

HOSOO Research & Development Project ver.1

“Quasicrystal – in search of textiles through code”

24 October 2020 to 13 February 2021

HOSOO Co., Ltd. has formed Hosoo Studies, a R&D department that conducts multifaceted projects with a modern perspective based on the continuous “relationship between human beings and textiles” since ancient times.

Hosoo Studies draws upon Hosoo’s cultivated network of dyeing and weaving artists, producers, intellectuals, specialists, creators, interviews and research with related groups, and Hosoo’s unique pioneering textile development at its atelier, which aims to expand the field of research towards the question of, “What is beauty?”

We are proud to showcase the outcomes for the first Hosoo Studies R&D project *Quasicrystal – in search of textiles through code* exhibition at Hosoo Gallery.

Since 2017, Hosoo together with artist and programmer Ken Furudate have been working on R&D projects that focus on structures, a fundamental component of textiles. In 2019, Shoya Dozono, Tatsuki Hayama and Norimichi Hirakawa joined the project team and over the course of four workovers at Hosoo’s atelier, applied their experiences and computations in art, design, and mathematics towards the development of new textile structures.

The theme and name of this project is *Quasicrystal*, which refers to a crystal structure that has non-periodical repetitions. Traditionally, woven textiles are composed of repetitive structures. Nishijin textiles, like other textiles, are mainly comprised of the three fundamental types of weaving structures: the plain weave; the twill weave; and the satin weave. With modifications to the weaving structures, sophisticated patterns, textures, and crystal like structures can be expressed. With the three fundamental types of weaving structures as the foundation, craftsmen have cultivated and inherited valuable experiences on weaving structures over generations. Based on computer programming, this project generates a new system of production methods reflective of quasicrystals that differ from the historically method for weaving structures.

Drawing upon the Nishijin textile DNA inherited by Hosoo craftsmen that have been pursuing beauty for over 1200 years and the materials unique to Nishijin textiles, this exceptional Hosoo process together with the four members of the project team’s new weaving structure technology has led to the creation of completely new textiles that embodies ubiquitous beauty.

The results of this project are showcased in this exhibition.

Quasicrystal – in search of textiles through code exhibition

Dates: 24 October 2020–13 February 2021

Venue: Hosoo Gallery

Hosoo Flagship Store 2nd Floor

412 Kakimoto-cho Nakagyo-ku Kyoto 604-8173

Tel: +81 (0)75-221-8888

Hours: 10:30–18:00 (Admissions close 15 minutes prior to closing time)

Closed on Sundays, Holidays and the New Year. Admission is Free.

Participated Artists: Ken Furudate, Shoya Dozono, Tatsuki Hayama, Norimichi Hirakawa

Hosted by: HOSOO Co., Ltd. Graphic Design: Akihiro Morita Photography: HIJIKI

Direction: Masataka Hosoo Curation: Kumiko Idaka

Ken Furudate Artist/Musician/Engineer

Born in 1981. His sound installation *Pulses/Grains/Phase/Moiré* received several awards, including Japan Media Arts Festival grand prize (2019). His project, *The Sine Wave Orchestra*, received honorary mentions at the Prix Ars Electronica (2014, 2019), CYNETART AWARD (2018), and the Japan Media Arts Festival jury selection prize (2017). As a musician, he has performed at many music festivals, such as MUTEK.JP (2019). He has also been involved in works with various artists such as Shiro Takatani and Ryuichi Sakamoto. He has been a member of Dumb Type since 2014.

Shoya Dozono Designer

Born in 1988. He currently works at Qosmo Inc. With his application of computational design methods, he has collaborated across various areas in research and production of graphics, video, and the web. His works include video programming for Hiroaki Umeda's dance installation and collaboration with Koji Hashimoto of Osaka University on multidimensional visualization. He has also won several awards that include awards from Prix Ars Electronica and the Japan Media Arts Festival.

Tatsuki Hayama Mathematician

Born in 1982. He is currently an associate professor of Senshu University. He received his Ph.D. (Science) in 2010 from Osaka University. His research interests are in complex geometry, computer graphics and digital fabrication. From 2010 to 2015, he had been a postdoctoral researcher at the University of Paris, National Taiwan University, and Tsinghua University. His book *Generative Art with Mathematics* was published in 2019 (available in Japanese via Gijutsu-Hyohron Co., Ltd.).

Norimichi Hirakawa Artist

Born in 1982. His interest lies in the most primitive of technologies, calculation. His work is focused on installations that use either mathematical processing itself as conducted through computer programming or the results of that processing. In 2016, he began creating the series *datum* at a residency at The Kavli Institute for the Physics and Mathematics of the Universe (Kavli IPMU), and *datum* was shown at the several exhibitions. In 2017, he created one of the works in that series through a residency at the ALMA telescope, showed the latest version of *datum* at Roppongi crossing 2019.

HOSOO Co., Ltd.

Hosoo was founded in 1688 in the Nishijin district of Kyoto, Japan to serve patrons from the main temples. With a history of more than 1,200 years, Nishijin textiles, a pre-dyed yarn textile of Kyoto, have been admired and cherished by the aristocracy, samurai class, and affluent members of society. Currently, utilizing the traditional Nishijin weaving techniques used for making kimono and obi-belts, unique textiles with a sense of timeless design and innovation continues to expand in Japan and the overseas luxury markets. www.hosoo.co.jp







