





OBOTLAB - BIOS [BIBLE | TORAH] (2007)

# PHYSICAL INTERFACES









WILLIAM FORSYTHE - BLACK FLAGS (2015)

### Prof. Andreas Muxel

# **Physical Interfaces - Creative Robotics**

In the course we are exploring physical human-machine interfaces in the context of creative robotics. We will also have access to a collaborative robotic arm (Universal Robot URe), which can be operated via a simple interface. In this process, we use code and hardware as creative tools in the design process. The results will be presented as prototypes in an exhibition.

# **Topics**

- Enactment & Embodied Interaction
- Creative Coding & Hacking
- Low- & Hightech Prototyping
- Scenario-Building & Staging

#### **Tools**

- TouchDesigner, P5.js, ml5.js, Unity, Unreal Engine
- Universal Robot UR5e
- Lasercutter, 3D Printer

#### References

- The Center for Counter-Productive Robotics (écal) https://ecal.ch/en/feed/projects/5424/the-centerfor-counter-productive-robotics/
- Soap Opera (AATB) <a href="https://www.aatb.ch/archive/soap-opera-v-a">https://www.aatb.ch/archive/soap-opera-v-a</a>
- bios [bible] (robotlab) <a href="http://www.robotlab.de/bios/bible.htm">http://www.robotlab.de/bios/bible.htm</a>
- Handshake (ATTB) <a href="https://www.aatb.ch/archive/handshake">https://www.aatb.ch/archive/handshake</a>
- Hi Human! (Hybrid Things Lab) <a href="https://hybridthings.tha.de/hi-human/">https://hybridthings.tha.de/hi-human/</a>
- Black Flags (William Forsythe) <a href="https://www.youtube.com/watch?v=6XVrrmm9jno">https://www.youtube.com/watch?v=6XVrrmm9jno</a>