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Ebru Kurbak. 2023. Reinventing the Spindle: Politics of Craft in Space. In *Proceedings of SIGGRAPH '23 Art Gallery*. ACM, New York, NY, USA, 2 pages. https://doi.org/10.1145/3588428.3593828

Reinventing the Spindle:

Politics of Craft in Space

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1 PROJECT URL

https://ebrukurbak.net/reinventing-the-spindle/

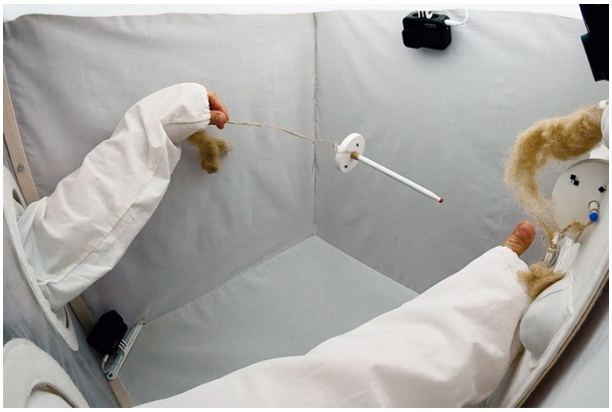

Figure 1: Hand-spinning in weightlessness. Photograph by Ebru Kurbak.

2 DESCRIPTION OF ARTWORK

Reinventing the Spindle is a research-based art project that explores textile crafting in microgravity environments. The project aims to open a broader conversation about the ramifications of near-space exploration and the politics of science and technology research in general.

Over the past two decades, influential actions have taken place in Earth's orbit that will continue to shape the future of our planet. NASA's recent announcement to open the ISS to commercial ventures, claiming that its research is complete and new opportunities are needed, has further increased the market-driven focus in Low Earth Orbit (LEO) [1]. Soon, we may find it difficult to imagine alternatives to our planetary skies other than another polluting marketplace. Reinventing the Spindle highlights weightlessness as a shared commodity and commons and draws attention to the vast amount of untapped knowledge and potential experiments that have yet to be conducted.

The project builds on the fact that flax (Linum usitatissimum) was one of the first plants to be grown in space, on Salyut 1 in 1971. However, no research documentation on spinning in microgravity has been found, while other mainstream "making in space" experiments, such as welding [2], soldering [3], glass forming [4], and even 3D printing [5] in space, have a long history and have generated new fundamental knowledge in many fields. Inspired by this observation, Reinventing the Spindle opens up "gravitational craft" research as a new imaginary by bringing ancient textile craft knowledge, strongly associated with indigenous, nomadic, and women's cultures, into contemporary space research environments. It invites us to rethink whose curiosity has been satisfied and whose knowledge has been marginalized.

The first experiments of the project were carried out on a parabolic flight, during which the artist experimented with hand-spinning flax yarn and explored the possibilities of knotting and netting with a tatting shuttle and lace bobbins. The goal of this initial experiment was to acclimate to working with fibrous materials and the hands in weightlessness

towards inventing new techniques that are indigenous to zero gravity. The art installation presents the first yarn ever spun in weightlessness and a spatial augmented reality reenactment of the artist's experience during the experiments.

Reinventing the Spindle invites its audience to question the technocratic mindset that assumes the latest technology is always the best and the colonial instinct to import not only the latest technologies but also the necessary massive infrastructures into new spaces. As archaeologist Elisabeth Wayland Barber points out, acquisitiveness is a settlers' concept [2]. She reminds us of prehistoric and nomadic philosophies of making, which involve tuning into new environments, making only as much as needed, by using the very local environmental forces. This philosophy is at the heart of Reinventing the Spindle, a performance of research in microgravity. The project seeks an alternative approach that recognizes the value of paying attention, listening, and tuning in when confronted with a new problem, new conditions, or new space. Crafting from scratch in the first person in uncharted territories initiates processes of unlearning that could inspire alternative ways of understanding and knowing, on Earth or beyond.

Figure 2: The artist experimenting on the parabolic flight. Photograph by Steve Boxall / Zero-G / MIT SEI.

Figure 3: A collection of spindle whorls that were used in preparation for the parabolic flight. Some of the whorls seen here are replicas of prehistoric spindle whorls that date back about 7000 years. Photograph by Ebru Kurbak.

3 ARTIST INFORMATION

Ebru Kurbak is an artist and researcher born in Izmir, Turkey and based in Vienna, Austria. Her practice explores the entanglements between art, technology, culture, and politics, with a focus on uncovering hidden values and ideologies in science and technology research. Ebru currently is Senior Research Fellow at the University of Applied Arts Vienna and runs the arts-based research project titled "The Museum of Lost Technology" (2020 – 2024) funded by the Austrian Science Fund. She previously was PI of the arts-based research project titled "Stitching Worlds" (2014 – 2018) and Visiting Professor at the University of Applied Arts Vienna (2020 – 2022). She also taught at the Departments of Visual Communication Design and Photography and Video at the Istanbul Bilgi University (2003 – 2006) and the Department of Space and Design Strategies at the University of Art and Design Linz (2006 – 2014). Ebru carried out artistic residencies at La Gaîté Lyrique (FR), V2_Institute for Unstable Media (NL), LABoral Cultural Center (SP), and EYEBEAM (US), and has exhibited at international platforms including the MAK – Museum of Applied Arts Vienna (AT), Ars Electronica Festival (AT), ZKM (DE), Siggraph (US), Microwave Festival (Hong Kong), Istanbul Design Biennial (TR), and Piksel Festival (NO), among others. Ebru was awarded the LACMA Art + Technology Grant by the Los Angeles County Museum of Arts in 2019.

ACKNOWLEDGMENTS

This work has received funding from the LACMA Art + Technology Lab and the Austrian Science Fund (FWF): V-795. The parabolic flight experiment was hosted in-kind by the MIT Space Exploration Initiative (MIT SEI) on the flight organized by the MIT SEI and operated by ZERO-G. The project was provided with a studio space by the Media Design Practices Department at the ArtCenter College of Design during the residency in Pasadena, California. I would like to thank Joel Ferree (Program Director, LACMA Art + Technology Lab), Ariel Ekblaw (Founder and Director, MIT SEI), Xin Liu (Arts Curator, MIT SEI) and Sean Auffinger (Mission Integrator, MIT SEI) for their support in making the experiments possible. Special thanks to computer scientist Markus Murschitz for his valuable advice on camera and computer vision solutions, Professor Dr. Arif Kurbak for his expertise in statics and structural analysis of the experiment setup, and Karin Altmann and Christiane Seufferlein for their advice on hand-spinning. I would also like to thank Jona Hoier for his production support and to Ula Reutina, Albane Kerisit and Arianna Cano for their assistance.

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