

## SISYPHUS: THE KINETIC ART TABLE

[17 Comments](#)

Posted by **Courtney Lentz**  
*Outreach Manager*

21st Oct 2016 at 12:32 pm

Surely if he had been given the opportunity, Sisyphus would have engineered a way out of his eternal punishment of rolling a boulder up a hill. It's just too bad for him that Raspberry Pi wasn't around to help. While it's a far cry from his arduous task, the Pi has been used to power Bruce Shapiro's [Sisyphus](#), a continuous and ever-changing kinetic art piece that creates unique design patterns in sand using a small metal ball.



Sisyphus is truly mesmerising. We learned this first-hand: at [Maker Faire New York](#) earlier this month, it captured the attention of not only the Raspberry Pi crew, but also thousands of attendees throughout the weekend. Sisyphus momentarily drowned out the noise and action of the Faire.

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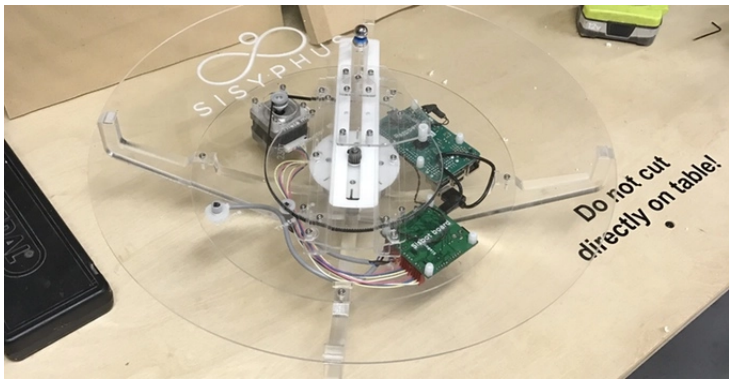
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AUTOCOMPLETE POETRY

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You can think of Sisyphus as a cross between an Etch A Sketch and Spirograph, except this is no toy.

Under the table is a two-motor robot (the "Sisbot") that moves a magnet which draws a steel ball through the sand. The motors are controlled by a small Raspberry Pi computer which plays a set of path files, much like a music player plays an MP3 file.



Bruce is using [Kickstarter](#) in the hope of transitioning Sisyphus from what's currently a large art installation exhibited around the world into a beautiful piece to be enjoyed in the home, as both furniture and art.

TWITTER AMPTMN



**AnnMarie Thomas**  
@amptMN

Sisyphus- Stunning art/furniture kickstarter (fully funded in <a day) by friend Bruce Shapiro. [kck.st/2cTGS40](https://www.kickstarter.com/projects/1234567890/sisyphus)

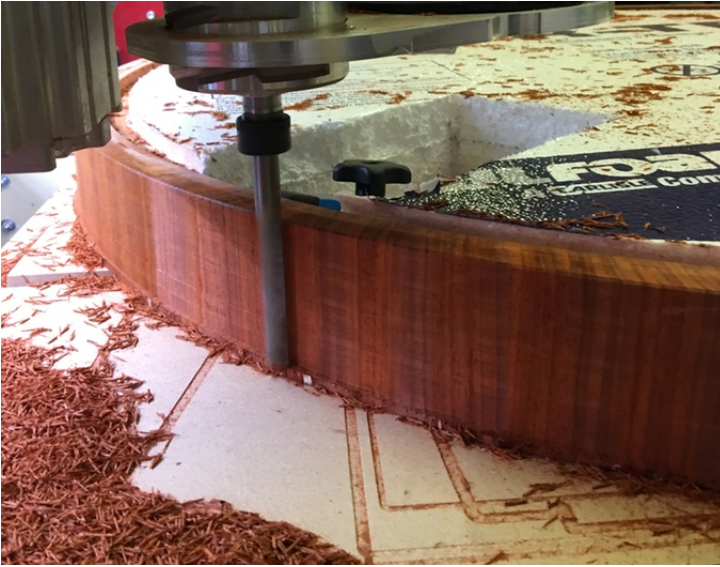
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Bruce says:

Of all works I made, Sisyphus stood out – it was my first CNC machine to break out of the studio/shop. No longer tasked with cutting materials to be used in making sculptures, it was the sculpture itself. It was also unique in another way – I wanted to live with it in my home. I've spent the last three years perfecting a home version that's beautiful, user-friendly, near-silent, and that will run for years.

Like most great Maker Faire projects, it's centred around a wonderful community. The collaboration and access to tools in Shapiro's local makerspace helped develop the final design seen today. While Shapiro's original makerspace has since closed its doors, Shapiro and his fellow members opened up what is now [Northeast Makers](#). It's where the production for Sisyphus will take place.



The Kickstarter products come in three styles: an end table, and two different coffee tables. You might want to find another place to display your coffee table books, though, so as to keep Sisyphus's designs visible...



This Kickstarter won't be running forever, so be sure to pledge if you love the sound of the Sisyphus.

## 17 comments



Phil Atkin says:

21st Oct 2016 at 1:37 pm

Now THAT is beautiful. Very, very nice work.



ukscone says:

21st Oct 2016 at 2:25 pm

my son and I spent hours standing there watching it. we'd watch for about 20 minutes then go off to look at other things but were always drawn back to give it another 20 minute watch. whenever i needed to find him i'd just go to watch it for a while and he'd turn up. it was probably our favourite thing at makerfaire



Alan Mc (Irish Framboise) says:

21st Oct 2016 at 9:34 pm

Sounds like the magnet in the Sisyphus was working on you both too! Are you sure you haven't any metal parts, Russ'? ;oD \*Imagines giant UKScone Sisyphus system working under a beach\*

It looks so amazing online, I can only imagine in real life it's all the more mesmerizing. It's a kind of magic!



Jon Lunn says:

21st Oct 2016 at 3:14 pm

That is amazeballs! (no pun intended), what a elegant combination of art and technology



AndrewS says:

21st Oct 2016 at 5:20 pm

With so many backers, looks like Bruce is going to be busy for a while!  
Visually stunning.



Courtney Lentz says:

21st Oct 2016 at 8:30 pm

indeed!



Norman Perry says:

21st Oct 2016 at 8:19 pm

Oh my!! Whenever you think that the Pi can't produce any more surprises it does! I am almost afraid to find out what someone will come up with next. Pi + imagination = excitement!



kkie says:

22nd Oct 2016 at 12:03 am

I'm sorry but this isn't original. I've seen this over a decade ago at the Kavli Institute for Theoretical Physics (KITP) "Jean-Pierre Hébert, Ulysses, Sand installation, (David Bothman & Victor Dinovi, collaborators)". The similarity between these pieces makes me want to raise the plagiarism warning flag.



Liz Upton says:

22nd Oct 2016 at 10:57 am

I really don't think there's a law out there saying that a medium's only available to the artist who first made something using it, or that an idea in art is something you own. All those naked marble Romans would have been bristling with lawsuits otherwise. (Renoir: "What do you mean, this Vetricano guy wants to depict umbrellas in paint on canvas? I was there first! I want to raise the plagiarism warning flag!")



AndrewS says:

22nd Oct 2016 at 3:33 pm

Who has the patent for oil-paint on canvas?



John Fisher (tenochtitlanuk) says:

23rd Oct 2016 at 11:29 pm

From Bruce's blog-  
<<>>

...so I suspect he was first with the idea.

I'm still surprised to see so few eggbots in the UK- Two steppers, a few bits and pieces, an EiBptBoard, and a Pi running InkScape....



John Fisher (tenochtitlanuk) says:

24th Oct 2016 at 11:49 am

Sorry, my quote was escaped )?) by the less-than/greater than symbols.  
His blog says ( June 24, 2015)  
I've been working on Sisyphus for quite a while now (17 years, though not continuously).



richfiles says:

27th Oct 2016 at 8:09 am

I would certainly expect you've seen similar things a decade ago. Indeed, the idea is not new. I know Bruce (met him through the Twin Cities Robotics Group), and I've always enjoyed his Sisyphus II installation at the Science Museum of Minnesota. It's been there since 1999. Bruce did his first in 1998, as an X-Y platform. The one at the Science Museum of Minnesota was his first to use a polar based system as opposed to the earlier model's cartesian system. it's 5 feet in diameter.

It really is a joy to watch!



richfiles says:

27th Oct 2016 at 8:16 am

Oh wow... I really ought to have read Bruce's site better myself. I'd missed the name... I'd recommend you find Bruce's site and read it as well before flinging "plagiarism" accusations. >\_>

From Bruce's site:

"During the spring of 1998, as part of a collaboration with Jean-Pierre Hebert called "Ho," the idea for sand plotting emerged from our numerous experiments with motion control. Watching the sand paths being slowly and methodically created, only to be erased and redone, I was reminded of the myth of Sisyphus, a man condemned to forever roll a boulder up a hill only to find the next day that it had rolled back to the start. I designed and built two first-generation machines, giving one to Jean-Pierre as a gift."



Harry says:

24th Oct 2016 at 10:51 am

I wonder if the one at Questacon in Canberra Australia is also controlled by Raspberry Pi.



Andrew says:

24th Oct 2016 at 5:26 pm

Awesome. I think that raspberry pi should show us how to make a mini one.



tesla says:

29th Oct 2016 at 8:55 am

I like this project!

Comments are closed.

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