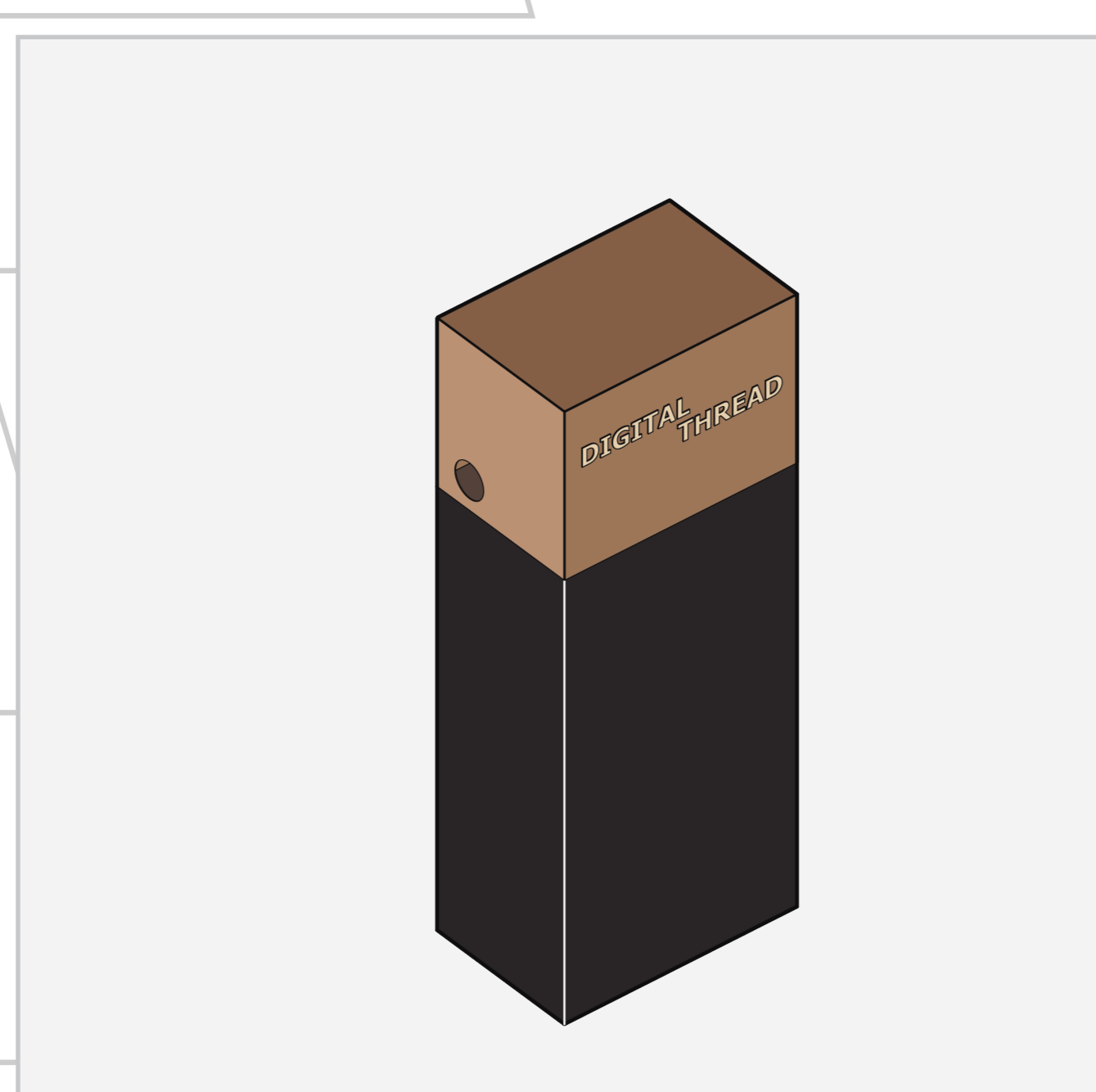
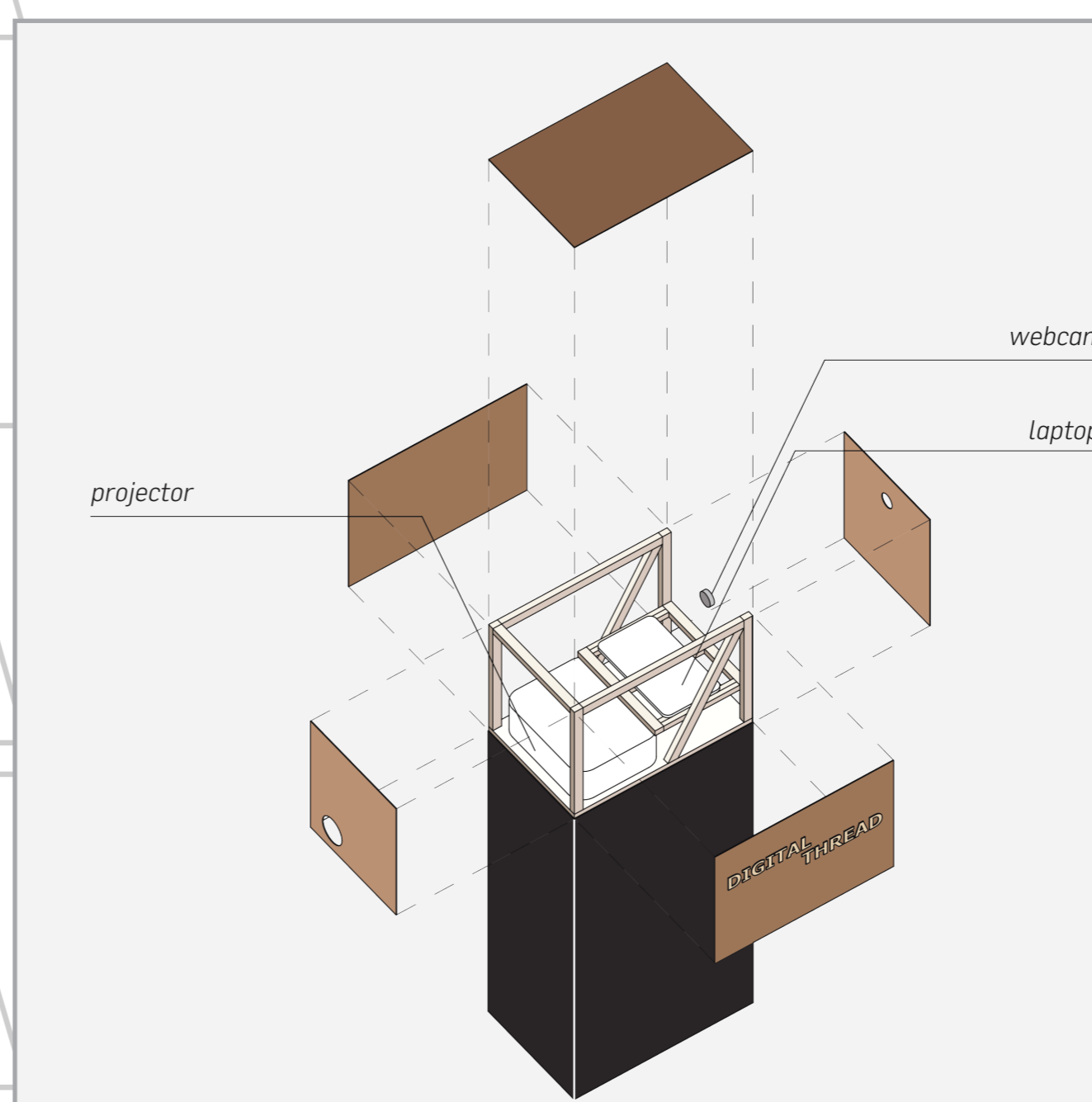


# Bauhaus oases\_trans-local network



Visualization of one input box.



Exploded visualization of one input box.

## Digital Thread

„Digital Thread“ is an interactive and translocal installation.

A full 100 years after the creation of the Bauhaus school of design, „Digital Thread“ offers a modern take on Bauhaus textile design and the work of Bauhaus teacher and artist Lázló Moholy Nagy.

Visitors can take part in an experimental, digital design process. At two separate but virtually connected locations, their movements are captured, computed, and translated into a visualization printable on fabric.

This fabric is then used to sew unique art tote-bags, available for purchase to those visitors who want take the „Digital-Thread“ experience with them into the analog world.

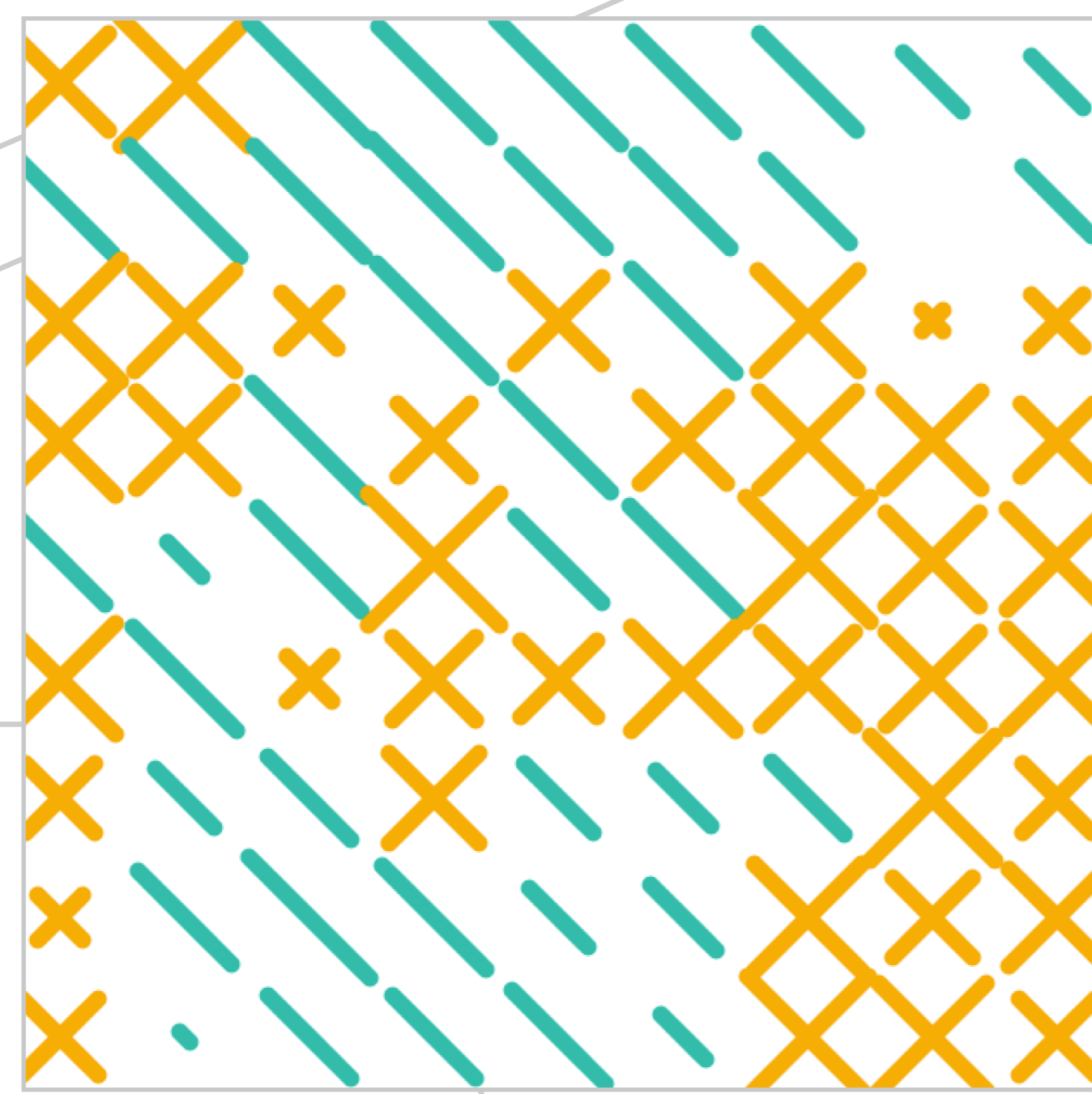
### How does it work?

The visitors movements are captured by a webcam and translated into an abstract visualization. This visualization is directly and immediately affected by other visitors at a second location, creating a live, translocal work of art! The color yellow indicates movement at the other site.

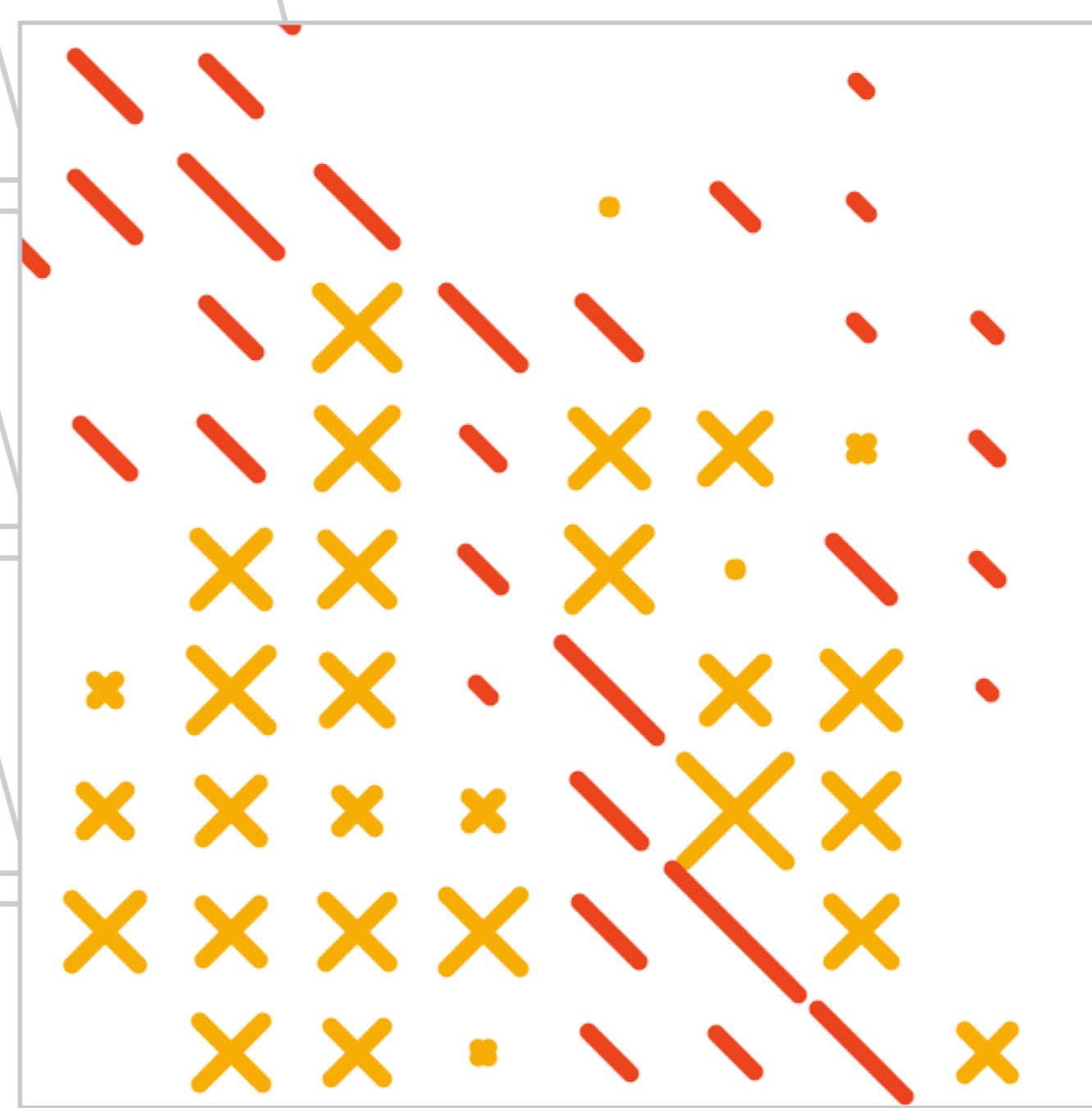
The visual material of a ten minute time span is combined into one long exposure image per location which is sent to a printer. An algorithm determines one frame out of the ten minute window from which to start the printing process. The brightness values of the long exposure image define the way the printer moves the pen.

After the first pattern is completed, the process is repeated with the input from the second location.

The printed fabric is used to sew unique art- tote bags, available for purchase to those visitors who want to take the „Digital Thread“ experience into the analog world.



Abstract visualization at the first location.



Abstract visualization at the second location.

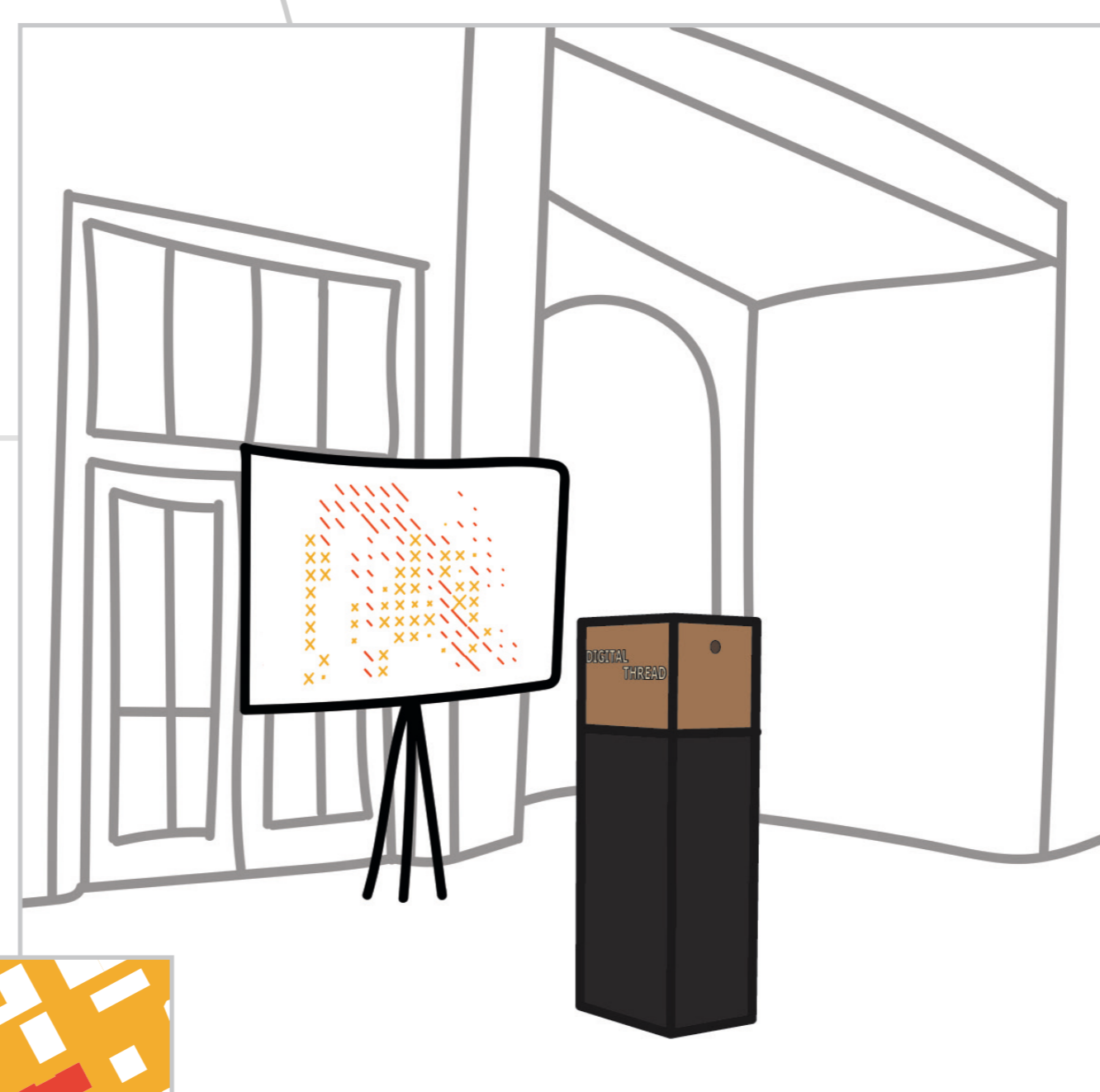
### Translocality

Having a box both in the entrance hall of the main building of the „Bauhaus Universität Weimar“ and in the „Kunsthalle“ Weimar, the „Digital Thread“ can create a translocal experience.

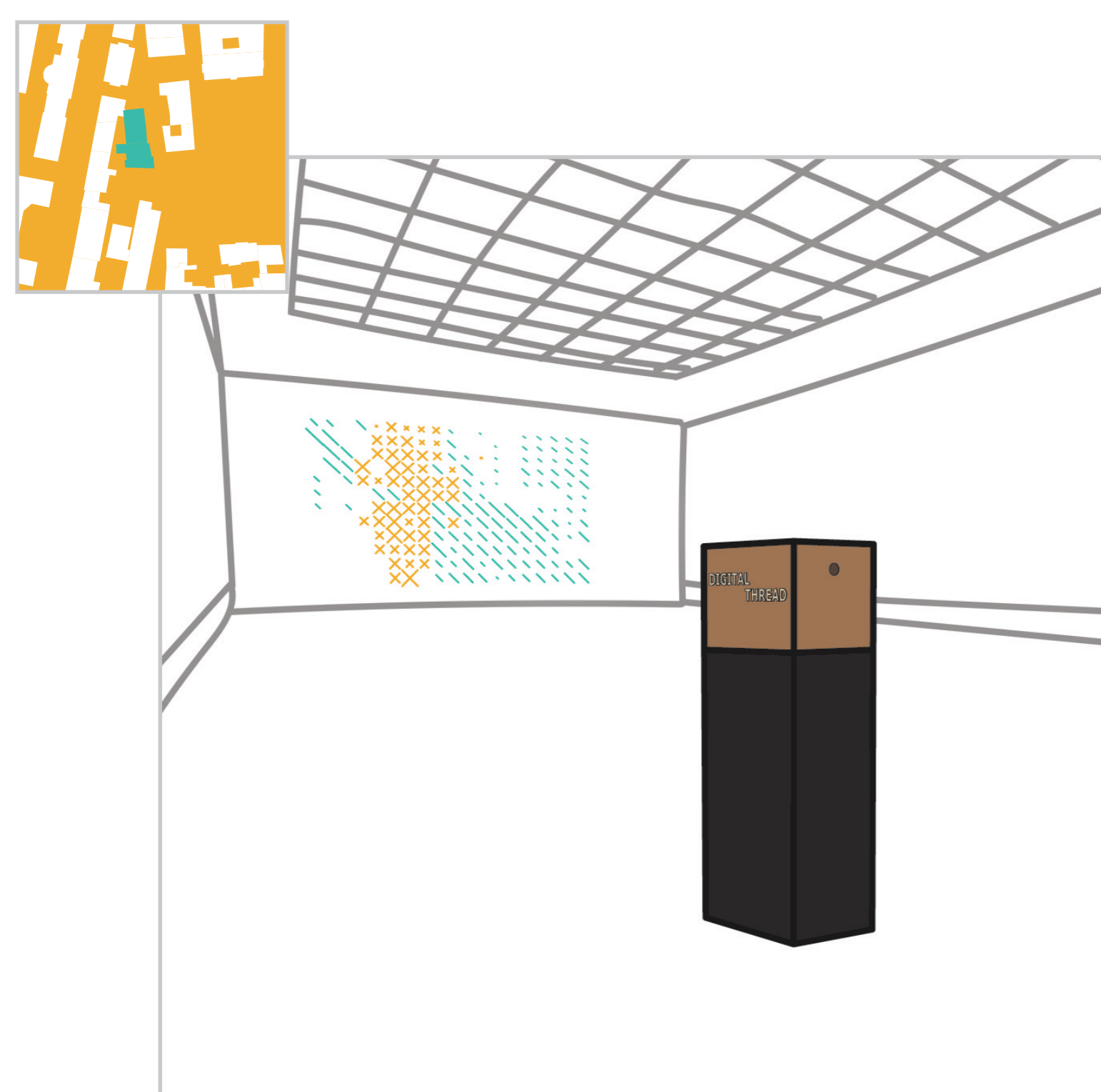
### Technology

The abstract visualization of the detected movement is generated by a „Processing“ code. With so called „websockets“, information between the two sites of the installation is transferred via internet and cause the creation of the yellow crosses wherever movement at both places overlay.

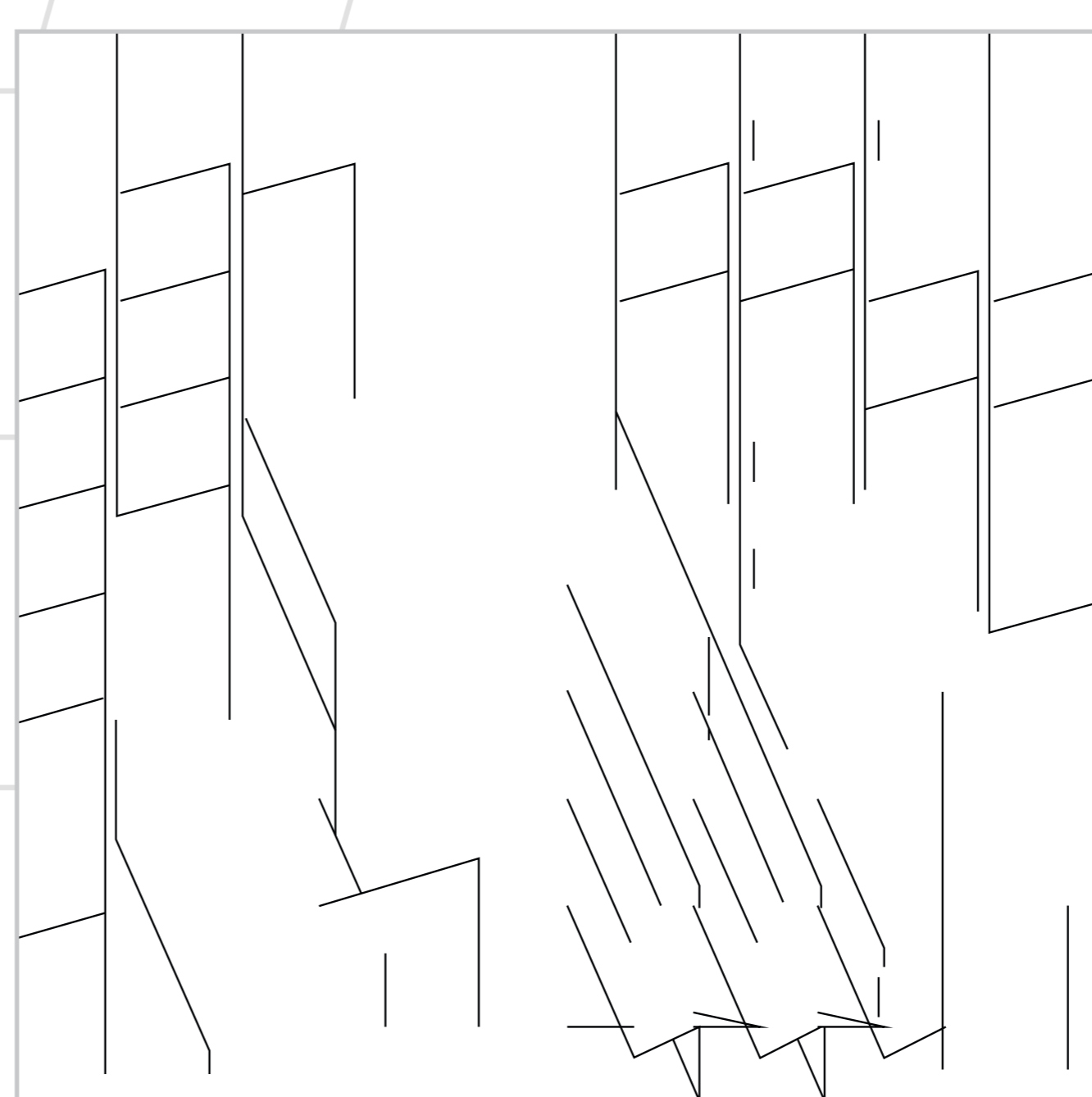
The third part is the HP 7475A Plotter. This printer is manipulated by an „Arduino“ to make it print in a continuous run and 3D printed Adapters allow to print with fabric markers. The printing process itself is defined and executed by a second „Processing“ code.



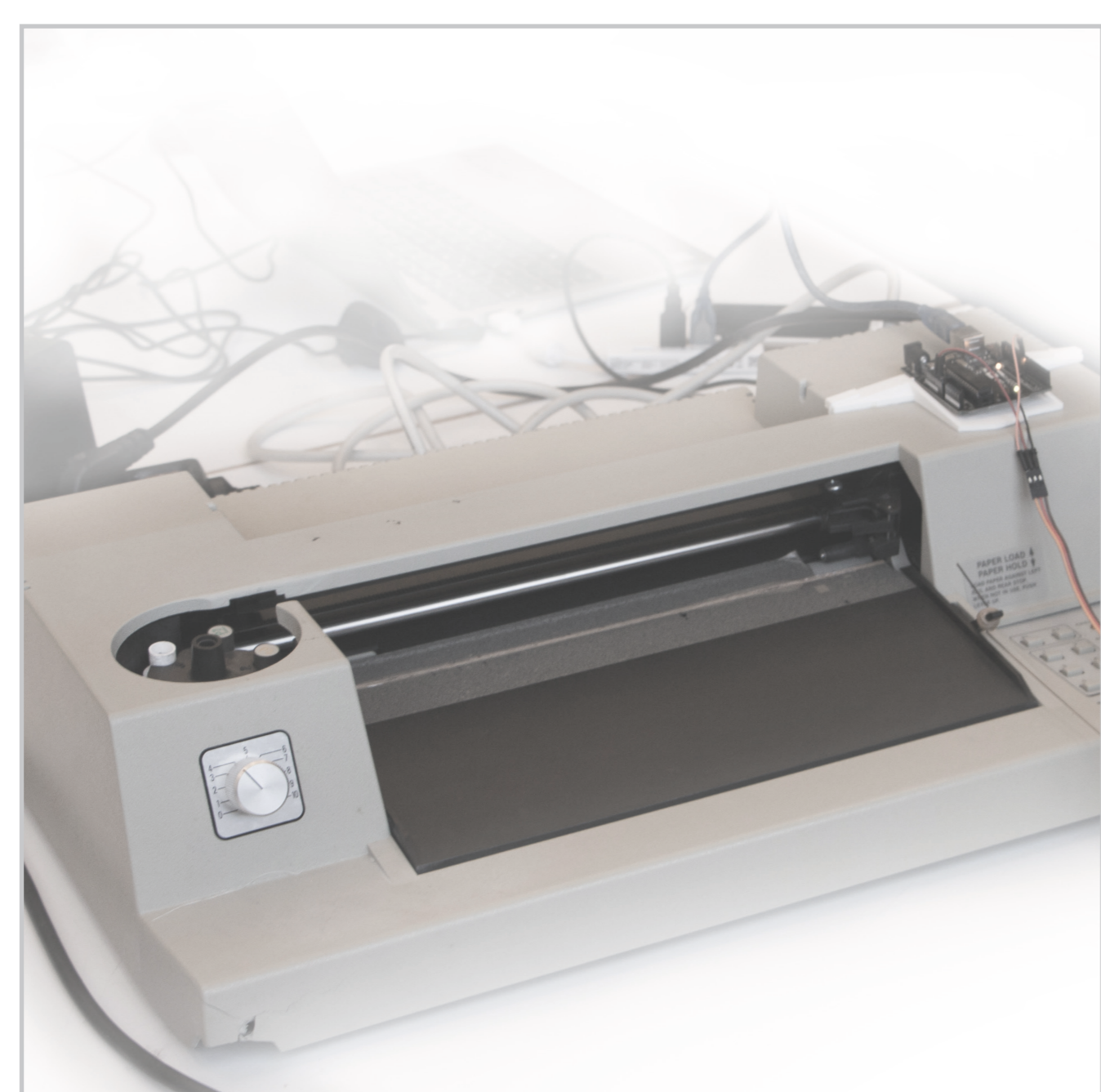
Second input box located inside the main building of the „Bauhaus Universität Weimar“.



First input box located inside the „Kunsthalle“.



Generated image that is printed on fabric.



HP 7475A Plotter.



Unique art- tote bags.

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Wintersemester 2018/19

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