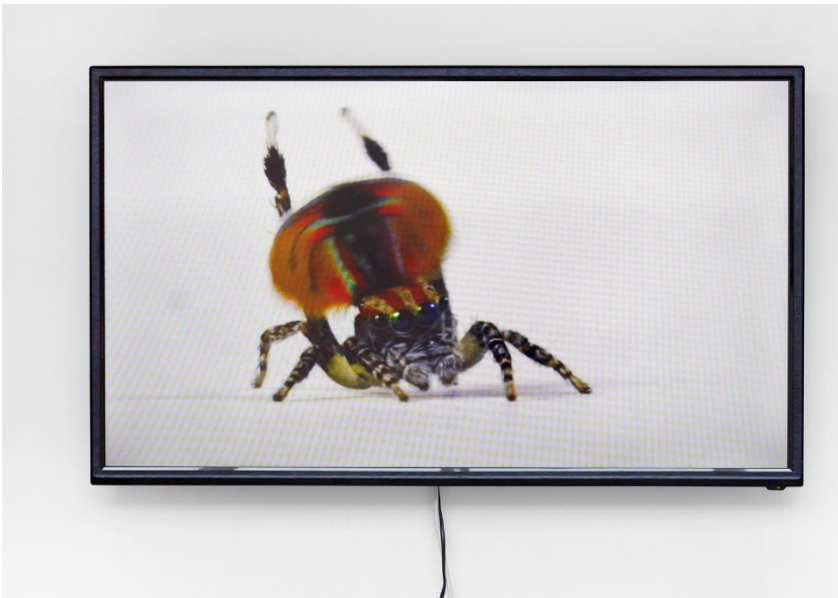


**Artist:** Maria Fernanda Cardoso

**Exhibition:** Seeing Science

In *On the Origins of Art I & II*, 2016 Maria Fernanda Cardoso focuses on the small Australian peacock spider species, the Maratus. Cardoso has captured visual and auditory proof of the 3-4mm-long spiders' dance and subsonic vibrations, inaudible to the human ear but revealed to us through the use of laser vibrometer technologies to reveal a music-like beat. Using large-scale, multi-screen HD Projections, Cardoso has created a video art installation featuring the different mating dances and looks of several of the Maratus species. The work was developed through an Australian Council Fellowship grant awarded for her exploration and experimentation in a cross-disciplinary approach through the blending of art and science.



*Video stills*

*On the Origins of Art I & II*, 2016, single channel HD video, hyper realistic sound with tactile dimension running time: 7 mins



*Actual II*, 2015 pigment print on premium paper 300gsm 152.40cm x 154.40cm x 5.70cm, edition 7 Digital imaging in collaboration with Geoff Thompson and Andy Wang, Queensland Museum. © Maria Fernanda Cardoso

**We need art but what for?**

Why artists do what they do, why we find it beautiful (or not), and why we care about art can be explained on a personal, social, and economic level.

Art also has a basis in biology. It is adaptive, something that helps humans, animals and plants to survive and procreate passing on genes to future generations.

In 'Origins of Species' Charles Darwin asks '*Is art a heritable trait that enhanced the reproductive rate of our ancestors?*'

Darwin claims art is a by-product, a side effect of other adaptations, such as the desire to obtain status and sexual selection. The "powers of discrimination and taste on the part of the female" when choosing a mate must also be considered.

You need to watch the videos *On the Origins of Art* at:

<https://mariafernandacardoso.com/d/projects/on-the-origins-of-art-videos/>

Artist **MARIA FERNANDA CARDOSO** uses unconventional materials and animals as inspiration.

In this series, we witness the performance by the male Australian jumping spider known as "Peacock Spider" to attract a female partner.

Listen to the sounds then describe what you hear

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Why is sound important to the artwork?

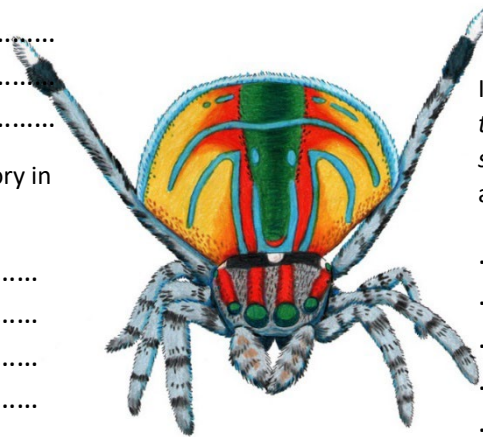
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What references are there to Darwin's theory in the work?

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How does the male spider attract the female?

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Is Darwin's claim '*art is a by-product to obtain status and sexual selection*', supported by the artwork?

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Dr Jurgen Otto discovered the 4mm Peacock spiders while bushwalking in Sydney and filmed their incredible mating display.

<http://www.abc.net.au/news/science/2015-12-02/male-peacock-spiders-must-work-hard-to-win-the-ladies/6991106>

<http://www.abc.net.au/news/2017-09-06/peacock-spiders-scientist-finds-five-more-species-in-wa/8870456>