi to it. And I thought, “Oh, that’s fantastic for all the guys like me that all we can do is make it go <vocalizes sounds> and can never get the right pitch. And it’s so hard to play.” I thought, “What a great idea to put midi into the mix.” And so, I called him and said, “Bob, I want to-- I want the very first theremin. So, I’m going to give you the money now. So, I--“ He said, “Okay.” He was happy to take my money. And then I called him about every month or so going, “Are you done yet?” And after about a year, he’s going, “Man,” he says, “I’m sorry. But it’s taking so long. It’s a lot more complicated than I thought.” And I was still calling him every month. “Is it done yet? Is it done yet?” And he finally said, “I’m going to send you something. And you have to stop calling me if I send this to you.” And he sent me a Memorymoog that was his personal Memorymoog. I still have it. And all of the sounds in it, he programmed. So, I have-- and it also-- the circuitry was a little bit different than the Memorymoogs that came out. And so, it has this kind of really-- it has amazing sound. It has a really great sound. And so, I’ve just made sure it always works and take care of that. And I used it just recently in the “Thor: Ragnarok” movie.

Garcia: Excellent. Now, how did you come into possession of the Electronium?

Mothersbaugh: Electronium, I got a call from a friend of mine who wrote for-- he still does. He writes for different tech magazines, recording tech. And he said, “Hey, I’m going to go interview Raymond Scott. Would you like to come with me?” And I’m like, “He’s alive? Of course.” So, I went with him and, in the process, saw his studio, which was a guesthouse behind his house that had fallen into disrepair. And his tapes and his disks, he had acetates of live shows, radio shows. And it would say like, “Ella Fitzgerald singing with the Raymond Scott band,” and a date. And there was stacks of stuff like that that were all-- that nobody had ever listened to again since-- he just had the wherewithal to record these shows and these programs like Frank Sinatra singing live on the radio back in the day. And he had all this stuff. And he had this work in progress. It was the Electronium. Everybody had seen pictures of it. And we all knew about it because he had done articles where he had said, “It’s the first machine that writes music by itself. And it never writes the same song twice.” That had a little something to do with sample and hold, which he was an early pioneer in. And he was doing all this stuff back then. And he passed away not long after that. And so, his wife was just getting rid of everything. And she-- the place was a mess. And she was just sweeping it up. And she was putting things in boxes. And I said, “You know what? You need his-- his intellectual properties need to be protected.” So, along with Irwin Chusid, and Mr. Bonzai, we connected her up with the University of Missouri that they do have a repository for intellectual archives of composers. So, they took all the sheet music. They took all these tapes. They took all his disks and a lot of his things that were around the place. But that Electronium weighed a ton. Like literally, it was really heavy. And she didn’t know what to do with it. And she was going to just send it to the-- to Goodwill or a trash heap or something. And so, I took possession of it. She was happy to get rid of it.

Garcia: Wow, awesome. Do you remember the first time you ever saw a computer?

Mothersbaugh: Yes. I was going to Kent State. It was in the-- there was like an educational resources room where they had this incredible typewriter I always look for on eBay and never can find. But it had like three eighths of an inch-high type. It was for like grade school, like for a grade school teacher to type

up things. And I always want one of those. But I remember I used it in there. I used-- I made crazy pamphlets, these Dada pamphlets of my own back then in the like 1970s.

Garcia: Oh.

Mothersbaugh: Yeah. One of the other students said, “Hey, there’s going to be this amazing art class this spring. It’s called Materials and Techniques. And it’s a conceptual art class.” And there-- I didn’t even know there were such thing as teaching conceptual art. But I was told that you had to be a grad student to sign up for it. And this person, who was a grad student, said, “Hey, I know you’re only a sophomore. But you know what? They just started using this new computer system at Kent. So, they don’t have everything programmed right. Just fill out all the blanks that you’ve taken all the prerequisites necessary. And just get in the class. It’s just important you do it. You have to do it.” And so, I did. I got in this class. And the computer didn’t catch me. It just let me in.

Garcia: Excellent. And do you remember what the computer was?

Mothersbaugh: No, I remember not-- I wasn’t impressed because my knowledge of computers had to do with movies from the ‘60s. And so, it would be like I knew of computers as being a whole room with like these fake wheels moving and blinking lights. And then somebody like Annette Funicello would put a card in it or something backwards. And then all of a sudden, it would start spitting cards out everywhere. And there would be a whole mess. And computers, they weren’t impressive to me when I first-- when I saw my first computer, I wasn’t impressed with it.

Garcia: Oh, wow, okay. So, as your career in music has gone forward, and you’ve seen, of course, computers becoming more and more ingrained in the methodology. So, how does the computer change your work as a composer?

Mothersbaugh: Well, early on, probably early ‘80s-- no, early-- late ‘70s/early ‘80s, I mean the first computers I probably worked with would be like these little dedicated computers that were inside an S-100 Roland sequencer keyboard. So, they were just these things that were part of the keyboard I was buying. And I think the first standalone computer that I ever owned was a Fairlight II.

Garcia: Okay.

Mothersbaugh: And it changed the way I thought about music in a lot of ways. And one of the things it did was it freed me from being in a band to being able to write things for a film or a TV show just pretty much all by myself. I didn’t really require other people to be with me to-- for me to be able to put it all down because you would play right into this computer. And to me, that was so transparent and so powerful. It was like-- you know because you played it in when you had the idea. So, it really became about conceptual art, writing music to me. It became this things that I totally understood of being able to write a piece, and then it’s permanent into this sequence. And then I wrote another piece, and it was all additive. And it enabled me to go from-- when my band, we were on Warner Brothers and then left them after doing five albums that did really well. But then we got in a fight with them. And then we went to this

company called Restless. And within the first month, we were there, they started to go under. And so, Devo kind of went into this kind of unwanted cocoon siesta hibernation state. And before that, I'd done five albums. You know you write twelve songs. You rehearse them. You go record them. You go-- you start playing them for a tour. You design costumes and a stage show. You go out on tour. And a year later, you come back, and you write twelve more songs. And then you rehearse them, record them, go play them on a stage, go out on tour, and then you write twelve more songs. Well, a friend of mine in 1984-ish-- I can't remember the exact year, but I think that's when it was, said to me, "Mark, would you score my TV show? It's called 'Pee-Wee's Playhouse.'" And I said, "Yeah, I got time right now. We're kind of locked in a lawsuit." So, he sent me a tape on a Monday. On Tuesday, I wrote twelve songs worth of music. On Wednesday, I recorded it. On Thursday, I took the tape, a two-inch tape, and sent-- half-inch tape, and I sent it to New York where he was editing his show. Friday, they cut it into the show. Saturday, it was on TV. We watched "Pee-Wee's Playhouse" in the morning. Monday, he sent me another tape. And Tuesday, I wrote twelve more songs. I was like, "Sign me up for this job. I love this." It was like all about the creative process. It was all about writing more songs and writing more music. And it was-- conceptually, it was-- we'd gone through this period where, early on, we got signed because well, David Bowie and Brian Eno think they're great. So, we'll sign them. But we already have Captain Beefheart. And we already have Frank Zappa and Wild Man Fischer, but we'll add another weirdo band to the list. So, they kind of ignored us even though we made them money. But then, once we put out "Whip It," and they had a platinum record, then all of a sudden it became a thing where we'd be working on writing music for the next album. And you'd look over and there would be somebody from Warner Brothers going, "Hey, you guys need anything? Keep up the good work. Just whatever you do, remember to write another 'Whip It.'" It was like that kind of a thing. And it kind of became destructive. It became this destructive force. And so, when I started writing for "Pee-Wee's Playhouse," my only criterion was Paul said, "Well, if it's something happy, make it really, really, happy. And if the scene is scary, make it really scary. And if it's sad, make it really sad." And he just said, "Make it extreme." And so, I could do any kind of music I wanted. And I was writing all this music. And I would do like parodies of my music, or Talking Heads, or TV commercials. You just change it, so that you didn't have a copyright infringement problem. But it was like I was in this world where it was all about writing music. And I loved it very much.

Garcia: Oh, excellent. Okay, so have you ever had any contact with the sort of the research side of music, sort of the scientists who are actually trying to do music-y, computer-y, electronic-y stuff?

Mothersbaugh: Well, during the Devo years, companies that were building things-- everybody sent stuff to us. Everybody wanted us to beta test for them. And they wanted us to try out-- I mean even companies like Casio. Everybody would-- I'd be in Japan, and Casio would come up. And they would go, "Here, take this. It's our new keyboard." And I'd get a keyboard from them. And everybody just wanted Devo to use their gear. So, I got to try out all these things. And I got to talk to people about what they thought was interesting. And my brother, who-- Jim, who we're talking about again here, but he-- pretty soon after he started playing with Devo, he was in our first film. It was my two brothers, Jerry, and me in our first Devo film. But pretty soon after that, he just wanted to work on drums and electronics. He ended up touring with us and then met up with Roland. And they asked him to come work with them. And he kind of represented Roland during the years that MIDI was being developed. And so, they had-- when MIDI was being developed, they had representatives from all of the big companies, but a lot of the little people too. And

so, there was big group of people that were all trying to figure out what is going to be the language that we all use? And so, I kind of was a little bit on the inside when that was happening.

Garcia: Okay, and in your current workflow, where does the computer factor in? At what point do you sort of go with it?

Mothersbaugh: Well, it's like I'm pretty much at a point where about ninety-five percent of the music I write starts on a computer. It's like, admittedly, I hated when I had to go from-- I forget what software I used before I used Logic. But then I learned Logic, and I loved Logic. Then I went to Digi-- Digi-- what is that called? Digidesign, what's their--?

Garcia: Oh--

Mothersbaugh: Whatever that is. I went to that software. And I hated having to learn a new language. It was like going from Esperanto to something else, to German or something. And then I started using Logic, and I just didn't even want to learn another musical language. But now, to me, Logic is very transparent. And so... the computer is pretty much where I start for everything. I mean, I-- sometimes I'll have a musical instrument that actually is the centerpoint, or is the starting point for something, or inspires something else to happen-- you know, either an accordion, or whatever. But it's-- now it's, even in *my* life, it's gone to a point where I'm designing musical instruments, and I use a computer to control those.

Garcia: Excellent. That's exactly what I was hoping for. <laughs> Okay, just to go a little bit into the Fairlight, because you were one of the golden boys of the Fairlight CMI. Whenever anyone talks about it, they talk about you and Devo. And so, how did you first hear about it?

Mothersbaugh: Oh, I don't know. Probably, *Keyboard* magazine was the first place I ever heard about a Fairlight. I don't know for sure, because everything was always out there. And I was very interested in technology at the time, and I was very interested in what was being developed, and... right about the same time I got a Fairlight, we had also toured Australia already, and-- you know, so it was something-- and we knew other bands that had already used it, so... so I got Devo to come up with-- to separate with $35,000, and buy a Fairlight 2X, which meant it-- I think it had MIDI outputs. And... and that was something like-- somewhere around the *Shout* album is right about when we were doing that.

Garcia: Yeah. And what did it make possible, that hadn't been possible before?

Mothersbaugh: Well, it was fast, but it also allowed you to create samples, and it allowed you to use... I mean, the thing about, you know, a Rollins synthesizer, where it's all electronic, they would have sounds that were called *Strings*, *Brass*, *Woodwinds*, *Guitar*, *Drums*, and it never sounded like any of those things, back then. They always-- they were like... the worst kind of approximations now. And now it's like you love it for something totally different than what-- but this was 8-bit, so it was pretty low quality to begin with, but they were samples of real instruments. And so I really liked that. I liked the idea of having the ability to blend acoustic instruments in along with my synth tracks. And... after working with it for a few months, I realized, "Well, these are even better than acoustic instruments, because they sound like the... the wood-

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paneling version of real wood paneling." You know, it sounded like vinyl wood, or sounded like a plastic brick wall version of a brick wall. It didn't really sound like a brick wall, but it sounded like the plastic, fake version of it. And so I loved the idea that I could write acoustic... plastic acoustic music. And I wrote a bunch of albums that were-- I called them *Musik for Insomniaks*, because I just wrote them for me, to-- because I wanted something to listen to in the house, that was kind of like M.C. Escher meets Plastic Acoustic Instruments, or something like that. And so I would let them go on for a while, and I would-- they'd have slow-- and they couldn't have too many parts, because a Fairlight only had eight channels, so... you know, you couldn't get *too* crazy, and-- but I liked that, because that made it-- each part had to be important or essential. It wasn't like just additive, like what happened later, then, when technology started allowing people to put hundreds of tracks on their songs, and all that did was... meant that you had 100 tracks that weren't essential, all playing at the same time, oftentimes.

Garcia: And so with both the Fairlight _________________, in general, when you're approaching a new instrument, how does that change the way that you interact with it, and think about it for use in your music?

Mothersbaugh: Oh, it's all different. It depends on what kind of instrument you're talking about. The last... the last instrument that really made me happy also eliminated my need for a celeste, a dulcitone, a lot of the keyboards that-- there's a lot of them just sitting in the studio, that are collecting dust, because-- it was Keyscape. I don't know if you know that software or not, but somebody put together this great collection of keyboard sounds, and it's the stuff that Wes Anderson would love to-- would love to have Keyscape. If he doesn't already know about it, he would love Keyscape on his computer, because he loves all those kind of instrumental sounds. But that was the last one that made me super-happy, and it's like I've put it in everything, ever since I got it. It's-- I'm sticking Keyscape in. Doesn't matter if it's... I'm working on a new animated show with Matt Groening, and I'm putting it in that. And I've done five movies so far this year, and I've-- every single one of them have Keyscape in it. I just happen to really like that instrument right now.

Garcia: Oh, excellent. Okay.

<cuckoo clock chirps>

Mothersbaugh: I mean, I'm not here to give a testimonial for them, but that just happened to be the one right now.

Garcia: Okay, so Devo's credited as having the first to score a video game. And you've scored video games, yourself.

Mothersbaugh: Yeah.

Garcia: How is that process different than scoring a film?

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Mothersbaugh: Oh, well, you think about video games quite differently than you do-- because video games, they're a different animal than a film. A film, you watch it... most films, you'll watch one time, ever, in your life. And then maybe you see it a second time, no in the theater. You watch it at home again, and you go, "Oh, yeah. I liked that when I saw it." You know, "It's *Die Hard*. Now I'm going to watch *Die Hard 3*," you know, or whatever. But whatever the-- you think about the films. But it's like, a video game... people play them maybe a thousand times, you know? It's not-- or they play them 100 times, you know? They-- and they hear that music 100 times more. So video games-- it's really important to come up with themes that are great, because there's often not a lot of dialogue, like in a film. And the story, the way it-- you know, it's like, the arc of a story in a film is more like a book, or something; and in a video game, it's this other animal that's growing inside you, like maybe a fungus, even, you know? It's kind of like-- a video game is something where you're going to play Level 1 a thousand times; you're going to play Level 99 maybe only a couple times. But you think about that when you're writing the music. And you have to think about things like... I don't know. I can't think of the name of-- I did some Homer Simpson video game, like five years ago, or something, where he's running around a food court. Just to give you an example is, you have to think about the music, and you record it totally different than you record the music for a film, because this music... I came up with the theme for the first level, and everybody liked it. And you know that somebody's going to be playing that level... the first time they play it, they might have to play it like five minutes or seven minutes before they get to the next one, or before they get knocked down and have to start over again. And so they're playing it for a long period of time. And then, after you've done the game for a while, then it's like, first level, 10 seconds, and you're on to the next level, 10 seconds-- and you'd keep jumping through it. But it's like you have to write the music for both the person that's just starting, and the person who's been playing it for six months. And so... my take on it is, what I do is, I like to put legato and slower-moving parts, like maybe whole notes or half notes, that are playing a melody, that you know the melody, but it-- or maybe you don't. Maybe it's just hinted at, and you're hearing it start to move. And Homer's going around, and then he grabs his burrito and eats it, or whatever he does. And then I bring in more strings, for instance, maybe, and then they're playing quarter notes, and they're playing faster-- a little bit faster. So you have a-- tempo has just doubled. And then he goes and he gets the pizza he was looking for, finally. Finally, he gets his pizza. And then you bring in woodwinds, playing something even-- playing these little riffs that are playing faster over top of it. And then... then he gets whatever-- a custard pie-- and then, all of a sudden, you have the-- the brass are hitting these, like, *bap-bap ba-da, diddle-liddle-la!* And it's still playing the melody. And now you've got the melody and the whole song playing, and it's been building. And it has to-- you have to also write it so that, when he gets that first sand-- his first burrito, you have to be able to, as soon as he grabs it, the next set of instruments add in, and change the tempo right there. It changes it so that it's playing-- you know, you're hearing a double-time going on, so it's playing faster. And maybe it takes one second, because you know how to play the game, or maybe it takes you three minutes, because you haven't figured it out yet. You have to be able to listen to that music for three minutes without wanting to kill the composer. And you also have to be able to, whether you get it in two minutes and 56 seconds, or you get in one minute and 47 seconds, or you get there in 3 minutes and 33 seconds, as soon as you grab it, it has to seamlessly keep going. It can't stop and start over again. You have to keep it as an additive feature. So you have to think about that while you're writing your melody, and while you're writing your themes, and so that by the time the percussion's on the top, playing this really crazy shit, and then he finally gets to go to the next room... it's like a build, the whole time, and you just have to be able to think of it that the build's

either going to be on this trajectory of five minutes, or it could be ten seconds; it depends on how long they've played the game. And... it-- you have to write it, thinking about that, which is totally different than thinking about the arc of a whole movie, and that you're playing-- you know, you're either stating a theme early on, or you're just hinting at it, and it doesn't totally pay off until the climax of the film, or something. You have to think-- you have a different strategy for that, and a different methodology for writing. So, I love both of those very much, and I see them as different. And so, because of it, you record different. So it's like, you may go in and just record the orchestra, like-- the first day, you might just record only low instruments and/or a certain instrument set. And then the second day, you come back and you add on the next layer, and then something like that. You think about it different, whereas... you know, otherwise, I love to play the whole orches-- I have-- I love to have the whole orchestra playing at the same time. That feels really good. You know? And there's less things that can go wrong that way, because you-- soon as they play it, it's either great or you need to do another one. When you're building up, you could get to the fourth day, where you've got the piccolos and the flutes and the clarinets, and go... "Oh. I should've changed the timing on the celli and the violas, but that's where we are now." So then you have to fix it. And that's where you need a good music editor, sometimes

Garcia: Oh, wow.

Mothersbaugh: But it's a totally different beast, you know? And that's what makes it fascinating to me. I love the idea of... you know, writing in different mindsets, with different kinds of concepts behind them.

Garcia: Okay. And when did you start recording digitally?

Mothersbaugh: That's-- I think-- well, you know, on one level, you're recording digitally when you're-- you know, have an Emulator II, and you're, you know, going, "Jesus loves you," in a microphone, and then you hit the reverse button, and it goes, "We smell sausage." You know, it's like on one level, you're already recording digitally, but then you're talking about... all the acoustic instruments, too, getting recorded digitally. I think Pro Tools has... you know, really became important in a entertainment world first, you know? And... you know, I mean, like commercials and TV shows and films. And they were-- but they were a couple years ahead of me. And then I went through ADATs and a couple of the other systems. I have all-- I have 8-track tapes that look like this, and 8-track tapes that look like this, in storage. And I'm like, "Well, three of these are... you know, *Bottle Rocket*, Reel One," you know? And then, so you have 18 of those tapes like that, to make up the 6 reels of the film, and you have to have 3 machines all synced up together. And now, Pro Tools are pretty much the winner in the world of entertainment, so everybody records to Pro Tools. Although, I love the way my Logic sounds, so I record just straight into Logic, usually. It's like-- when my engineer comes over, he's all, like... gets all upset about it, and says, "No, you should be just always recording in Pro Tools." And I go, "Well, I'm not, so too bad. This is quicker and more transparent for me, so..."

Garcia: Okay. And...

<crew talk>

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Garcia: So, MP3: What are your thoughts?

Mothersbaugh: MP3-- I have a... there's a time and a place for it. And the only thing I dislike about MP3s is that it's crowded out a lot of higher-quality recording. The things I like about it is, it's democratizing. It allows everybody-- it allows kids, it allows-- when I was a kid, I would look at albums, and I would go, "A recording studio. What is that?" And, "What's a record company? I know there's no record companies in Ohio." You know? And I would look at these things, and it would be confusing. And... you know, little things happened slowly, when *I* was younger. I remember seeing a Todd Rundgren album that had a big effect on me, because it was-- you know, it was like Todd Rundgren at his kind of sweetest, you know? It was okay. You know, it was-- he always had an interest in technology, which I liked. But the thing about the album that was-- that struck me was not the music, as much as it was the album cover, because it's like-- and back in those days, a big cover-- you know, there was all sorts of clues as to what was going on. And I remember seeing this picture. And I could tell it was like a snapshot from a-- you know, an instamatic camera, or some-- like some cheap Kodak, or something-- home camera-- that you had to go get developed at the grocery store. But it had carpeting. It was cheap, you know... bedroom carpeting. And it had a sliding door that was just like whatever kind of sliding doors everybody had in houses, and still do, you know? But the thing that struck me was that there was this thing that looked like a washing machine sitting in that room that had no furniture in it, and wires coming out of it. And I'm looking at this picture, and I'm going, "There's... these 16 view meters, like on my little cassette deck-- my mono cassette deck that has one needle." There was 16 or 24 of them. There was 24 on this one. And it had-- like, "That looks... that's a reel of tape, and those are-- those look like mic cables. And he's in a house. He's not at a recording studio; he's in his house, somewhere." And I remember that, to me, was such a big thing at the time, and it made me and my brother go out and try to figure out how we could record in *our* house. And my brother Bob, then, he had a job delivering meat or something during the day, and he came back one day with this four-track tape recorder-- a Teac four-track. And... we were amazed. We're like, "Well, the Beatles recorded their first albums with a four-track. We could record an album with this thing." And it was just mind-blowing to me that we could have this in our house. I could not believe it. At the time, I thought we were on the edge of technology. We were on the cutting edge. We had a four-track Teac in our house, and I could come home after work, and I could write a song. Bob and I could write *Blockhead* down in the basement, and record drums and bass on a couple channels, and then we'd record a couple other instruments on two channels. Then we'd mix it down, and then we'd add vocals and a synth solo, or a guitar-synth solo. And we could do it ourselves. And that was... that was a really big thing in my life, and it made me start writing music much faster. And it was...

Mothersbaugh: You know, to me, that is... that is something that I see reflected now. Kids don't know it, but it's like... I watch my kids. They have an iPad. And they were-- a couple years ago, when they were 10 and 12, they were making these videos. They would make a video on an iPad, and they'd be running around the house with their friends, and they'd make up a song to go with it, and they'd make up a storyline. And then they'd set up the shots, and they'd make this film. And they were just having fun, and they knew nothing about filmmaking, other than intuitive stuff. And I was like-- I remember thinking, "You little brats. Do you know how--? It took me a year to make the first Devo film. I had to get a job with Jerry. We started at a graphic design studio, and we kept it going for four or five months, to make $3,000 profit, and then we used that to buy film stock and things, and then rent some gear. And then we shot the film,

and then we had to beg people that worked in editing rooms to let us edit it, and then-- it took us a year, and you guys are... it's totally transparent and effortless, and you're just making this art." And the thing was, is now it's like... kids can, with a phone-- you know, they can take a phone, and there's apps where you can sing a drumline into it. You can go *boom bop, boom-boom bop*. And then... it'll quanti-- you can quantize it. Then you can pick what kind of sound you wanted. If you wanted an electronic sound, what kind of electronic sound do you like? What kind of acoustic drum kit did you want to have? Do you want to have a death metal kit, or did you want to have a Portland garage band sound, or-- you know, you could choose whatever you want. And then, if... when you get a drum-- you don't have to own a drum kit. You don't have to own a basement, or have access to a basement, where people aren't going to say, "Turn that shit off!" You can-- you don't have to spend hours learning-- and you can just do that. You can have the idea for a song, and you can do it with your mouth. And then you can do that with a bass guitar, and you can decide, "Is that a bass guitar? A bass synth? Is-- what kind of sound do I want to be?" And you can choose some of these instruments. It's a $1.99 app, you know, we're talking about, and it's digital. And then you can do that-- you can add on all sorts of instruments. And if you get something you like, and you sing over top of it, and you mix it, and you really like it, you don't have to go to a recording studio to do that. You don't have to go to a record company and say, "Will you please release my record?" You just go to YouTube, and you make a little video of that song; and overnight, the whole world can be part of your art, or can be exposed to your art. And to me, it's so-- I'm so impressed and excited about that. It just seems like we are in such a great time, and technology has-- I, you know... I mean, I don't want to make it sound like I'm-- you know, like I'm... not giving credit where it's due, to-- the orchestra, the London Symphony, that I work with at Abbey Road a couple times a year, that you just hand them a sheet full of music, they'd look at it, they'd play it once; then the second time, you record it, and you're done. And it's something that's very complicated, that follows all-- that's-- maybe you're following Thor through a battle with the Hulk, and they're beating each other up, and they're getting tossed against the wall. And there's all these other things that are happening in the music, and so it's doing hairpin turns, where you go from 4/4 to a 5/4 bar, and then a 1/8 bar. And then the timing tempo changes, and then-- and these people play it perfect. They're amazing. And... that's a-- that's pretty impressive. But the idea of that an artist can... has another way to go, and that is using technology that's inexpensive, and it's available to kids in the Amazon, or kids in China, or kids-- you know, kids anywhere in the world. They can get ahold of this stuff for a small amount of money, and they can... they can-- you know, they have recording studios that are more powerful than the Beatles had, when they did-- or Devo, <laughs> when we did our first demos. You know, I just think it's an amazing time right now.

Garcia: Oh, excellent. All right. Now we're on to the static art section.

Mothersbaugh: The-- say, what?

Garcia: The static art section.

Mothersbaugh: Okay.

Garcia: So, when did you first use a computer in your art creation process?

Mothersbaugh: You know, I avoided it for a long time. And... it took somebody-- it... and I hate to give him credit for this, but it was Henry Rollins who kind of pushed me into it. He introduced me to this woman who was a book publisher, and she came over one day with an Amiga computer, and just handed it to me. And she said, “Let’s do a book together.” And I was like... there’s all sorts of games and stuff. When I go to people’s houses, they’re all using their computers to play games. And I said, “I don’t want to get distracted, because I just want to... I’m a serious artist, and I just want to be tunnel-visioned on my art.” And... but I got this computer, and I wrote a book, and put images into it, that-- because I drew every day. And it was all downhill from there. I had been doing this thing where I used mirrors, and I was making symmetrical photographs. But you would always see the black line of the mirror, where-- this part that was reflected over here. And there was this thing called Photoshop, and for-- it was totally simple to do. It turned it almost into a sophomoric-- like, erasing the pupils out of eyes when you’re a bored high-school kid kind of trick. But I did all these things where I made this-- these symmetrical mutants. I called them *Beautiful Mutants*. And I became obsessed with doing this with photos, and started looking-- I started seeing, “You know, they’re-- humans, they all have-- they’re symmetrical, but they’re not totally symmetrical, and there’s one half that seems more the childlike side to a human; there’s another side that’s the more demonic side.” And almost everybody that I would cut their faces in half, and then flip them-- all these images, I was finding that to be the case. And so I made hundreds and hundreds and hundreds of those, <laughs> and that was my art for a while, that I was just doing that. And then, I don’t know, just the slope got slipperier. I draw every day. Want me to show you something?

Garcia: Sure.

Mothersbaugh: I’m going to show a book. Which would be a good one? Every day, I draw on paper. Like, this paper’s prepared. But I draw them-- I did-- I took this image and put it on that paper, because I’ve been doing a bunch of things where I write poetry around the edges of that eye. And... that’s a subtext to this. But I draw on paper every day, since 19... early 70s. I was into mail art, is how it started. And I found that a nobody from Akron, Ohio, that nobody’d every heard of, called Mark Mothersbaugh, could take a piece of paper and send it to Robert Indiana, or send it to Jasper Johns, or Irene Dogmatic, or Mr. Peanut, and there was a good chance they would send something back to me. And it was like, to get something in the mail from Robert Indiana was such a... it was amazing. I felt like I was on the map. It was an amazing thing. So I-- and I-- so I was doing these drawings all the time and sending them out, and then I was also putting together a band. And in the process of that, I was sending something out to somebody, and I said, “Hey, these... this could be-- if we ever get to do a record, this could be the cover for it.” And I started to put it in the mail, and then I said, “Wait a second. Maybe I should be saving this stuff.” And so I started... this book here-- I was a nerdy stamp-collector when I was a kid, and I knew that in stamp stores, they had these red albums that would hold 100 covers-- you know, like envelopes, or something. And so they weren’t expensive. They were like-- back in those days, they were like five bucks, for one of these books. But I found that if I had 100 of these cards, I could take these cards and put 100 of them in one book, and then I’d called it *Book One*. Now there’s about... I’m closing in on 400-and-something. I don’t know how many books there are. Hana knows, because I make her scan them when I bring a new one in, so she knows what the last number is. But this became like an image bank, that... that I would take these images, and we would go through and say, “That could be our album cover,” or, “That could be a single sleeve.” And-- or I would have poetry I would write. I was influenced by Thomas

Pynchon, back in those days. I loved his books, and he always had these-- in the middle of his stories, there'd be-- somebody would be singing a ditty, or he'd hear a TV commercial, and it was kind of nonsensical. And so I would write stuff like that, and it became part of... of this collection, and a collec-- so...

Mothersbaugh: So, the thing I'm-- what I wanted to say about computers is, it used to be all just drawings and collages. And then, about 15, 20 years ago, scanning-- I found out about how you could scan things. And so on these cards, in particular, that I'm showing you, I would take something and draw it, and then I could mutate it in the computer. And then I could print it again, and then I could draw over top of *that*. So, that's my Holy Communion picture when I was a kid. I had fallen off a skateboard about three days before, so I have stitches, I have two black eyes, and I was loving it, that I'd looked like a monster in this group photo with everybody. But then I added-- you know, I printed it on this piece of paper, and then I drew over top of it, and added things to it. And so, computer is very important to me, in my visual art. And... some of the stuff I do now is musical, because I work with every musical instrument, and write music for everything from... from duduks, and everything that's in a traditional orchestra, but also for... you know, circuit-bent things, and whatever. And I decided I wanted to build my own instruments. And that started because of the movie *Moonrise Kingdom*. Wes Anderson had given me a piece of footage, and it was these two kids running across-- through the woods. They were running away from summer camp. And-- but he gave me this footage that didn't have any sound with it. So you saw these tree limbs going like this, and you saw birds flying around, but you couldn't hear anything. And I have-- in this building, I have a large collection of-- you know, hundreds of birdcalls. Some of them are 150 years old, and some of them are toys-- novelty toys. Like, those things up there, I just got, because I didn't know if they were going to be any good or not. And they're *kind* of interesting. They're semi-interesting. But I'm always looking for sound-making devices, and so-- but I looked at this film, and I started playing these birdcalls. And then I lost interest in the film, and I just wanted to write music for birdcalls. So I started playing these things, but it was kind of cumbersome and complicated to go back-- after being used to doing things in the computer, to go back to me playing all those things. But I hire players, so I'm thinking, "Okay, so what if I get 40 players to come over and teach each one how to play a different birdcall?" Like, "You're going to play a duck call, and I want you to make it kind of flaccid-sounding. And I want you to make your owl call sound kind of, you know, energetic and worried." And that didn't make sense, either. But when I sampled things, then it just sounded like samples. It sounded like this, like-- it sounded like this.

<electronic-sounding birdcall>

Mothersbaugh: Totally fake. Totally fake-sounding. So... I found this guy who worked at repairing calliopes for amusement parks, and I told him I wanted to take and make... I wanted some way to make a duck call-- blow air through it-- but I wanted to have 50 or 60 different birdcalls altogether, that I could control with air or electricity, or with gears, or whatever, and write music on a keyboard form, but I wanted them to play acoustically. And so he was interested in that, and he helped me build one of my first orchestrions. And so, since then, now I'm working on numbers 7 through 12 now, and they're-- some of them are similar. I like to use birdcalls a lot. They reoccur in my instruments. But one of them I'm working on now, I have 100-year-old foghorns that I'm-- that are like-- they look like a bellows that you squeeze,

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with a brass horn on the end. And... they make one note. They go *whoooo!* And I figured out how to tune those, so now I have 18 of them that are all tuned to different notes. And I have a machine that I can control with MIDI, with my Logic on it-- so, with my computer-- and I control it with a computer, and it'll squeeze the horns for me. So... I'm building an instrument with 18 of those. And then, also, part of that instrument, besides 18 that are all off-- can be put all over a room, there are 18-- you know those little-- when you're a kid, those little toys, where you go <imitates sheep baaing>, or they go, "*Moooo*"? I'm also building in 18 of those to this. So it'll have 18 foghorns and 18 cow-mooers. Hopefully, I'll be done before the film comes out anywhere, but-- so nobody does it before me, because-- but... so I'm making things like that. And then one instrument is tubular bells. It's got about... it's going to have about 30 or 40 tubular bells built into it, and... I use a lot of organ pipes, just because there's all these decommissioned organs that are 100, 150 years old, that it's too expensive to replace all the leather bellows, and to-- you know, for a church or a school, or some... you know, a community... that says, you know... you're say-- you know, "It's going to cost us $3,000 to refurbish this organ, or we could-- for $300, we could buy a Korg keyboard that has pipe-organ sounds in it, and it has piano sounds, and it has harpsichord, and it has a choir, all right here in the-- let's just get the keyboard. We can put it under our arm, and it doesn't need repaired." So... so these things are being decommissioned all over the world, and so I try to buy up beautiful pipes, so that they don't turn into fireplace kindling, and... I'm using those in my instruments.

Garcia: Well, excellent.

Mothersbaugh: And it's kind of-- what I like about it is, it's got a computer. It's got a high-tech Logic... you know, sampling, and-- I mean, not sampling; I mean, sequencing-- mixed with real instruments that are really playing things, like cuckoos, like taking cuckoo clocks apart and taking a *cuckoo* out of it, or the *gong*-- the little spiral gong that's in it. And so that's kind of... that's what I'm doing for fun right now, and for-- that's my passion.

Garcia: Ah, excellent. Okay, so this part-- we just got a couple more. What sort of samples attract you?

Mothersbaugh: What sort of samples attract me?

Garcia: Yeah.

Mothersbaugh: It depends upon what I'm working on. You know, it's really-- really, it depends on what you're working on, and I look for things specifically for projects. Something I like to play with, when I get bored, is I like putting subliminal messages in films and commercials and TV shows, because it's so easy to do. <laughs> It's so easy to do. You can put your own messages in things, and... so I look for samples that you can-- I like voices that you can hear, but you *can't* hear. So I like it when it's like-- I think my first one I ever did was a Hawaiian Punch commercial, was the first time I ever did this. And underneath a drum solo, I had it go, "Sugar is bad for you." And... I just remember being at the ad agency, and the guy's tapping his pen on the table, and I'm playing it for him, and Bob Casale's looking at me. And I'm blushing when it happens, because I can't... I'm not really good at that kind of stuff. So I turn bright red, and he's looking at me like, "You're-- we're going to get fired." And then the guy's tapping his pen, and at the end of the commercial, the guys goes, "Yeah! Hawaiian Punch *does* hit you in all the right places!"

And he just looked at me, like, "How did that happen?" And so then that started a... 30 or 50 commercials in a row, before we started just mostly doing them in films and TV.

Garcia: Oh, excellent. Okay, great. Okay, and what do you see as sort of-- what's going to happen next, with technology in music? Where do you sort of see it going?

Mothersbaugh: Technology in music?

Garcia: Yeah.

Mothersbaugh: Oh, it's changing on so many levels, it's... it's-- you know, it's... I don't know. I see things. *You* see things. Every-- you know, it's like *kids* see things. Kids want things, and then they can give them to them. I was just telling somebody earlier that I went to the premiere of *Thor*, and I heard it through speakers. They were blasting so loud, it sounded like a rock concert, and you couldn't really hear any of the dialogue, and it was just all really loud and crazy. And then I went to see a couple different screenings, and one was with the Atmos speakers, which had a lot of separation. And I remember the music-- I thought, "Wow, that's the closest I'm going to hear this music to sounding like when I recorded it at Abbey Road." And it was very clean-sounding, and the... it... they were able to separate the sound effects and the dialogue and the music in a really enjoyable way on that system. And I had just kind of-- I kind-- you know, I had-- my engineer-- one of my engineers kept saying, "I'm working with Atmos stuff." And he had done... oh, no. The movie where this little Indian boy that's out in a life raft with a tiger?

Garcia: *Life of Pi*.

Mothersbaugh: Yeah-- a beautiful movie. And he's Mychael Danna's engineer, also. And he was talking about Atmos, and all these amazing things. I'm thinking, "Yeah, it's"-- sounded really techy to me. It sounded-- but when I heard it... even my film, which wasn't made for Atmos-- it was made for, I don't know, 11.1 or something, and so it was already pretty split-out. But just splitting it out like that, it just sounded so great. It made me think, "I wish every theater, you could hear it sounding like this."

END OF THE INTERVIEW