



Watch A 170-Year-Old Sofa Balance On One Leg

OPTICAL ILLUSION? NOT A CHANCE. THIS ANTIQUE SOFA HAS BEEN LOADED WITH SATELLITE GUTS TO STAY EERILY ON POINT, THOUGH IT HAS FALLEN MORE THAN ONCE.

0 1 1 95 5

NOTES PLUS TWEET LIKE

|

SHARE

There are scenes that the Internet simply cannot do justice, and this is one of them. Because a five-inch video on your screen cannot capture the effect of walking into a silent, empty room and seeing an antique sofa balanced on one leg like a lost scene from *The Shining*.

Jeepers!

This video can't be played with your current setup.
Please switch to a browser that provides native H.264 support or install [Adobe Flash Player](#).



Balance from Within is a haunting, robotic sculpture by Miami University, Ohio, assistant professor Jacob Tonski. While you may expect it to be an optical illusion, held upright by fishing wire, the sofa has actually been retrofitted like a robot to pull off this stunt. At its heart is a reaction wheel--the same counterbalancing mechanism used to rotate rockets and satellites. So you can even push the sofa--just a bit--and watch as it rights itself.

"I was wondering if it's possible for anything to balance on a rigid fixed point," Tonski tells Co.Design. "It was both an existential and an engineering question. We stand still on our feet, but we're never actually still. How does that work?"



Tonski learned quite a bit about how that balancing act works. In fact, while he was able to balance the couch on one leg, that wasn't

enough. He wanted the seat to convey fragility as much as possible, to convince the audience that it could topple over at any second. So even though it's hard to see in the video, the sofa actually rocks a bit back and forth, "like a drunk standing still."

"The threat of something slightly larger than you rocking back and forth as if it might fall has a visceral threat quality which I connect with vulnerability in relationships," Tonksi explains. "But I think the most memorable encounters had are by the handful of anonymous people who pushed it out of curiosity and it fell down and exploded in front of them, smack in the middle of an exhibition. I like to imagine someone doing that to, say, a marble bust in an art museum."

Of course, Tonski can only enjoy seeing his artwork be trashed because he designed it to break. The whole sculpture actually reassembles easily through integrated magnets. But there's no reason that a hands-happy visitor needs to know that.

[See more here.](#)

[Hat tip: [Creative Applications](#)]

This project was made possible by the Frank-Ratchye [Studio for Creative Inquiry](#) at Carnegie Mellon University and the Miami University School of Creative Arts.

0

NOTES

|

PLUS

19

TWEET

55

LIKE

|

SHARE



M A R K W I L S O N

Mark Wilson is a writer who started Philanthroper.com, a simple way to give back every day. [Continued](#)