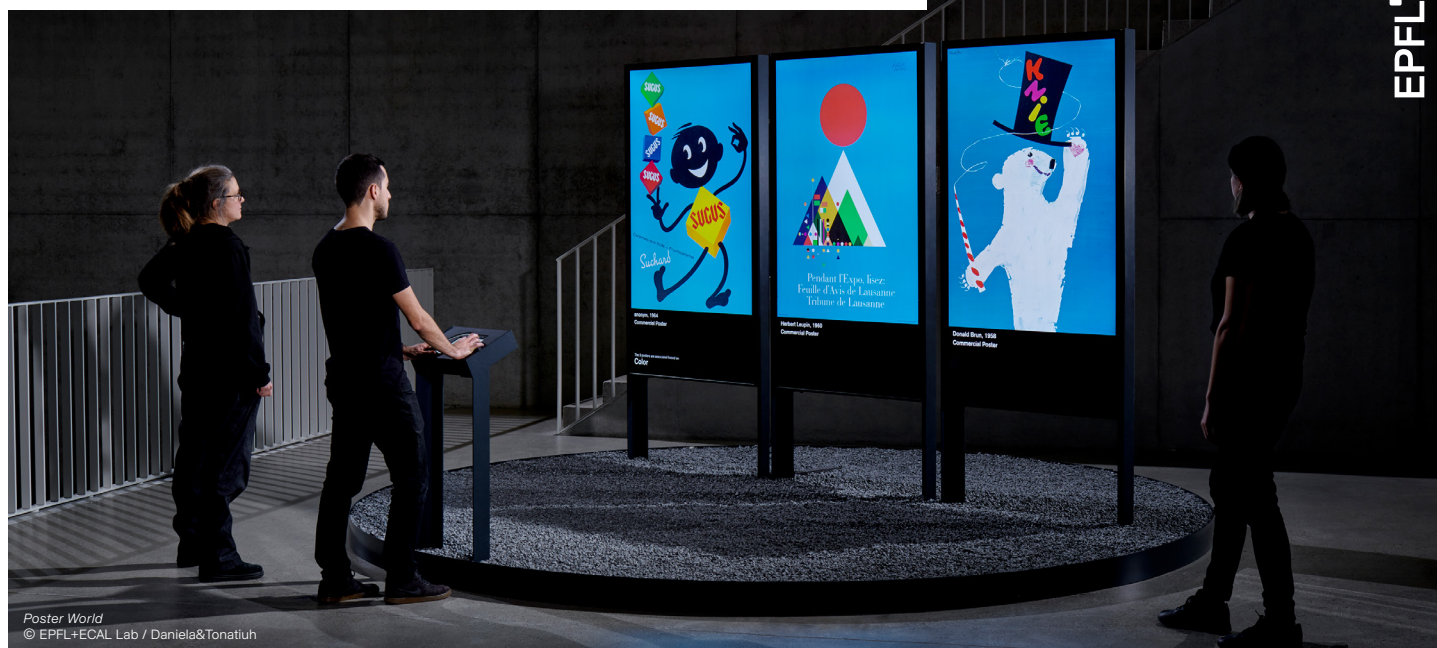


Poster World

Artificial intelligence reveals the richness of Swiss graphic design



Poster World
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The new experimental installation by EPFL+ECAL Lab, the EPFL Design Research Centre, allows everyone to enter the heart of a medium that permeates our daily lives: the poster. For its premiere, to be celebrated on 10 February 2022 at the Museum für Gestaltung Zürich, *Poster World* brings together more than 2,000 posters that celebrate Swissness through Helvetic symbols, products, places, events, themes and graphic art. The Museum's collection is one of the largest in the world. It constitutes a major reflection of our society on essential subjects such as the role of individuals, political language or consumption. Two years of research have made it possible to put artificial intelligence at the service of the cultural approach to reveal the graphic complexity of the posters, where texts and images intertwine. *Poster World* is on view at the Museum für Gestaltung Zürich until 6 June as part of the "Planet Digital" exhibition!

Poster World is a research project carried out by a team of designers, engineers and psychologists from the EPFL+ECAL Lab, in collaboration with several EPFL scientific laboratories. With the posters, it explores how emerging technologies and interaction design can enhance general interest in digitised cultural heritage. The resulting installation reveals to the public, novice and experienced, the main elements of Swiss graphic design, a world-renowned art.

The poster is a fascinating graphic object because of its role in society and the complexity of its composition. Ubiquitous in our daily lives, it must catch our attention and deliver its message in a matter of seconds. It also combines many visual components where text and image mingle closely. A poster's dominant colours,

main composition lines, objects, typography, text positions and contrasts, are just some of the elements that influence its visual impact. With the use of different algorithms, and in particular artificial intelligence, *Poster World* reveals these dimensions to the public, allowing visitors to understand the poster's graphical richness. The installation analyses the posters, extracts data and generates a new representation of the poster that visualises a particular feature.

Going even further, the experimental approach led by the EPFL+ECAL Lab has made it possible to produce trios of posters based on visual similarities. *Poster World* thus brings together similar posters on the basis of a chosen criterion. To confer cultural relevance on these connections, the EPFL teams trained artificial intelligence on associations produced by the museum, especially its books, rather than using the standard data and tools. They then tested the results with both designers and the general public.

The project also had the mission of emphasising the relationship between each poster and the collection. The collection view rearranges according to the selected settings. The system designed by the EPFL+ECAL Lab makes it possible to quickly process other selections made by the curatorial team. With its ability to manage associations among several billion possibilities, *Poster World* does not replace the curation work, but amplifies and complements it, in order to enhance the museum's collection in an unprecedented way.

This approach has been the subject of studies on user perception following research protocols from psychology. The results show how digital technology can lead to

gains in attractiveness and knowledge among the public. And that it is possible, with a single installation, to bring a significant impact to both novice and professional audiences.

ABOUT THE EPFL+ECAL LAB

The EPFL+ECAL Lab is the design research centre of the Ecole polytechnique fédérale de Lausanne, founded in 2007 in collaboration with ECAL/Ecole cantonale d'art de Lausanne. It aims to explore, through design, the potential of emerging technologies and addresses the related challenges by combining artistic creativity, scientific knowledge and the ability to measure user perception. Working on concrete projects, the EPFL+ECAL Lab collaborates with many companies, museums and institutes. Bringing together skills in design, engineering, architecture and psychology, the Lab creates disruptive concepts and turns them into functional prototypes.

PRACTICAL INFORMATION

Poster World is on view at the Museum für Gestaltung Zürich as part of the "Planet Digital" exhibition from **11 February to 6 June 2022**. Private view on 10 February, by invitation.

Museum für Gestaltung Zürich
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www.museum-gestaltung.ch



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