



hochschule für gestaltung
offenbach am main

schlossstraße 31
63065 offenbach am main
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www.hfg-offenbach.de

Hochschule für Gestaltung (HfG) Offenbach

Hochschule für Gestaltung (HfG) Offenbach is the Hessen State University of Art and Design. Its tradition dates back to 1832, when it was founded as a crafts school.

Soon after, it became a school of arts and crafts, where crafts, artistic and theoretical subjects were taught simultaneously. In 1970 it was transformed into a higher education establishment with university status.

With reference to the training and research models of the Bauhaus and the Hochschule für Gestaltung Ulm, the HfG Offenbach practices future-oriented teaching based to a large extent on individual one-on-one supervision and mentorship. The perspectives in the two departments of art and design are diverse. Burning social issues have their place, as do discussions on the theory of science.

In addition to the bachelor's and master's degree programs, graduates from the fields of art, design, media, or related sciences are offered the doctoral degree of Dr. phil. (PhD).

The HfG Offenbach considers it its duty to provide society with impulses from art and design. To this end, it maintains a nationwide and international network of diverse collaborations. In all of this, the HfG is guided by one conviction: that the triad of diversity, sustainability and equality is the key-note of a fairer future.

Institute for Materialdesign IMD
www.imd-materialdesign.com



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Materialdesign

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The Institute for Materialdesign IMD at the Hochschule für Gestaltung in Offenbach is working on the experimental and interdisciplinary intersection of design and materialization. The focus of the work is the role of the material in the design process. Designing appropriate to the material becomes a „design with designed materials“. The new logic of the material often has nothing to do with originally „inherent“ properties. Informed materials change the way design concepts fundamentally. Materials become carriers of a wide variety of information that enter into a dialogue with their environment. They increasingly take on the role of the actual object and become informative and intuitive.

Prof. Dr. Markus Holzbach

is a Professor at the Offenbach University of Art and Design since 2009. There, the qualified architect and materials and process engineer heads the Institute for Materialdesign, orl MD. From 2016–2019, he was dean of the School of Design at HfG Of-fenbach. He is Visiting Professor at the Politecnico di Milano, Italy.



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MA - Between Nature and Craftsmanship

MA, as a collaborative design work between the Institute for Materialdesign IMD at the Offenbach University of Art and Design, and Mazda Motor Corporation, creates an interactive installation reinterpreting the Japanese design philosophy from a European perspective.

The project, presents an understanding of the philosophy of Ma (間, lit. 'gap, space, pause') in Japanese art and craftsmanship, which is a Japanese philosophy referring to the time and space in between. The project emphasises the perception of the gap and interval between nature and craftsmanship.

The team of IMD used the material design approach to understand, interpret, and explore the Japanese craftsmanship in different fields and historical periods, and then integrated these innovative hands-on experimentation results generated in the new context into the concept of the project, creating installation: between two solid black roots, hollow black wooden sheets are lined up, resulting in a structure with smooth and dynamic lines.

The various results of material experimentations were applied to the surface of this holistic structure, formulating in colour gradations and morphological cuts. Inside the structure, sensor controlled light sources let the Object interact with its surroundings.

The final project delivery contains the installation and material samples from experimentations. These samples contain several directions of research and experimentation: Kogin-zashi (こぎん刺し), Yakisugi (焼杉), Katazome (型染め), Sokui (続飯), Tadelakt (タデラクト), Woodcut printing and Gyotaku (木版画 と 魚拓), Papermaché (張り子), Asa no Ha (麻の葉). They demonstrate the feasibility and aesthetic experiences of Japanese craftsmanship in different fields.

In cooperation with Mazda Europe

Project Lead:

IMD Institut for Materialdesign:
Prof. Dr. Markus Holzbach, Dipl.-Des. Valentin Brück, Dr. Ziyu Zhou
Mazda Europe:
Jo Stenuit, Sandra Hoener zu Bentrup

IMD-Team: Sophie Bernauer, Mi Düver, Julia Kulaga, Lennard Ludig,
Dipl. -Des. Florian Hundt

Fotos: Bernd Schuster (Mazda)



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Exhibition Tortona Designweek

April 17 - April 23 2023

10:00 - 19:00

Via Tortona 12

20144 Milano

Opening Evening: April 18, 18:00 - 20:00

Meet-up Event: April 21, 18:00-21:00

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Kogin-zashi

こぎん刺し

Kogin-zashi is one of the techniques of sashiko, or traditional Japanese decorative reinforcement stitching, that originated in the part of present-day Aomori Prefecture controlled by the Tsugaru clan during the Edo period (1603-1867). It is generally constructed of white cotton embroidery in diamond patterns on indigo-dyed fabrics such as cotton, linen, and hemp. During the Edo period, peasants could not afford cotton cloth in the Tsugaru region, so they added cotton thread to linen cloth to bypass these regulations and make clothes warmer and more protective during the harsh winter weather and strengthen the cloth. In this project, Kogin-zashi is researched and experimented with as a traditional embroidery technique, thanks to its historical cultural meanings on sustainability.

Katazome / Sokui

型染め / 続

Katazome is a technique to dye fabrics. First, rice paste is applied to the fabric. It is pressed through a paper stencil. This is also called Katagami (型紙). Afterward, the dye is applied to the fabric. The surface covered with the rice will not absorb any dye, and by washing the fabric, the stencil pattern shows. In this project, rice paste is the main focus. Sticky rice can also be used as a durable glue (Sokui - 糊) and to produce a form of bioplastic. Sticky rice powder was combined with different materials and shaped with different surfaces. This biodegradable material can be easily dyed, while a great variety of shapes and forms are developed by air drying or baking.

Tadelakt

タデラクト

Tadelakt is a mineral waterproof glossy plaster made of shell-limestone (calcium hydroxide), the surface of which is polished with stones. It is traditionally used in Morocco. The processing takes place in two layers, especially on plaster substrates indoors. The circular polishing movements create the surface relief typical of Tadelakt. Treating it with an olive oil soap that reacts with the fresh lime in the Tadelakt makes the surface water-repellent, and additional treatment with wax enhances the shine. Tadelakt is a purely mineral, diffusion-open, odorless, alkaline dry mortar with no plastic content. After treatment with soap and wax, the surface is waterproof, and resistant to algae and mold, but not fat-repellent. Tadelakt will develop wear signs over time in stressed areas, reflecting the material's unique characteristics.

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Papermaché

張り子

Papermaché in Japan is traditionally used for ritual artifacts like the „Daruma doll“ or for child toys, while the paper is used not only for graphical use but also for architecture and Objects like Lampions or Kites. Experiencing and experimenting with the process of paper making and hands-on experiments with papermaché as a sustainable and easy-to-recycle material was the main drive behind this row of experiments.

Woodcut printing and Gyotaku

木版画 と 魚拓

The earliest ukiyo-e prints from the seventeenth century were monochromatic. Called Sumizuri-e („black printed picture“), they were printed only in black ink. Sumizuri-e had its roots in early Japanese woodblock printmaking, which was introduced into Japan from China in the eighth century. In the 1760s, the multicolored ukiyo-e printing technique was developed.

The process yields markedly different results to the western printing technique; by printing with water-based inks combined with Japanese Nori starch paste, the results are subtle and delicate, while Western woodcuts tend to produce bolder results. In addition to the Nori starch paste, oil paint is a common printing medium as well.

Another relief printing technique critical to the Object's results was „Gyotaku“, the traditional Japanese method of printing fish, a practice dating back to the mid-1800s. This form of nature printing was used by fishermen to record their catches and has also become an art form of its own. By using burned wood as a structure with charcoal-colored oil paint and Nuri starch paints, the woodcut-printing techniques is combined with the idea of using natural objects as printing plates.

Asa no Ha

麻の葉

Hemp in Japan has always been considered a vital, robust plant and also has a strong resistance. Following these qualities, the hemp leaf pattern in Japanese culture symbolizes perfect health, healthy growing up and long life. The pattern is based on six diamonds, which are arranged at 30° angles to each other at the center of the circle, and can be constructed infinitely. Here, Asa-No-Ha was further developed by rounding off the basic shapes and reducing or even dissolving the pattern. The further developed pattern was then engraved into a carrier material and thus only visible from one side. By shining light, the engraving is also visible on the reverse side and could be used as shy-tech.

Yakisugi (焼)

In Japan, the method of carbonizing wood under the name of yakisugi has been in use since the 18th century. Traditionally, only Sugi wood, japanese cedar, is used. Yaki means „grilled, charred“. Yakisugi therefor means „charred cedar“. The wood gets its unmistakable appearance, waterproof surface and great durability from the special charring method.



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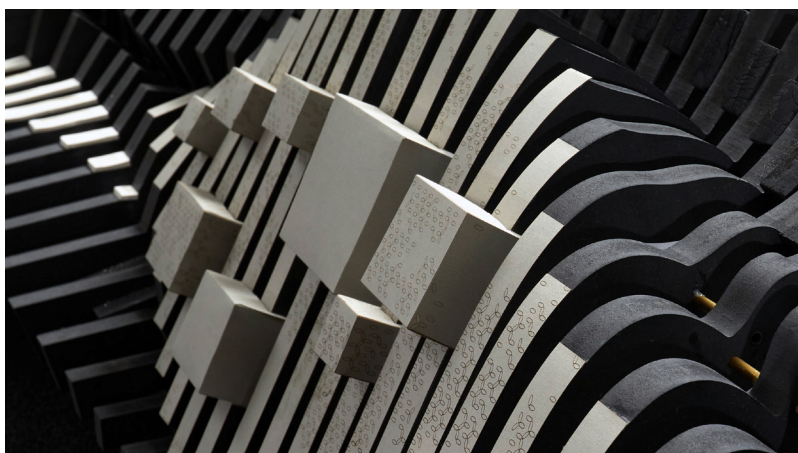
Papermaché

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Kogin-zashi



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Tadelakt



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