



Cool Tools Show Podcast Episode 44: Gareth Branwyn

Transcript

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Our guest this week is Gareth Branwyn, Gareth is the former Editorial Director of MAKE. He was also the senior editor at bOING bOING print, a section editor at Mondo 2000, and a Wired contributing editor for 12 years. Gareth has also written and edited over a dozen books. His most recent book, a combo best-of collection and “lazy man’s memoirs” is called [Borg Like Me \(& Other Tales of Art, Eros, and Embedded Systems\)](#).

Mark: Welcome to the Cool Tools Show. I’m Mark Frauenfelder, editor and chief of Cool Tools, a website of tool recommendations written by our readers. You can find us at cool-tools.org I’m joined by my co-host, Kevin Kelly, founder of Cool Tools. Hey, Kevin.

Kevin: Hey, it’s great to be here.

Mark: In each episode of the Cool Tools Show, Kevin and I talk to a guest about some of his or her favorite uncommon and uncommonly good tools they think others should know about. Our guest this week is Gareth Branwyn. Gareth is the former Editorial Director of MAKE. He was also the Senior Editor at Boing Boing Print, a section editor at Mondo 2000, and a Wired contributing editor for 12 years. Gareth has also written and edited over a dozen books. His most recent book, a combo best-of collection and lazy man’s memoir, is called “Borg like Me and Other Tales of Art, Eros, and Embedded Systems,” and that’s available at sparksoffirepress.com. Hi, Gareth. How is it going?

Gareth: Hey. Good, Mark. Good to be with you guys today.

Mark: Yeah, it’s great. Gareth, you’ve recently started blogging again at makezine.com, and I just want to alert people that your blog posts are fantastic. I love the stuff that you’re covering there. It’s really fun.

Gareth: Thank you so much. Yeah, I know. I have a contract with them to do a blog post every day, and it’s ... yeah, it’s been really, really fun. I just basically just cover whatever

interest me, and one of the things that I've zeroed in on is the tips, is covering shop tips, and tool tips, and things like that, so I've been putting up a number of those posts, which have been doing really, really well.

Mark: I love tips, and in fact, you are ... you're putting together a book about shop tips. Isn't that right?

Gareth: Yeah. Yeah, inspired by that, the tips pieces that I've been putting up, and they just get so much interest, and traffic, and excitement, and stuff, we decided for me to do a book where I'm going through the entire corpus of the magazine and the website, and just getting the best tips that anyone ... that we published that are either embedded in articles or we've done tips round up a bunch of those over the years. On the blogs, I'm going through all of that stuff, and then outside of that too. Things like Jimmy Diresta who does videos for MAKE. He's been on his own channel, been doing these awesome tips videos under different categories, so I've been using some of that stuff. Yeah. The book is basically going to be a directory of tips. It's called ... We keep on changing the name. I think it's "Top Tips and Shop Tales."

Mark: "Tips and Tales from the Shop?" Is that what it is?

Gareth: Yeah, that's the current one. Yeah.

Mark: Okay.

Gareth: Yeah. It's a provisional title, but ... Yeah, so it's going to basically be a directory divided up by measuring, cutting, finishing, soldering, printing. There's a section on 3D printing tips, and then interspersed is going to be the shop tales where I'm going to interview. Basically, the same thing we're going to do today where you ... the three of us are going to have this conversation about the tips in our lives, and then I'm going to boil those conversations out. I'm talking to people like Jimmy Diresta and you. You've agreed to do one, and a bunch of other amazing makers.

Then, I'll just boil those out into these standalone pieces, which will be interspersed throughout the book because one of the things when Dale and I, Dale Dougherty at MAKE, and I used to talk about the idea of tips and tools, there's always stories. They have lineages like when you get an amazing tip from somebody, you remember the source, and you're reinforced when you use the tip like I remember tips that my dad gave me when I was a kid about working with a hammer, and a saw, and things like that, and so I loved that that there are stories.

These are story-driven as much as they are. These daily things that you use in your work life, they tend to have a backstory, so that's the idea of interspersing them with these interesting colorful stories about the origins of some of these, and then just what people's beloved tips are.

Mark: That sounds great. You have some tips that you want to talk about on this show, which I think is a fun thing to do to focus on tips this time around.

Gareth: Yeah.

Mark: Why don't you go ahead, and start, and tell us about the notebook keyword index?

Gareth: Yeah. That's one that I put up a couple ... I don't know, like a couple months ago I think and got a lot of traffic, and that's one of the ... of all of the tips that I've put up in these tips roundups I've been doing recently on MAKE, it's the one that more people have come up to me like several people at Maker Faire, [Oro 00:04:53] Maker Faire and said, "Oh my god, I'm completely using that. I've started using it." It's very, very simple. The basic idea is you take the back page of a notebook that you're starting on.

As you generate subjects, you write down those subjects along the outer edge of the back page, and then you just find those subjects that you're ... as you write the subject in the content of the book, you just mark the corresponding area on the outer edge of the notebook, just a little black mark, and so then as you look through the edge of the notebook, you can see all of the connecting ... the black marks that connect to that line of the back cover index.

I have a picture of it that really explains it much more easily, which we can put the picture up in the notes. Once you just look at the picture, it's completely obvious what you do, but it's very simple. Apparently, it's a common ... It's a Japanese technique, somebody told me. Yeah. It's one of those things where you see it, and I love this about certain tips. You just see it, and it's so painfully obvious. It's painfully obvious what its use is, how useful it will be, and you just get that sense of, "Oh my god, I can't believe I've never thought of that." I love tips like that, so that's one of them.

Mark: Yeah. Kevin, have you seen this photo?

Kevin: Yes, I have. It's a little bit like what some dictionaries and others used to do, which was marking pages in a section with something on the edge of the page that could be seen when you tilted the book or opened a book slightly, but this is a homemade do-it-yourself version, which is really cool, which I had not seen, and that's a really cool idea. By the way, Cool Tools has a tip section, and we used to do a lot more of them than we have done, but while you're mining it, you might want to look at some of the tips that have accumulated over the years.

Gareth: [Exactly 00:06:37]. I've already been there. It's already bookmarked.

Kevin: Okay, great.

Gareth: Yeah, absolutely.

Kevin: Yup.

Mark: Let's go down to the next one.

Gareth: Okay. Yeah.

Mark: Bonding plastic with a Dremel.

Gareth: Yeah, and this is something that Fran Blanche, who is an engineer, audio engineer that does the Frantone Effects Pedals, really awesome maker, and she had a video I think years ago. She put up a video with this tip, and then Matt Griffin who writes for MAKE and used to work at MakerBot and Adafruit. He is writing a book for MAKE about 3D printing, finishing technologies, and 3D design and stuff, and so he put this in an article in MAKE, and so I pulled it out of there and put it up as a blogpost.

The basic idea is you just take a Dremel tool. If you want to bond 2 pieces of plastic like you've worked on a 3D print that's broken or you want to combine 2 pieces of a 3D print, you just slot a piece of plastic rod into a rotary tool and just place it as it spins around. You just place it up against the join, and the friction melts the plastic, and so you basically have a little friction welder. I haven't actually tried it, but Matt has, and he was ... like I went out to lunch with him years ago right after he had just discovered this thing, and he was really excited about it.

I didn't actually understand it as he explained it to me, but then when the piece came out, I was like, "Oh, okay. I see what he's doing." Yeah. It's just one of those things that I would never think to do that to put piece of plastic in a Dremel tool and use it for plastic welding. Apparently, it works and ...

Mark: Is it just a piece of plastic that you had like snipped off the end of a real ... a spool of 3D printing plastic?

Gareth: I think you can do it that way, or yeah, I've seen people do it with that Plastruct, that kind of plastic. Yeah. I think the basic idea is you would just use the filament that you would use in 3D printing.

Mark: Yeah. Yeah, filament. That was the one I wanted.

Gareth: Yeah.

Mark: Yeah. If you're using ABS, you'd get a chunk of ABS and PLA for that, so you could have the same kind of material.

Gareth: Yeah, yeah. I don't if there's different dynamics, different properties of those to different filaments, but yeah. I think the basic idea is that. It will have links. There's the link to the

actual article. I can provide all the links in the notes, so you can go and find out more information about it, but that's a really cool one. Another one that I got from Dave Hrynkiw of Solarbotics is using baking soda and CA, cyanoacrylic acrylate, however you say it, glue to make a bonding material. If you add the baking soda to the CA, it makes this incredibly strong bond like a much more substantive bond.

I saw a video where a guy was trying to fix the ... I don't know what you call it, but where you go from the neck to the peg, the tuning pegs on a guitar, that little transition area on the neck that was like ... that can get broken off as people move their guitar around. If you catch that corner ...

Mark: As they call, the nut?

Gareth: I have no idea, but it's that area. Yeah. A guy brought in to a ... an instrument maker brought in a guitar that that part was just broken off on the end, and it was just too ... It will be way too complicated and expensive to actually like replace everything, the neck, and the tuning pegs, and stuff, that area, so yeah, he just used the CA and the baking soda, and just made a little strong enough bridge. You can cut it and carve it, so that's really cool.

Mark: I love that.

Gareth: Yeah. I had no ...

Kevin: Is it important that it's baking soda versus baking powder?

Gareth: I have no idea. I've always heard every ... and I've seen several videos and things about it, and they always say baking soda.

Mark: Yeah. I don't even know what the chemical difference is between those two. Is it just the composition of it?

Kevin: I think one is sodium bicarbonate. I think the other one is sodium carbonate.

Gareth: Yeah, you're right. Yeah.

Kevin: In baking, you often get it mixed up, and so I was [wondering 00:11:45].

Gareth: Yes, you do.

Kevin: In sanding or whatever in the shop, whether it matters.

Mark: Yeah, that's interesting.

Gareth: Yeah, I know. It'd be interesting to actually experiment with that and see. I'll go actually look that up after this and see if the other works as well.

Mark: Something that's similar is when I've worked on making cigar box guitars and I gauge wood, I'll just take wood glue and sawdust, and mix into a putty or a paste.

Gareth: Yeah. Yeah, that ...

Mark: It works pretty well. You can fill things in nicely with that.

Gareth: Yeah, yeah. That's a common woodworking, old woodworking trick. Yup. Then, Jimmy had a really great one on one of his videos on his drilling tips video, which is ... and he has an interesting rap in the beginning. I can't imagine that tool companies don't do this, but he was saying, "It'd be really great if tool companies really got people like him to consult on the construction of their tools to be able to incorporate things like this," which is the idea is to be able to drill a straight hole.

He puts a board. He attaches a board to the top edge of the drill, so like if you're trying to drill up against the wall or you can even like make a jig out of a piece of wood at a 45-degree angle to your drilling surface, but by having this piece of wood on the top of the drill, you just ... and make sure it's level with the drill bit, then you ... you created a perfect perpendicular hole by placing that wood up against some other wooden surface or some other surface.

Kevin: What Jimmy was ... Yeah. What he was suggesting was that why don't drill makers ... the companies that make drill, why don't they make that top surface of the drill perfectly flat and leveled because then you'd have basically a built-in way to make a straight drill cut?

Gareth: Yeah. Yeah, which when ...

Kevin: It makes sense, right, because it costs you nothing.

Gareth: It totally makes sense.

Kevin: Yeah.

Gareth: I can't imagine that they don't ... that tool companies don't employ consultants like Jimmy Diresta to give that kind of feedback, but it is really ... Yeah. I think it would be great if tool companies had more of that because they would get this kind of intel, which to me, yeah, you hear that, and it just makes so much sense.

Kevin: Right. Drills to me look a bit like athletic shoes. They've got all these dude ads and unnecessary little flourishes on ... for I guess marketing purposes instead of making them very simple and streamlined.

Gareth: Yeah, and he actually talks about that in the drilling video too, how silly the packaging of the cases of them are. Another Jimmy one that I really, really like because getting a lot of things mailed to me ... Every day, I get ... I'm sure you guys do too get tons of things in the mail, hardware, and books, and things, and when they're just wrapped to crap with packing tape and stuff, and you end up cutting the thing you're trying to get out, or cutting yourself, or whatever.

He has this great idea of using stretch wrap and wrapping ... bundling up a thing in stretch ... I'm sorry, in bubble wrap first, but not taping it, and then just putting stretch wrap on the outside, and then folding the end of the stretch wrap where it's a little tab. You get the package, and then unpack it. You just grab the little tab, and then you just unwind the few turns of stretch wrap, and then the bubble wrap, so nothing is actually attached except that one little tab at the end of the stretch wrap that's holding the whole thing together, and that makes so much sense to me. It's one of those things you just ...

Kevin: Stretch wrap itself is a great cool tool. A little roll of it does wonders because you can quickly temporarily bundle things, wrap stuff up, and it doesn't ... because the nature of it is sticking to itself. There's not really an adhesive there. It doesn't leave any residue on stuff, yet it's like post-it notes. It adheres sufficiently to do the job, but not too much so that you are fighting it to get it off.

Gareth: Exactly. Yeah, and he uses it. He uses it to do things like to wrap up tie-downs for the back of his truck. He talked about the fact that you go to someone's truck to use tie-downs, and they just have a big snake-y bundle of the tie-downs in the back, and you could just keep one of these in your truck, and you just quickly wrap them up. Yeah. You can get it. You get them at ULINE where they have a little handle, and it's just a little spool. Yeah. It's a perfect ... Yeah. I get the sense it's one of those things that when you have it ... It's like a glue, like a hot glue gun. You just use that on everything when you have one, and I think that the stretch wrap would be the same basic thing.

Kevin: Right.

Mark: Have you ever tried that stuff that's called like "self-fusing silicone tape?"

Kevin: Yeah. It's the same idea.

Mark: I've never used it. Is it good stuff?

Kevin: Right. It's narrow, so it's like electrical tape. But again, instead of there being adhesive on it, it's like shrink wrap ... stretch wrap. It's sticking to itself, and so you can use it, and you ... With a number of turns and adhering to itself, it's basically un-removable in terms of ... unless you peel it back and go. You can even get versions of it where it's a little stretchy like stretch, and so it compresses very, very hard, very firm around whatever you're doing. You can use it for even ... It's very popular in marine settings where the salt water stuff might ... or even the water itself might corrode. The adhesive here, it's impervious to that, and so they use it for fixing hoses, wrapping stuff. It's like a duct tape that doesn't have its own adhesive.

Mark: It's cool. Yeah, I'm just looking, but it says you can instantly repair leaks on plumbing and hoses, make underwater repairs, use it on electrical wiring or a shrink wrap, and even use ... make an emergency fan belt, fan belt, O-ring gasket. That's pretty cool stuff.

Kevin: Yeah, yeah, yeah.

Gareth: Yeah, that's great. Speaking of tape, one other great tip that Jimmy has, if you want to lower the adhesive quality of a tape that has high adhesive quality, he just puts it on his t-shirt, and then depending on how much adhesive quality he's looking for, he just tap it a bunch of times. Yeah. Just the cotton that sticks to it reduces the adhesive quality, which I think is a cool on-the-fly hack.

Kevin: Yeah, yeah. Yeah. I also highly recommend his series of tips around different themes like drilling, or gluing, or tape. They're marvelous little videos and highly recommended.

Gareth: Yeah, yeah. They're called "Jimmy ..." I can't remember what the series is called. Yeah. I thinks it's "Jimmy Tips." Yeah. It's really, really great.

Kevin: Yeah.

Gareth: Yeah. Do you guys have other favorite tips?

Kevin: I have a tip that I think is really useful in a broad way, and that is something that I've been doing in the last ... I don't know, 5 years or so, which is if you're going to purchase something, you ... before you purchase it, get and download the user ... the owner manual. Look at the manual, the user manual that normally come with the purchase of something you're buying, particularly if it's a complicated device. But even if it's simple, get the official PDF from a site and look at it because it gives you the true dimensions. It gives you the true capabilities. It gives you all the caveats that you would hope would be disclosed beforehand, but aren't usually.

It used to be that you can only get that after you purchased it. It would be in the box, but now, you can get it before, and it saves so many headaches because you think, "This

thing is going to do what I wanted to do,” but when you get it, you realize, “No, it doesn’t.” The plug is angled instead of straight, or there’s a thousand little things that you assume would be true about this product, but once you get the user manual ... the owner manual, you can actually see and get like the actual dimensions for a refrigerator or things like that, which don’t appear on any website. I found that getting and downloading [what the use is 00:20:59] is really the ... often the first step before you hit the “Buy” button.

Gareth: Right. Yeah. That’s really good. Yeah.

Mark: [Crosstalk 00:21:04]. My tip is probably one that a lot of people know already, but I have a drill press that has a chuck key that’s not attached by a chain or anything, so it’s really easy to lose, so I’ve just taken a neodymium magnet and stuck it to the drill press body, and then I just put the chuck key on that, and so then I never lose it. I’m surprised it didn’t come with a clip or something. Maybe some do, but this way, I always know where it is, and I never lose it. Now, it’s just become a habit to stick it on there.

Gareth: Right. Yeah, and I also have a tip in the book of ... and I can’t remember. I think it’s like a key. It’s like a retractable wire. It’s a little one of those little ... it’s like a spool, and so you put the chuck on that. You put that on the side of your drill press, and so you don’t actually have to remove it. You just grab the chuck, and it reels out. You make your adjustment, and then let go, and it goes back, so that’s ...

Mark: That’s even better because then, you have no choice. You’ll never going to lose it.

Gareth: Yeah. You’ll never going to lose it. Exactly.

Kevin: Just like for a long time, everybody was losing their gas caps on their cars until they realized, “Oh, you just put a little rubber thing on it.” It’s like, “How can this take 10 years, or 20 years, or whatever to figure that out?”

Gareth: You leave it on the top of your car. Drive off with it.

Kevin: Yeah. You just connect it there, and then you can’t lose it.

Mark: Yeah. I want to do that with the scissors I keep in my desk drawer because my wife and kids take them, and then it takes forever to track it down, but I like that idea of that kind of retractable thing.

Kevin: Yeah, yeah.

Gareth: Yeah.

Kevin: This is actually a tip I got from [Madame Sandwich 00:22:41], which is true, which is you want to reserve a scissors for cloth and never use it for anything but cloth. If you have

scissors that you use for sewing and cutting cloth, you don't cut anything else except cloth with it because it really ... cutting any stuff with it really dulls it really quickly, and you want to have this really sharp, so you have cloth or sewing-dedicated scissors that are used for nothing else. Actually, I put a little red ribbon on one just to indicate that this is like only for sewing.

Gareth: Right. Yeah, that's good. Definitely.

Kevin: Another tip which I got from ... You asked for tales. This was from Joshua Schachter, the guy who started Delicious. He told me about this, which I've used a lot. If you forget or lose an adaptor like an iPhone charger or something and you're traveling, go to the front desk of a hotel and ask to borrow one because they have like a gazillion of them that people have left.

Gareth: Yes. No. Yeah, that's ...

Mark: Yeah, that's a really good one.

Kevin: Just go there, and you could even take it. You could even claim it.

Gareth: Right. I don't think they'll miss it.

Mark: Yeah. No.

Kevin: You just go and say, "I need an ..." Whatever it is, they've got it because somebody has left it behind.

Gareth: Yeah. I just left one in my hotel room at Maker Faire.

Mark: Like a community resource.

Kevin: Right. Exactly. Right. Yeah. Just lost and found will have what you need.

Mark: Speaking of Joshua, he gave me a great tip that again, it's something that's like blindingly obvious once you know it, but I did not know it. Whenever I used to rent a rental car and was time to fill it up with gas, it's a 50-50 chance pulling out to the gas pump whether or not the inlet valve for the gas is on the left or the right of the car, and so you can find out where the fill valve is if you just look at the speedometer. You look at the gas gauge. There's a little picture of a gas pump with an arrow.

Kevin: Yeah. I didn't know that until recently either.

Gareth: Yeah, same. I just found out ...

Mark: It's awesome, isn't it?

Gareth: Yeah, yeah. I just found out within the last year or two. That's funny.

Kevin: Yeah, yeah. I wonder if they just started doing it last year.

Gareth: Yeah, right.

Mark: Yeah. I think it's a fairly recent thing, but thank you, Joshua, for that tip too.

Kevin: Yeah, yeah.

Gareth: Yeah, I know. That's really good.

Mark: We got to get him on the show actually.

Kevin: That's great. Yeah, that's a good idea.

Gareth: Yeah. This whole idea of the stories behind tips, one of the inspirations for doing this book was I used to do a toolbox column on MAKE years ago, and I did a piece called "The Homeliest Tool in the Shed," and the idea was to try to find those kind of tools that are just so homely, so common, so everyday that they're ... basically, they disappear, so like an ice pick, or scissors, or ... but this guy sent me this really beautiful, and I put it up on the document, the show document, and we'll put it up on the notes.

He sent me a hammer that his great grandfather had used ... that his grandfather had used during the World War 2. His parents were taken to ... his grandparents were taken to a Siberian concentration camp or a work camp, and he used a piece of brass stock as a hammer. He had a job in a shop of some sort. He was a tool smith and a tinker, so they put him to work in the shop, and he used this piece of a bar stock just as a hammer. Over the time, the ends of the hammer mushroomed. The ends of the bar stock mushroomed.

When he moved to the States and he became a lamp maker, for his whole life, he was a lamp maker, he continued to use that as his hammer because he just gotten so used to that, and so he would use the bar stock until the mushrooms on the ends became so large that he would then retire that one, grab another piece of bar stock, and start all over again, so when his grandson ... When he died, his grandson inherited the last hammer that his grandfather has, and he still has it and still uses it, and it's just such a beautiful sort of wabi-sabi or whatever. It looked so beautiful with the use, and stuff, and the fact that it's got these mushroom ends on it. It's just such a beautiful piece, and so ...

Mark: It looks like an espresso tamper.

Gareth: Yes, it does. Exactly.

Mark: That's what I thought it was. It's amazing, and it looks like it has a "Jen" carved into it.

Gareth: Yeah, like someone's name.

Mark: Yeah.

Gareth: Yeah. It looks like "Jen." Yeah.

Mark: That's really nice looking.

Gareth: Anyway, I loved that so much. I thought that was a perfect addition to this piece, and that inspired me. One of the inspirations for this book was that because I just think it's such a cool piece. Now, when you guys were growing up, did your dad, or parents, or whatever, did they share tool tips with you that you guys still remember?

Kevin: No. My dad had lots of tools, but he wasn't ... He tried to be handy, but he didn't ... He was making stuff up as he went along. Let me put that way, and he was learning himself, so he didn't ... His father died when he was young, so there wasn't any kind of transmission of ancient wisdom, tool wisdom. Yeah. I wish there was more of that, but we didn't have that.

Gareth: How about you, Mark?

Mark: My dad was really handy, but I wasn't paying attention.

Gareth: That's me. I don't really have that many of me. My dad probably would've loved to have shared them, but I couldn't concentrate well. [It was the education 00:28:56].

Mark: Yeah. I feel bad now. I try to learn from him now because he's still does incredible stuff at home, and he's been ... He does also ... He makes really beautiful stained glass lamps and stained glass windows. He's done ... made nice leather vests and stuff... He's' very handy, but yeah.

Gareth: Yeah. My dad is the same. He was a contractor, and so he's got a little shop in his barn, and so yeah. He makes all kinds of stuff for my mom [or now 00:29:22].

Mark: Gareth, I just wanted to let folks know that they can read your blogposts just by going to makezine.com and clicking this "Stories" link. Also, and I'll have this on the show notes, you can go to makezine.com/tags/tips, and you can see all of your different tip articles. Gareth, thanks a lot. This has been a lot of fun. You can get our show notes just by going to cool-tools.org, and you can get links on the things that Gareth has talked about. Gareth, thank you so much. This has been fun catching up with you.

Gareth: Always my pleasure.

Kevin: Yeah. Thanks. Really great.

Gareth: I love you guys.