Era-Drilling Robot

Interface Design Master Projektmodul

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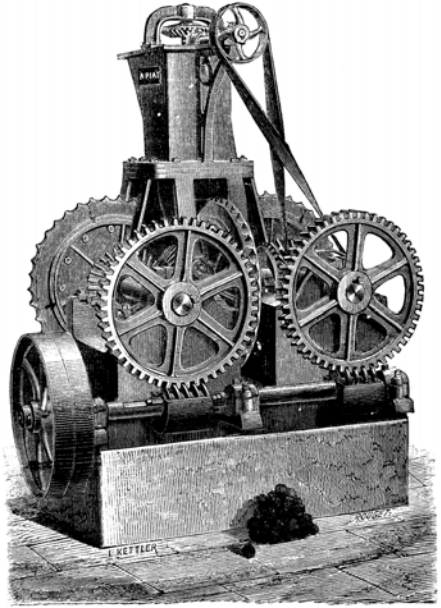
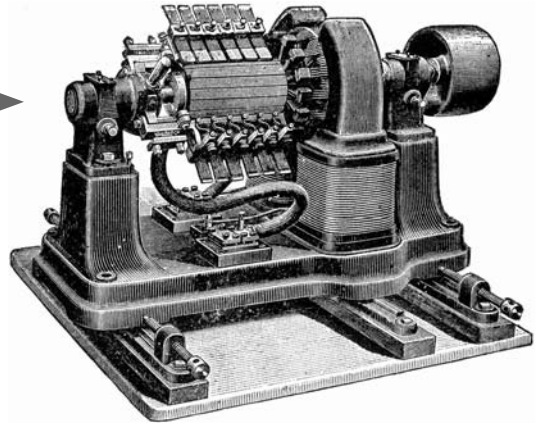
From Mechanical to Digital Era



The Mechanical Era
(the middle of 18th Century
- the middle of 19th Century)



The Electric Era
(the late 19th Century
-the early 20th Century)

The Digital Era
(after the late 19th Century)

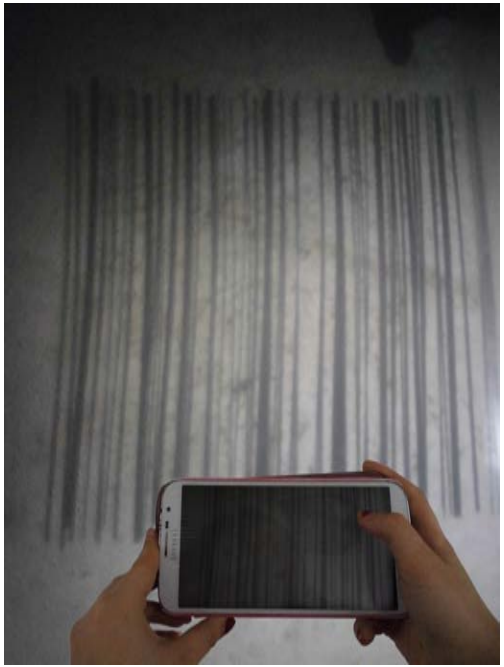
Base: Hand Drilling machine

CHARACTER	Simple, analog, robust, durable
PURPOSE	A tangible foundation
MEANING	Represents mechanical era
THEME	Drilling through different eras

Electric components: Motor and LED

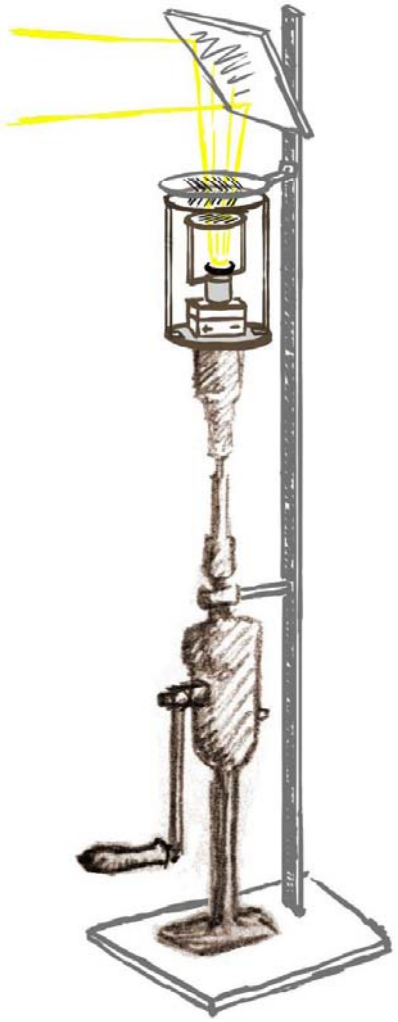
CHARACTER	Transformational, electric
PURPOSE	A twofold connection
MEANING	Represents electric era

Digital element: Barcode projection



CHARACTER	Informational, haptic, digital
PURPOSE	A terminal with infinite possibilities
MEANING	Represents digital era

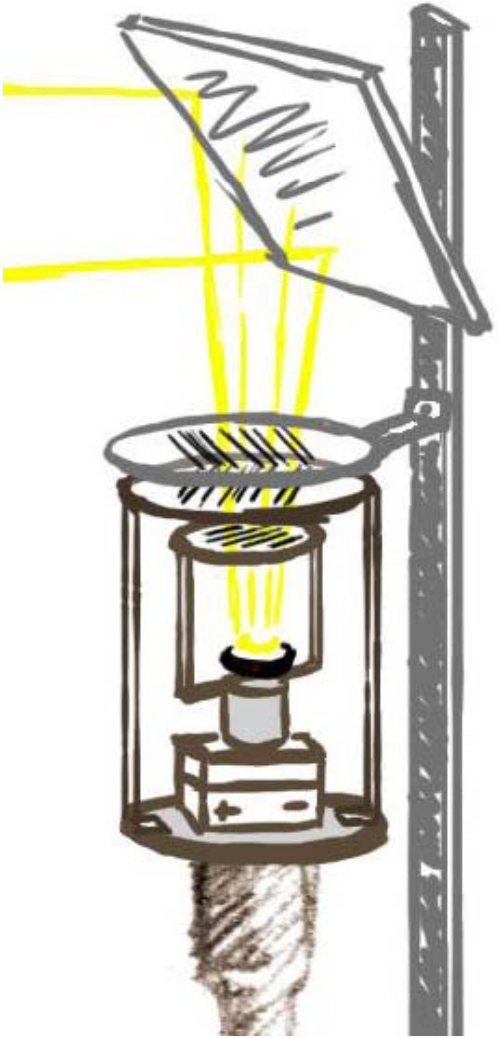
Combine three elements to create
a playful and meaningful projection.



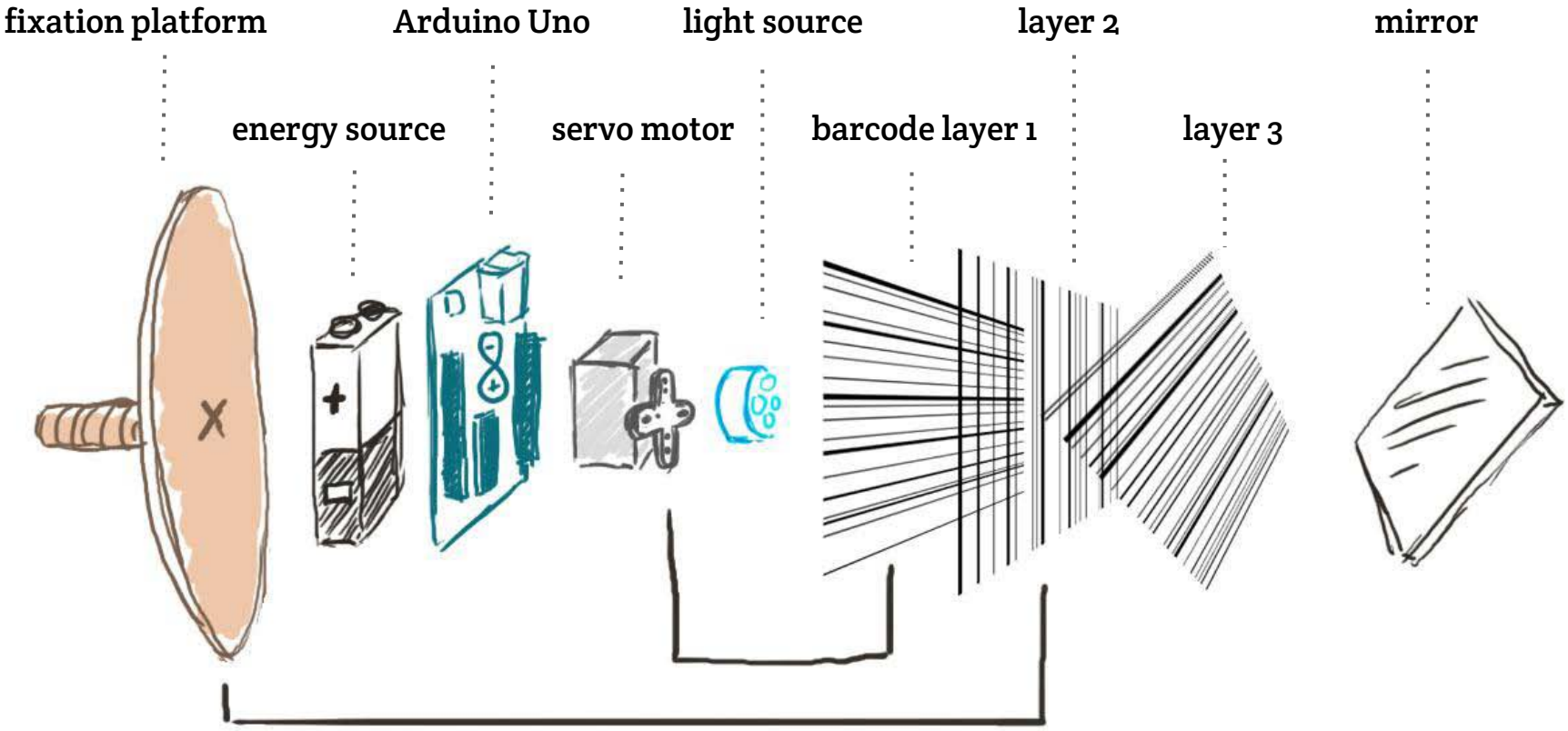
How it works

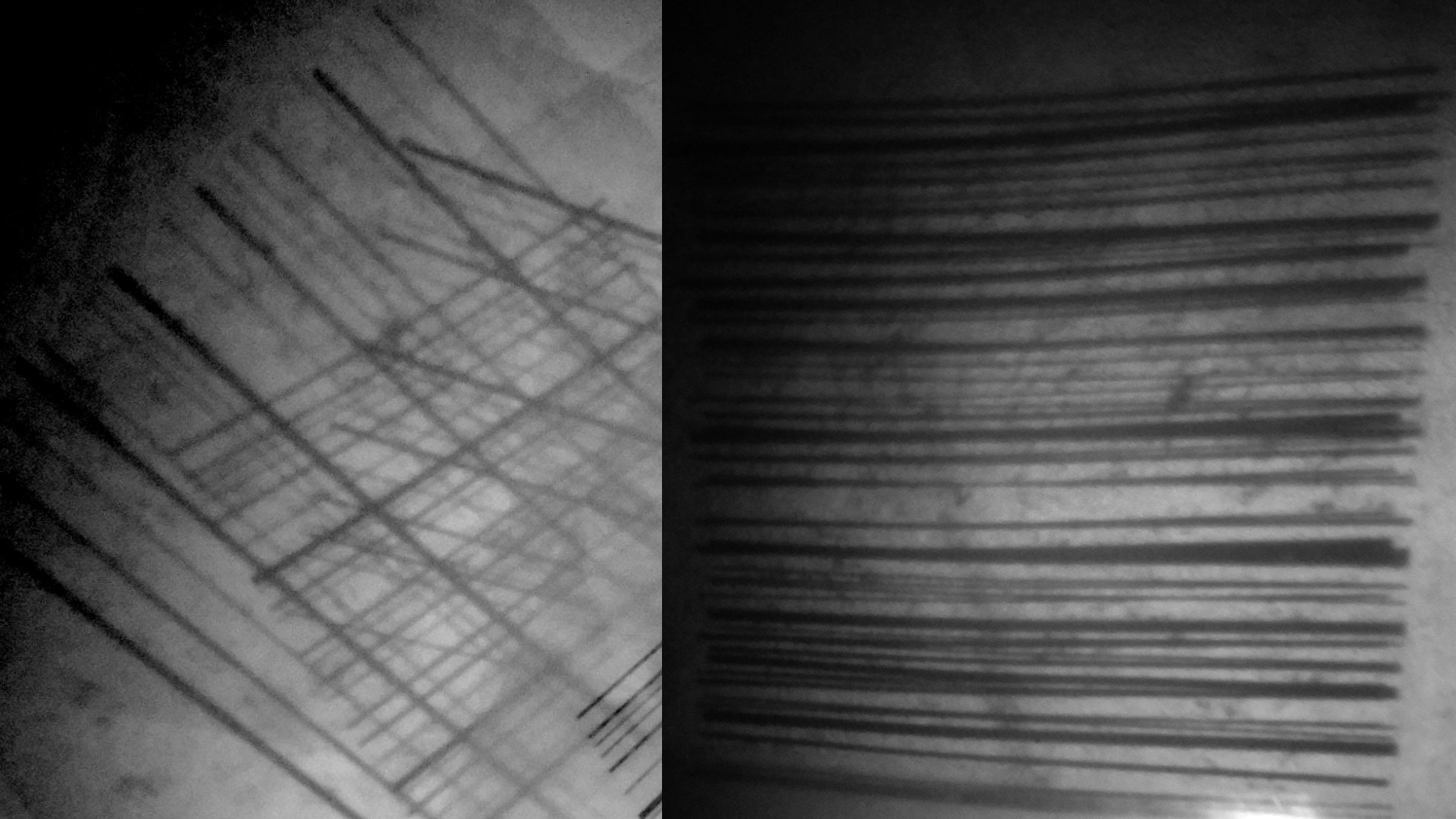
The three layers have to be combined playfully by using the machine to project the bar code,

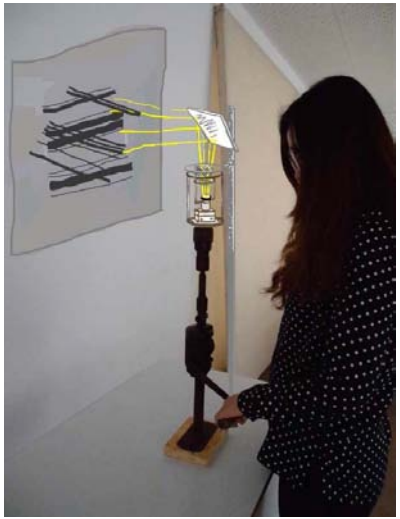
which then can be scanned with a mobile device.



Structure


fixation platform
energy source
Arduino Uno
servo motor
light source
barcode layer 1
layer 2
layer 3
mirror





Video clip

Infinite possibilities

The code can lead to:

- Another associated robot/project
- An information web page (e.g. for commercial)
- A new step within the project (e.g. usage of camera)
- Interact with other projects (e.g. play with users elsewhere)

Installation

- Portable
- Overall appearance should fit the aesthetics of the drilling machine
- Fit into different environments: e.g. exhibition, fair, installation
- Material used: wood and metal

Further development

1. Adjustable layers and mirror
to have better control over the projection

2. Possibly controllable motor speed

3. Different web page or project
for the actual bar code