

## DISCOVERY EP. 13 - English

[00:01:54] Everyone, and welcome to Knight Foundation Discovery, our weekly look at the art and its impact on our communities. I'm Chris Barr, director of art and technology innovation at Knight Foundation. And today we're gonna be talking about open source tools for creative expression and art making. And our guests today are A. Holloway.

[00:02:14] She's an artist and director or professor, rather, at the School of the Art Institute of Chicago. And at the University of Illinois in Chicago. And Chris Coleman, who is director of Clinic for Open Source Arts and a professor at Denver University. Welcome to you both.

[00:02:37] Thank you very much. Good to be here you are.

[00:02:40] So we have a lot to unpack, right to the title for. This is Open Source Tools for Creative Expression. So we've got a lot in there. We've got open source. We've got tools and tool making. And we've got ideas about art and creative expression and folks who make art using digital tools. And I wonder if we could start at the top and just talk a little bit about this face of digital creation and where these tools sit within.

[00:03:14] So, you know, I think we've been seeing a long time about what it means to have control over the sort of set of brushes or tools that you use to make your art work and how much how much your very work and the things that you can create that content itself, how much that's shaped by the tools. And so, like using a tool like Adobe Photoshop means that while it's nearly limitless in its possibilities, it also does have limits. And those do shape what it is you can create and what it is you're putting out into the world. And so there's something about this sort of other ecosystem of open source tools that allow you to see both sides of how it's made and how it can be used. And that opens up the possibility to make your own. And really start to make, you know, makes a custom brush that's really going to serve what it is that you want to express. And that's really sort of the core notion that I think digital technology enables. But, you know, other kinds of art technology enable that as well. Is just a little bit more complicated in some ways.

[00:04:34] Right. Yes. Go ahead.

[00:04:38] I was just going to say. Yeah. So true. And I think one of the reasons why open source software and other kinds of bits and pieces that are made fits around the artistic community of people who want to be creative is because also, you know, you get the chance to have sort of a feedback loop with the folks that might create that software, that hardware or whatever it is that you're using, whereas you don't with dollar, you know, there's this thing about like if you design for everyone, you design for no one. And, you know, these kinds of things, big, bigger corporations aren't necessarily designing for kind of everybody. But with these open source tools, they can be really neat because a lot of them, I think, really come out of this need for, you know, one thing to happen. Right. And you get to listen even a little bit closer because maybe their motivations aren't money. And artists, I think, really especially gravitate towards this because we do need really specialized things or creative people. We need specialized things to get the job done. But also, we want to be able to have a say because I don't know when the last time you talked to an artist, but we don't really do anything that we're supposed to do with what we're told to do, especially if we're given something we definitely don't want.

[00:05:49] And so you want tools that are easily broken and exploited in new ways.

[00:05:56] Where do you want them to stay the same? I mean, that's another thing, too. And the maintenance of these tools and Adobe Photoshop is a really great one where, you know, there's a whole movement and a glitch, artists that we're making and breaking things within Photoshop that now a lot of the versions with a lot of different calls can't you know, we can't do that anymore. So now there's lots of opportunities.

[00:06:22] So so we have artists who are working with technology and really interdisciplinary models for making things and even what to call this field that that ranges from creative coding to new media are two things that are hard to define. It's tricky. And we know that there's a set of tools that are often supporting that. And I think that's a piece of what we want to talk about today. For those who aren't aware, when we say open source, open source, a one hand is a licensing regime. Right? It's a set of permissions that we put on a piece of software on another hand. It's a structure by which you might think about community and you might think about how things get made, too. So could we talk a little bit about why open source and why those models are so attractive for people who are who are creating art specifically?

[00:07:32] Yeah, I mean, I think Shani really got to one of the most critical parts is that, you know, many times there's a tool that maybe only 50 people in the world want to use.

[00:07:45] And so, like, how does that get made like that? You know, no company is ever going to make that tool. They're never gonna make their money back developing that tool. But like one or two or 10 or 15 people can sort of pull their efforts together and create and then most importantly, maintain a tool like that by combining their efforts and also understanding that, you know, open source isn't a sort of fixed set of people, that it's sort of flow of people coming in, finding a tool, using the tool, helping make some changes and then flowing out to maybe another tool and that sort of fluidity and understanding that people are coming in and out of a project and moving through it. That's like why open source is so essential that, like, you know, I if I want to do specific projects, like, let's say I didn't make this beautiful artwork behind me will say, I want to make something like this and I want a tool that really makes these beautiful patterns. And I want to add a new feature to it. I think other people will like it. Well, I can see that code. I can offer that feature to the rest of the community. And, you know, maybe they'll accept it. Maybe it'll be part of the tool going into the future. And then maybe I'll move on to something completely different. But there's other people who come and continue to sort of carry the load of keeping that thing functional and useful or not like it's OK to let them go, too, which again, is another sort of beautiful part of this ecosystem.

[00:09:17] So you, you're both artists. And this is sort of pretty abstract right now. And I'm curious, Chanay, could you talk a little bit about how these tools find their way into the work that you create?

[00:09:34] Yeah, I mean, I think a little bit to follow.

[00:09:36] I'm a Christian said two days in a number of aspects of dream dreaming. With the open source community ethics.

[00:09:47] And hopefully my opinion, if you're doing it right, there is an end.

[00:09:52] This dreaming is a necessary and sort of collective dreaming that can happen. And I think with artists, you know, comes mentorship. And for me at least, these tools have come into my hands through mentors and through people that I trusted in people who are

trying to help me out and say, like, oh, you just graduated from college and you can't afford, you know, your mind anymore. And I'm very like, here. Yes. Good day. And, you know, I try to try to work anywhere. It's really cool. Like, you can just get started really fast and prototype that thing. Right. That dreaming extends also to, you know. Oh, you feel like this interface is really impressive here. Maybe try this tool. It was made by someone who might be more like minded to you.

[00:10:41] I love this. I did that. Open source arts is about collective dreaming. Right?

[00:10:48] That that together we're going to think about the world we want to create. And we're going to make the tools to realize that. And we're gonna do it together.

[00:10:58] You know, I think so often we think about both in especially the visual art world and in the software world. This idea of the solo genius. And I think a lot of what you are talking about is community. It's about togetherness. And how do you how do you manage projects and realize a future together? And in a lot of ways, this is becomes really important. And so your work with the clinic pro open source art is really about how do you nurture those communities and how do you help these projects all along? Chris, could you just talk a little bit about what that effort is and the work that you're trying to do there?

[00:11:44] Yeah. You know, as a clinic for open source arts came out of me being a professor who teaches with a lot of open source tools. So I was shown a sense like I feel it's really important to put my students as young artists into the world with things that they're going to be able to for afford to continue to use just at a base level like you've just gotten done paying for college. Can you afford to pay for the tools that you're going to continue to work with? There's a real big question, but. So I think that initiated me on this path of like, how do I support these ecosystems? Because some of them are like, amazing. And some of them I'm really worried about. Right. You know, we talk about sustainability quite a bit. And so the question became like, how do I use my institution in my sort of base of knowledge to think about that? And how do I, you know, connect with other people? Notably Goaland Levin at Carnegie Mellon University, the Studio for Creative Inquiry. Like, he's been doing this for years, trying to help different open source projects be realized and sustained. So we really thought about the clinic for Open Source Arts as a clinic in that we're thinking about the health of these tools that we rely on every day. And so, like, what does it mean for a tool or a project or a community to be healthy? It means that it needs to have a diverse group of people working and thinking about what it is. It needs to be welcoming to all different kinds of contributions. It needs to be sustainable. It needs to not have people burn out and, you know, burn the project down in flames because they can't deal with distress anymore. And it needs to help projects that whose time has passed. And it's time for them to sort of sunset and even what does that even look like? So many of these topics have been talked about maybe in some regard for bigger open source projects, more generally computer science. But I feel like by focusing on tools for creativity, we've got a very different kind of community. And it enables us to have, frankly, some much more progressive conversations about what it might look like for open source, especially for artists. But I hope actually these lessons can cascade out to other projects as well. Tools that maybe not targeted at artists, but artists also leverage. I certainly also leverage that, you know, at museums and other spaces.

[00:14:27] Yeah, so so absolutely, as we think about art and technology and how it's supported through those institutional structures. On one hand, you are both in universities and you're teaching courses. You're training a next generation of artists who are using

specific tools and maybe learning about how to create and be a contributor in those communities.

[00:14:58] The artwork that gets created and I think one of the things that's interesting, especially code based art, is often it's not just that the tool is created to make the thing, but that that the code is often running the project as well. So there becomes a conservation issue long term. If we want to think about how some of these things run in the future. And so there's a lot there as we're thinking about what becomes critical about these individual tools. But I like the teaching element because I think one of the things both of you are working on is, is the teaching element. And that's not just in the classroom, but it's also within the community. And so I'm curious if you can speak to how do we teach these tools to people who are curious, people who want to start making things with P five J. Yes. With processing, with other tools that are available and how we think about this idea of turning someone from someone who is interested to becoming a contributor. And what are the various ways you think folks can contribute to that?

[00:16:20] I mean, I think one really easy answer to this is just do it like, you know, and it's yours.

[00:16:28] I mean, like it. It's.

[00:16:33] It really bothers me sometimes, especially in this kind of like, oh, we can't do we can't teach opensource, they have to know this for their jobs. Then like it's first of all, we have a standard of how to use a computer or how to use an interface. Right. You know, something as basic as if you can't find and go look at the documentation. Google it or look at the you know, in the menu. It's a bait. You know, there are familiar objects within these open source tools. I think a lot of people I feel like open source is so far away from anything that they could possibly ever relate to. Right. But in reality, a lot of these things are just copies of what you can pay for. But just a little bit more customizable. And with education, you know, there's a canon. And I think right now we're in a moment where we're starting to say, like as professors, am I brave enough to, like, go against this canon? And personally, you know, no one checks on me in my classrooms.

[00:17:31] I know whatever I want.

[00:17:32] And so, you know, we have these opportunities as people in authoritative positions to start putting these Foote's phone feet forward. And, you know, I always say it only takes one person to care about a student or to say like, hey, you know, have you ever thought about this? Always takes one minute with one person. And I think that's just that's how you start with open source. But you yourself also in the classroom where as an older as a parent, you even have to be open to understanding a language. And I think that, you know, radical pedagogy, which is what I hope folks are leading within the classroom, really starts with this openness and modeling that for even children at university. No, we're gonna buy it over in our step. But, you know, modeling that for children. It's also important to the way that the future of our even Internet and computers will go. We need to think about the next generation. And the more the BS open source, the more that they're going to be able to change the landscape of how we navigate.

[00:18:38] I love the notion of like, oh, it's industry standard and so, like, we have to train them for it.

[00:18:44] But the funny part is, is it's industry standard because the last group of students that we're taught, we're taught with these tools. And so, like, by choosing to teach those tools again, you're actually perpetuating that standard. And so if you want to see change, it actually has to begin here at the educational level, because that's how people walk into a movie studio and say, actually, I can do all this with Blender and you can not pay the ten thousand dollar my license. And all of a sudden that studio is going to be reconsidering what you're doing. So I love that notion of change. And I'll just double on the other part of your question, Chris. Which is like we actually live in an amazing age of like YouTube and Twitch. And like, you can literally learn anything now. And, you know, I'm thinking about Erin Davies. She's got cozy coding over on Twitch where she just sort of like it talks about and codes with people while chilling on her bed among her stuffed animals. And. And, you know, learning the code that way is really sort of beautiful, a beautiful way of thinking about getting into it and being comfortable with dabbling and playing. And then it becomes more and more serious as you have ideas of what you might execute.

[00:20:07] So so as you think of the tools available to artists, creators, folks that want to tinker right now, what's the sort of starter kit for folks who are watching that that want to know what toolkits are available to them? I think that they can go and download and play with today. I mean, we heard you mentioned Blender, we've I mentioned P five J. S in processing, which is a specialized library for four artists specifically. But are there other tools, big or small, that you think are really neat that people might need to know about?

[00:20:47] Definitely, twine is something that that's the first thing that I always teach in my classroom because it sets a foundation for understanding each genomes, assets. And then we move forward from there.

[00:20:59] And for me, that was actually even still, it's probably one of the only fluid languages. Those are the only four languages that I know, along with JavaScript. But once you know, HMO and SS, you can kind of move also on to key J. S learn that structure and then move forward from there to kind of scaffold a solid programing knowledge.

[00:21:21] And of course, we have this thing about this question quite a bit.

[00:21:25] Over at Kosa and actually produced a series of videos just last month called The Cuts The Connectors, where we asked opensource curators or journalists, I don't know, there's somewhere in between to do little two minute movies, introducing a lot of these fantastic tools. You should definitely check that out if you want to just hear about some of the cool options, because, in fact, there are so many. And, you know, as a digital professor, I'm always like, well, tell me more about what you want to do. And then I can tell you some tools that might help you do that just because there are thousands like this one. That's for making zines. You know, there's ones that are for drawing pixellated cats. It really goes a pretty long way. And I think it also depends on whether you want to do something like creative coding, which is really for generative art or creating quick animations or maybe even doing interactive things and interactive interfaces where as you might also want to use something like Inkscape that's going to allow for that's more like Photoshop and you're just doing photo manipulation. So that span really is there.

[00:22:47] So so for folks watching, I'm going to say stick around, because we will see a clip of one of these Kosa Connectors videos with Sharni talking about the project that she mentioned twined. And there are more online on YouTube. I want to get to know, thinking about open source in this idea of free and what is sort of being spent in the creation of of these projects. Right.

[00:23:18] You know, open source is a paradigm that's about a license that allows you to alter source code. And people often put those tools out on the Internet for you to download and use for free on. On the monetary side. But in order to create them, folks are volunteering their time often. And so the ability for everyone to volunteer their time gets into sort of questions about power and resources and ability to participate in that kind of activity. And I wonder if you if you all could talk a little bit about different ways to think about how you will contribute to these projects and ways that we should be ensuring that we're valuing people's time.

[00:24:16] I think, you know, as I accidentally contributed in some way, and I did. I started with administrative contributions and I really felt like, oh man, maybe I'm not doing them real time. Maybe I'm not a real contributor because I'm not doing, you know, the pull requests and then the issues and fixing stuff in the code and whatever. And I really had to unlearn that and P five JSC project with everyone who really makes that project. The project really taught me that, you know, the aspects that you can kind of move, you know, move forward into the contributor. Are all important because, you know, a project can just run on code, folks. People really find their mission, whether that's any support role period, or even just like being that person who is there at all the events. Right. I think boundaries and also knowing your strengths are things that can come with time if you're if you've never worked within a community structure before. But that none of these contributions are disvalued, hopefully. Mean. I don't know that that's true everywhere. But hopefully and then if it doesn't work in one project that there is another project out there and that, you know, the many variety of projects will also necessarily come with different kinds of ways to be a contributor.

[00:25:50] Yeah, that's super important. I think La McCarthy with P five US are really defined as that project in a way of thinking about contributions. It, you know, like beyond the code. And so long we've dealt with this notion of open source as a gift from some smart guy, typically. And he's sort of like granted upon the world and other people are probably helping. But he's the genius who's made this thing and everybody should just like, you know, wait for him to grant you with new gifts. And every other kind of contribution is sort of like a bonus. And so turning that around and saying, like, actually the people who are making the code are so important and they're doing important work, but so are the people that are writing documentation.

[00:26:42] So are the people who are making tutorials. So are the people who are teaching other people about this tool. So are the people who are giving money to the tools and so are the people who are just advocating or interested. You know, this makes up an entire ecosystem of contribution to what makes a tool viable and healthy and sustainable. And so that changing that notion has been really so, so important. And the primary work of Crozet, frankly, because these projects can't exist and we've seen it time and time again, these projects cannot exist with just like the soul genius who's, you know, carrying the whole cross up the mountain and won't let anybody help. And then they burn out. And then the project just falls flat because it's because they've never trained anybody else or prepared anybody else to be part of the leadership of the project. And so thinking about how to diffuse these and make them more of a community effort assures that they actually talked a lot about something called the bus factor. Like, if one person was hit by a bus with this tool disappear and like how many people would be hit by a bus before the project would disappear? It's the health of the project.

[00:28:10] So for folks, we've got a question here from the audience. And curious if you can talk a little bit about how your work and how others who are working with these tools, creating artwork with these tools. What are the media sources, sources of information that are covering this space for folks who want to learn about it? Where do they go to start digging in and finding out about projects? Or are there go to spots?

[00:28:44] I mean, yeah, I've you know, I feel like open source, it's funny because you can, you know, be reading something in the cut or, you know, just like any media source.

[00:28:55] And maybe they're talking about these things and don't know that they're open source. And because of that thing, they're starting out like, you know, there are they and say that there are large corporations that use these open source tools. And you may just literally never know what's going on. But also, it's kind of weird. This isn't just like you can't be afraid to talk to human beings that are there. I mean, I think most open source folks get help or some kind of repository where their home lives. And there's necessarily folks moderating that. And there are forums and things like this. And they can definitely be incredibly daunting, especially depending on what project you're actually interested in knowing more about because of, you know, racism, misogyny, all the stuff that we love to love.

[00:29:41] We'd love to get right of in the world.

[00:29:45] But I think, you know, every community has that kind of injury tax in some way.

[00:29:53] But, you know, to learn about it for real, I think getting your hands kind of dirty in that community is the best way. Or at least that's what I would say to my students.

[00:30:06] Thinking about one of those entry taxes, it seems that coding itself can be one of those gateways to entry for digital art making. What recommendations do you have for folks who don't code, who still who want to make digital art and want to fool around with digital tools? Where where might they start to create things?

[00:30:32] I mean, one of the obvious ones is, you know, one of the friendliest points of entry really is P five US, the project we've been talking about.

[00:30:41] I believe that's a P five. Two. Yes. Dot org. Is that correct?

[00:30:45] And they've put a lot of energy into having, you know, learning resources there on the Web page. You know, if you want to see somebody super energetic and excited about teaching coding and who does it really well. Daniel Shifman has a series online called The Coding Train. And if you look at coding train on YouTube, you can find his tutorials about using P five G.S.. He his energy is super infectious and you can't help but have fun with.

[00:31:22] And I think I mean, everybody I talked to was like, oh, you only come from Daniel Schorr material. And I was like, yeah, we all learned to conquer Afghanistan.

[00:31:31] And, you know, I think you also see Daniel's influence in, like, you know, tutorial makers as well.

[00:31:43] Yeah. And one thing about I think to be sort of sad, not to mention Frank Jacinthe community statement back, the statement is the one that I use in every single

classroom that I have, regardless of whether it's like a digital classroom or not. And it's know community, editors, community. I'm really like kind of watched over in some ways and make sure that we're also shooting each other in a certain way. But that's also another way that you kind of judge in the environment of a certain project, too, and think, what? Do they have a community statement? Is our folks easy to contact and things like this? And you really get to know them like the flags and in the vocabulary, uncertain.

[00:32:27] Well, that's great. We are out of time, unfortunately.

[00:32:32] But I wanted to end the program with a little bit of a preview of a clip from the the Khoza Connector series. And I want to thank you both, Tony and Chris. Thank you for joining us. Thank you for talking about this work and really, you know, the generous spirit that goes into all of it and thinking about community and and making things and putting things into the world. You know, I think this video clip is a really great place to start because we've been talking about what are the ways you can contribute.

[00:33:11] And we just talked about Daniel Shifman and the really wonderful things he had sort of kicked off with the kinds of tutorials he did. And so I think this is a great place to end it. Thank you both. And for folks who enjoyed this kind of program, we encourage you to tune in next week. Our guests will be Laura Zabel, who will be talking to Victoria Rogers. And they're back. Issues and recordings of all of the programs that we've done over Kay Uptalk slash Discovery. And thanks to the team who helped produce this and every one who's put work into the project. And so now, just to leave you all with something really special here.

[00:33:59] This is from the Coast Connector series.

[00:34:17] Hey, Shani McLane Holloway here. And I'm a new media artist and poet and just general kind of noise maker. And this is an episode of Cozza Connectors. In this series, me and a few friends are showing off our favorite open source tools to make artwork and just get generally creative. In addition to being a media artist, am also a professor. So a lot of these tools are the same ones that I'm using in the classroom. Let me show you a few. All right. So today we're going to be talking about twine and twine. T.W. Iron is a choose your own adventure game engine. This is also sometimes talked about as electronic literature and electronic literature and games. Both have been a part of computing history forever.

[00:35:01] And so I really cherish twined as a program that can both teach folks about the Internet and its relationship to the printed book and the things that words and text really bring to the life of the Internet. Twine provides a background of CFS and a Schimel, and you can really get really fancy with JavaScript and other kinds of coding languages and the community, which is huge and it's really popular within clear gaming circles, uses this on all levels. You'll see really popular games that are just text and a color all the way to full on experiences where things move across the page and music follows you wherever you go. The nice thing about twined is it's super beginner friendly, whether you're an advanced programmer or someone who's never even been on the Internet before. There's going to be something for you in this particular software. The thing about twined is because we're writing stories, you don't necessarily have to deal with any of the code that other users that might be on the advanced side might want to get into. So if you're working with a group, it's a really great way to accommodate different skill levels. If you're a beginner, you can really focus on your story and make sure that you have the best narrative possible. And if you're advanced, you can work with JavaScript and CSX to make sure that you have the right

environment for that story. China is also really great for visual learners and those who are learning narrative structures because twined has both a story mode and a preview mode. We get to understand how our code. The stuff in the editor then functions visually in our story mode and how it's translated into preview mode. For those of us learning narrative structures, we get to plan out exactly where we want our story to go. The interfaces super flexible. You get to move each of these little squares. Then as passages around the screen positioning them wherever you like to use twine, we can access it through an app or through the browser times. Information is always saved in the browser cache, which means if you clear the cache or the memory that you store on your computer locally, your story won't be there. Sometimes that's a little unstable, but what it does is it creates a really agile workflow. Through the app, you'll see that you can create libraries full of awesome stories to share. The real time can play. Is she able to give you agency and control over your story as folks on the other side of the computer screen interact with you, but only on your terms? I said earlier that time has a really beautiful, thriving community. Well, I'm thinking maybe this is why sometimes the Games community relies on agency and choice to be able to chase stories that reflect our values.

[00:37:44] And syas twine also really brings a lot to the conversation of consent. Twined gives us those important conversations about consent and control that everybody in the technology road should think about. Great. Thanks so much.

[00:38:02] Amazing. Thank you both so much. And again, thanks to the team for putting this together. What a wonderful way to to end things. And now I'm gonna go play with twine. I'm going to go listen to Megan Stallion and Jamila Woods.

[00:38:18] So I uploaded to YouTube tutorial for my mind one point one. So, yes. And yeah, YouTube. So if you're very curious, gosh, my YouTube video just me too hard.

[00:38:30] Listen, again, thank you to our guests, Chanay and Chris, and get out their gate code and give making things and use open source Toltz.

[00:38:40] Have a great day, everyone.