

Cyber-physical space

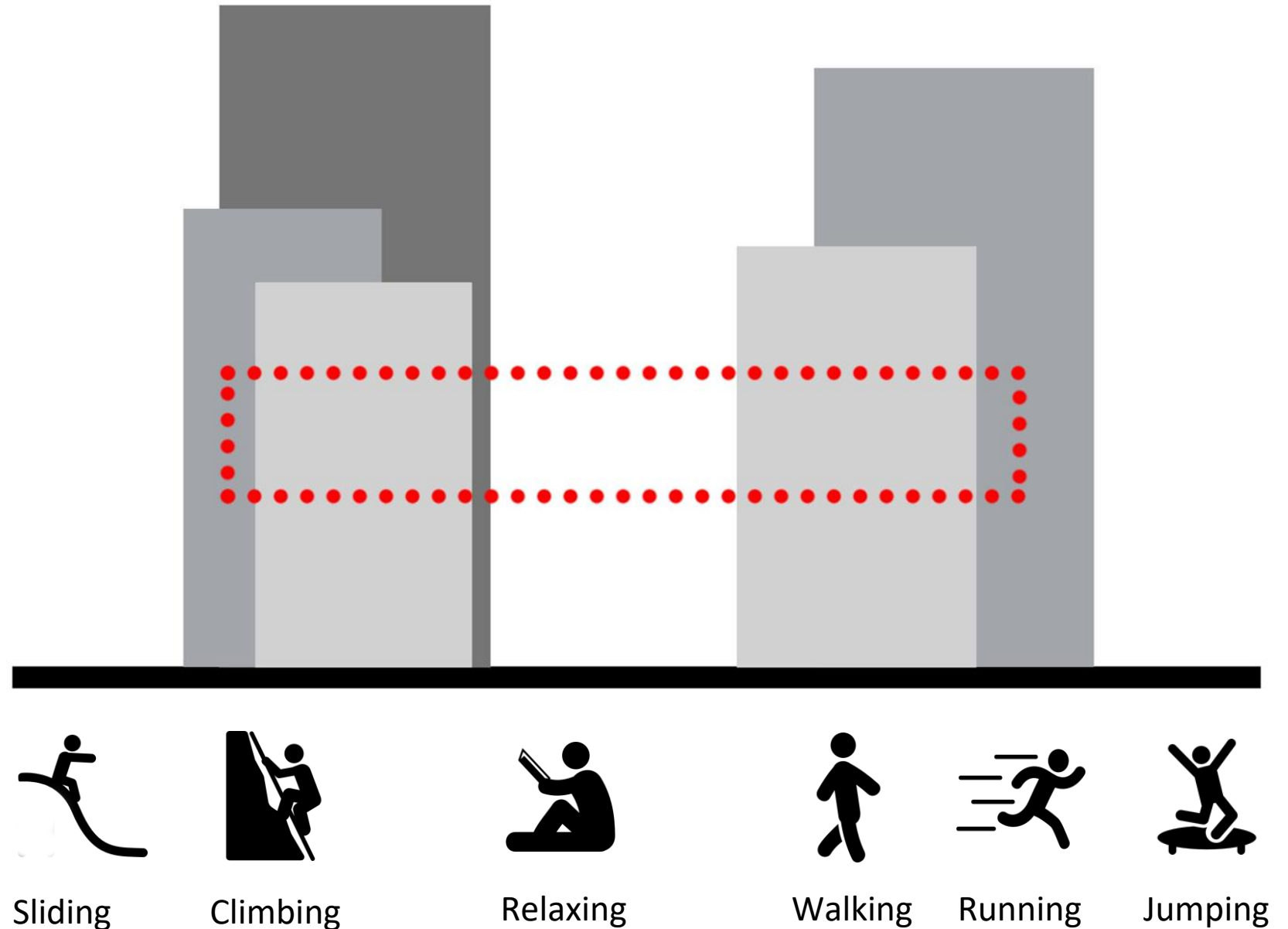
Midterm presentation

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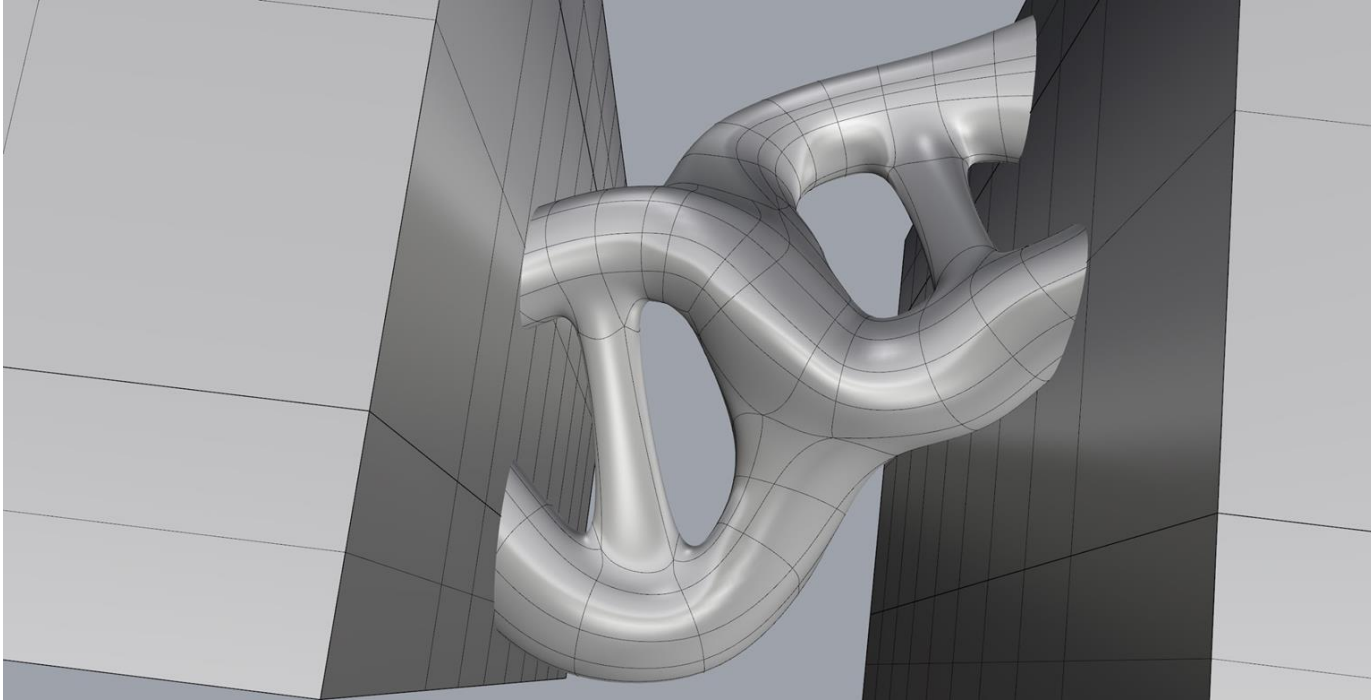
GROUP 3

Vision

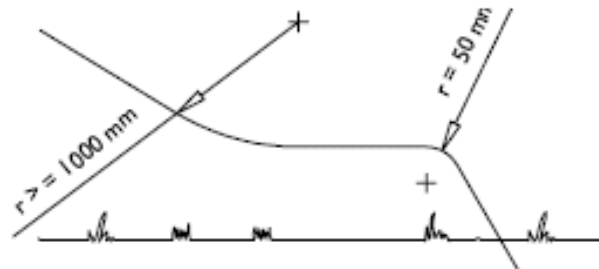
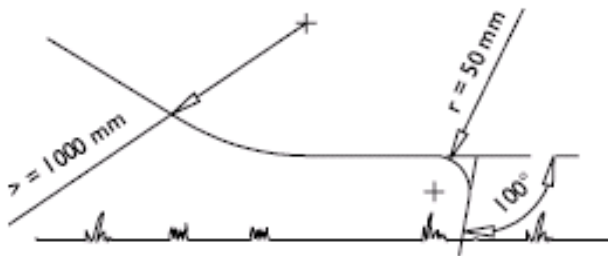
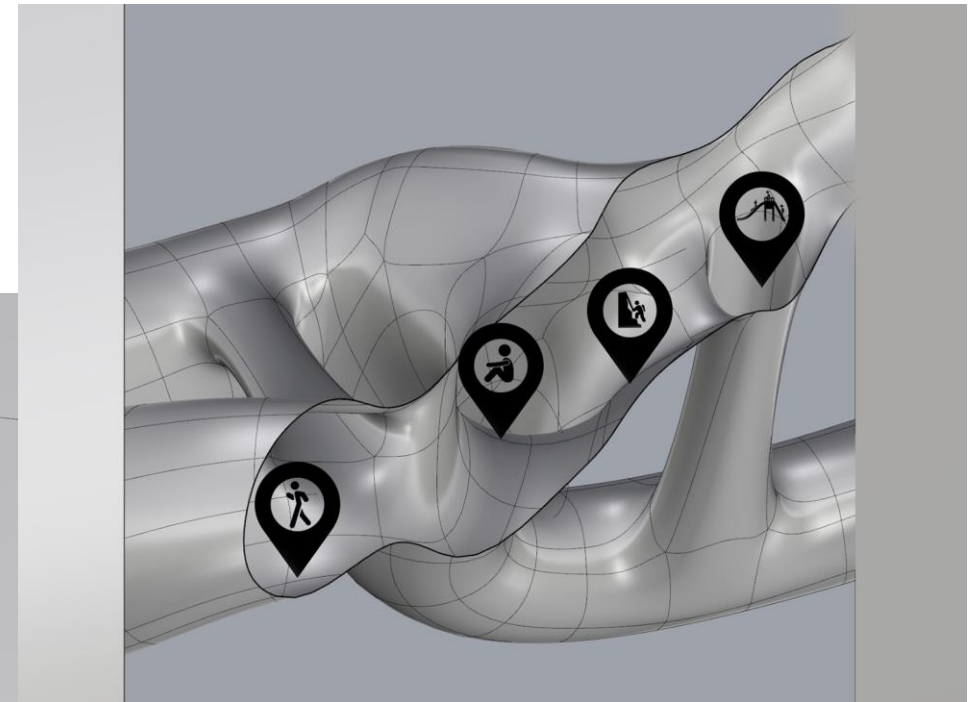
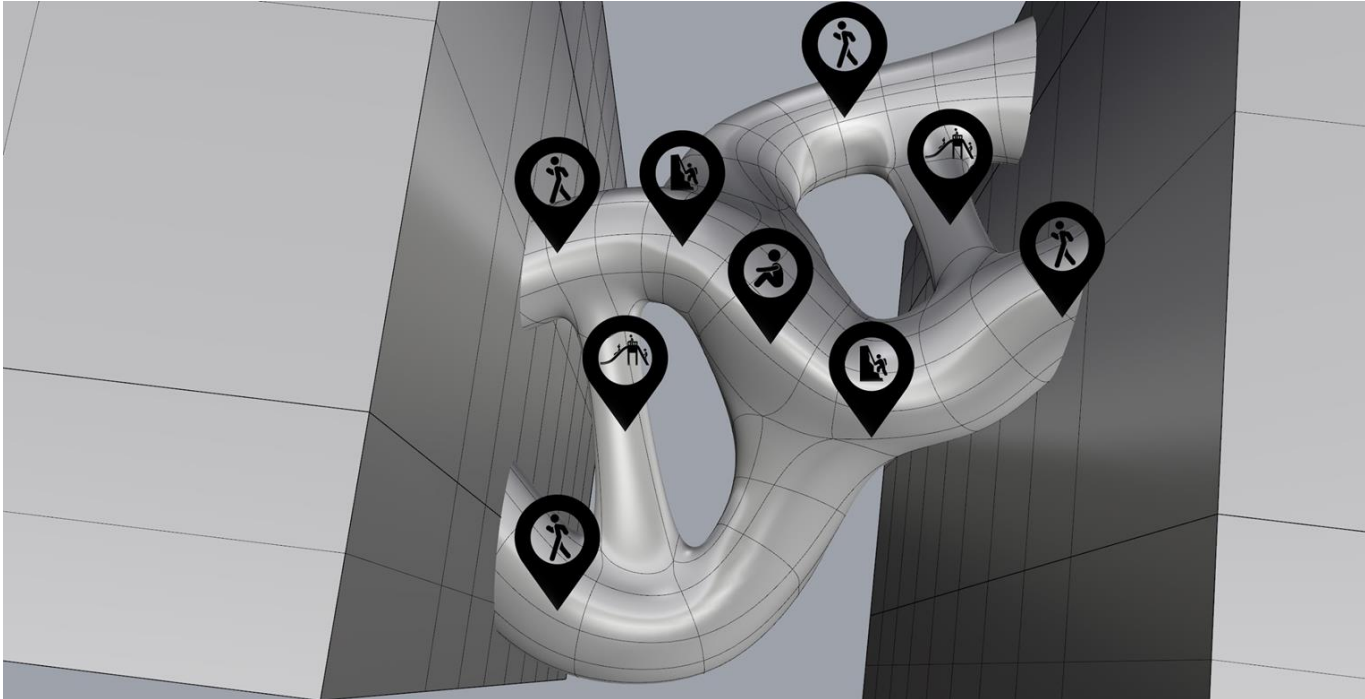
Creating a (sub) level within the existing city that connects people and their buildings. By creating an interactive playground.



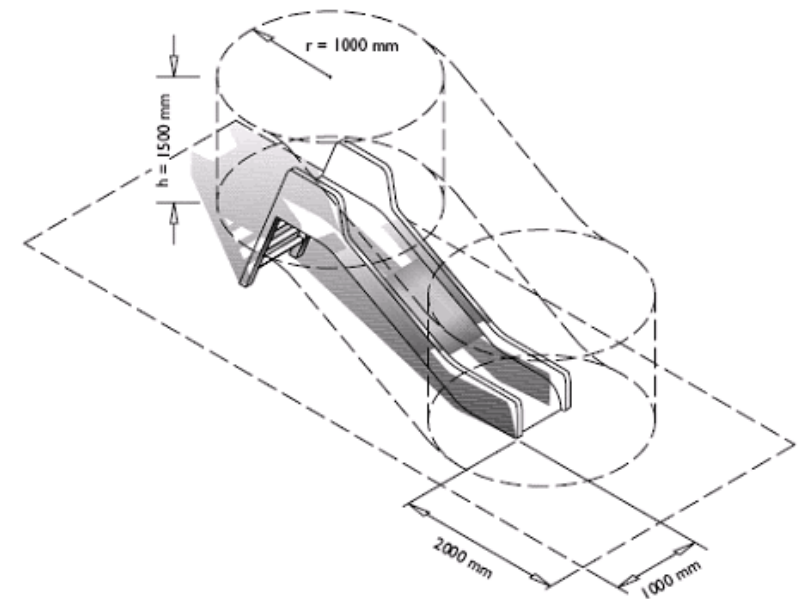
Structure / shape



Activities

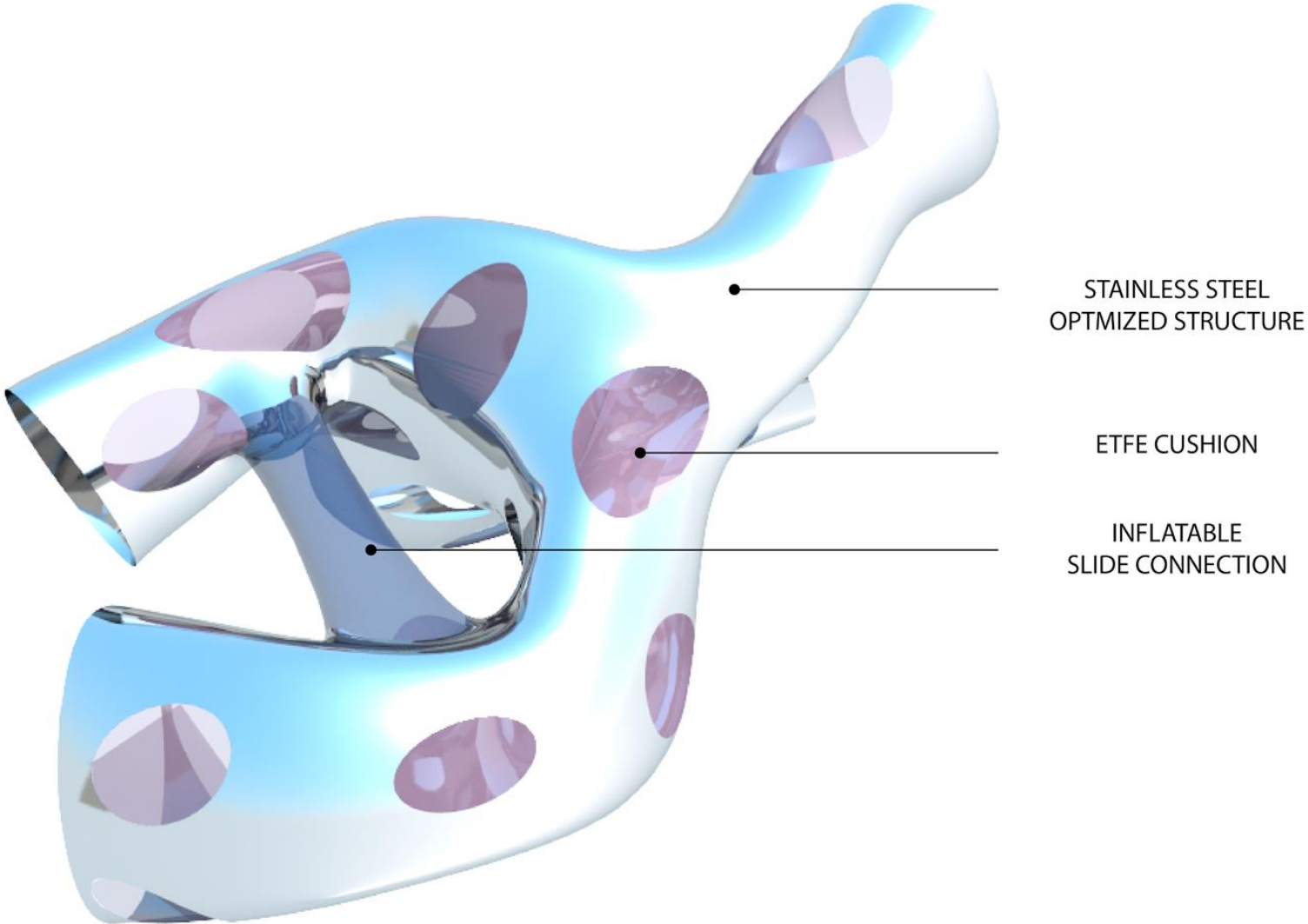


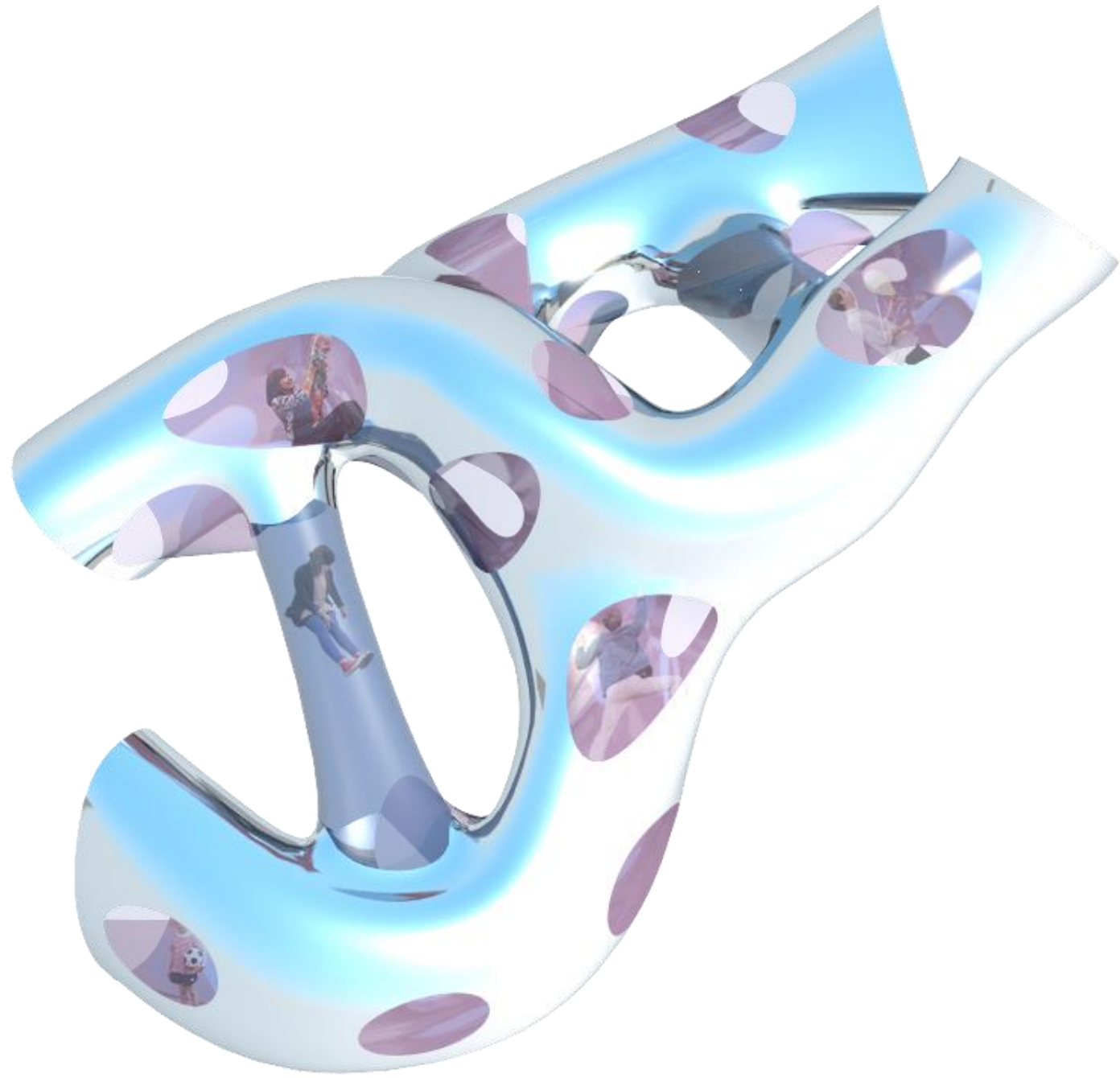
Bron: Handboek veiligheid van speelgelegenheden, 2003



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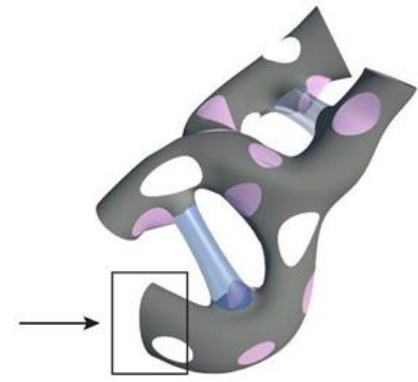
Section



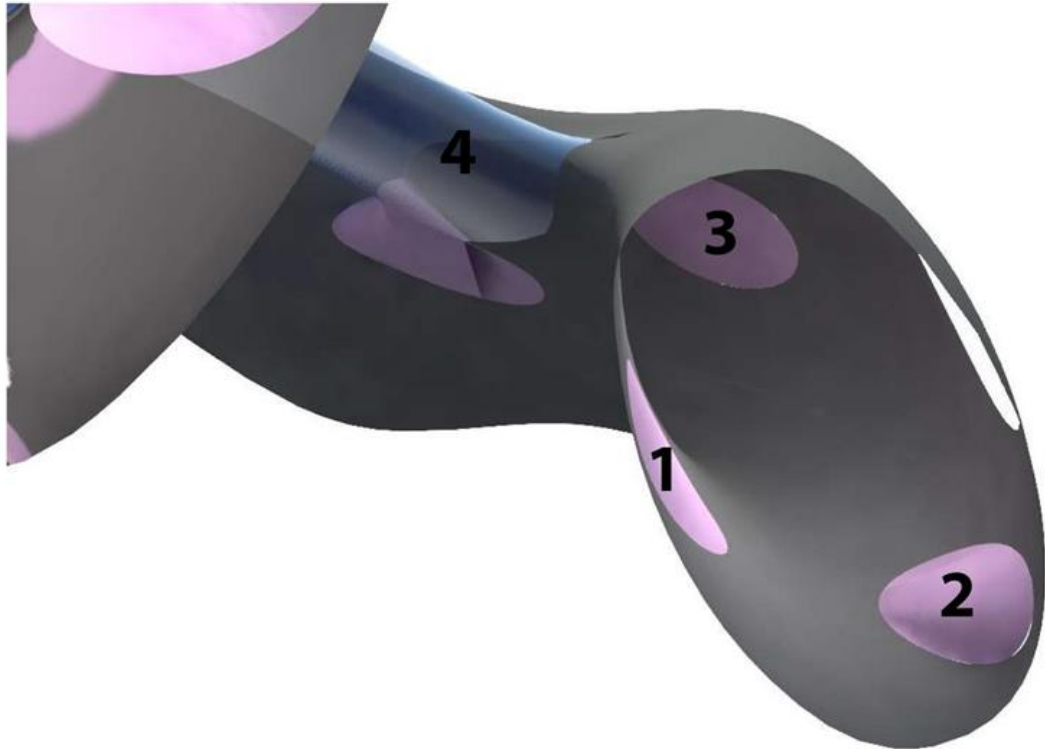


INTERACTION OF THE "DOTS" WITH THE PEOPLE

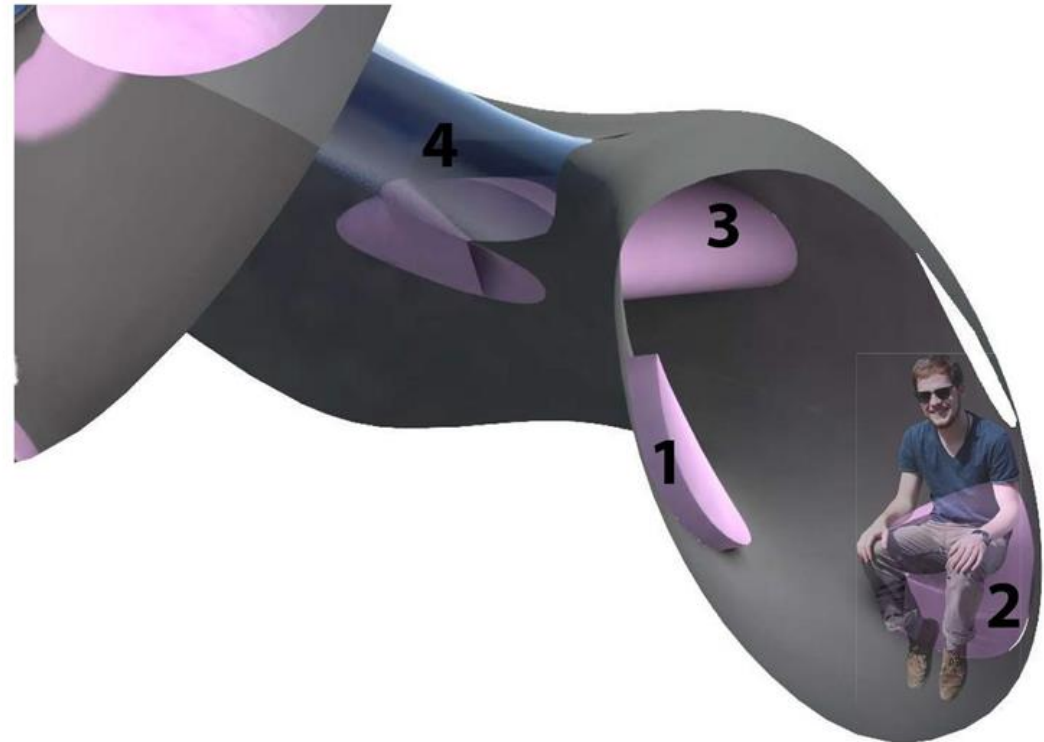
1. BLOW LEVEL 1
2. BLOW SEAT LEVEL
3. BLOW FROM ONE SIDE TO THE OTHER
4. OPENING IN THE SLIDING CONNECTION



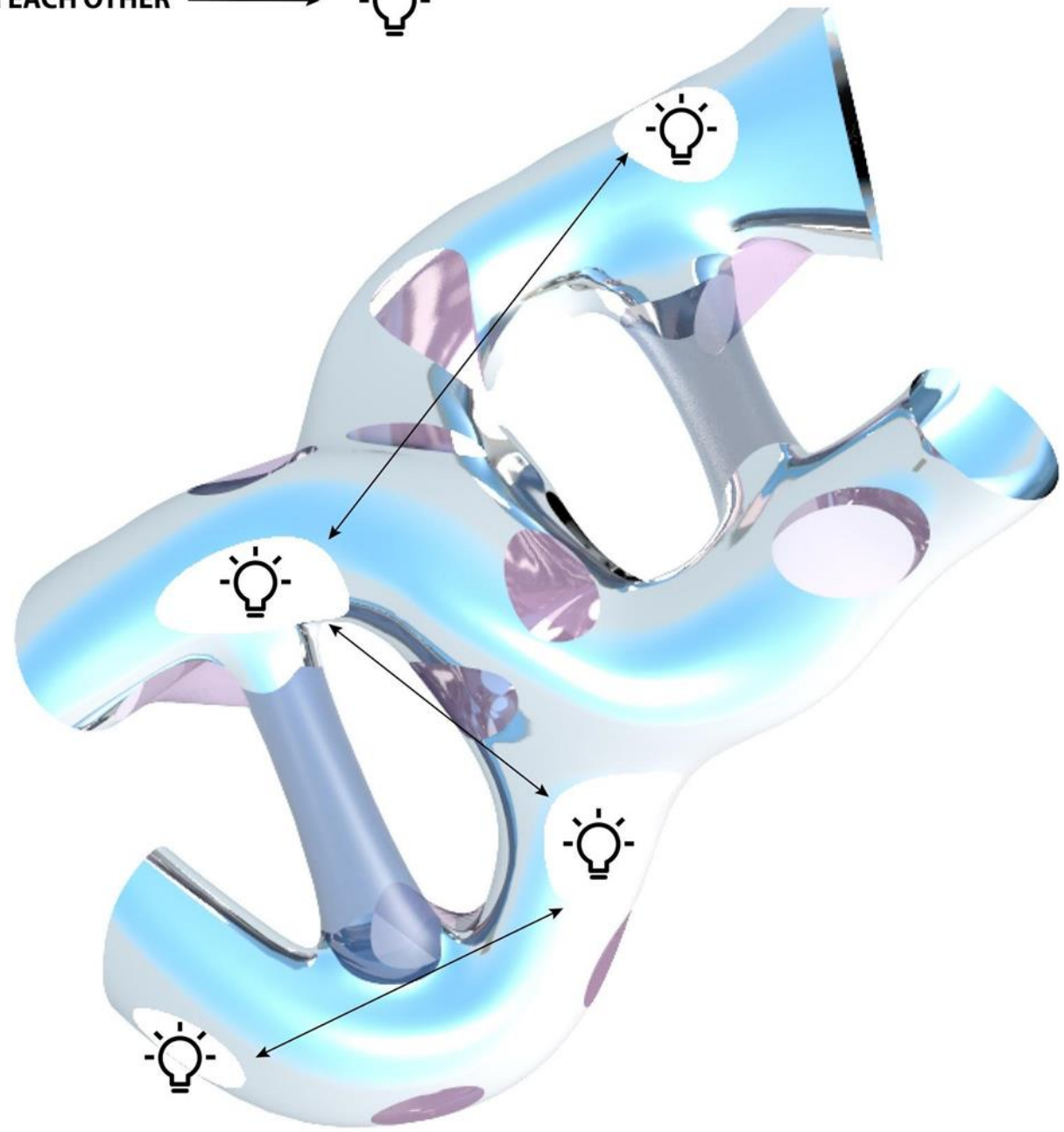
BEFORE



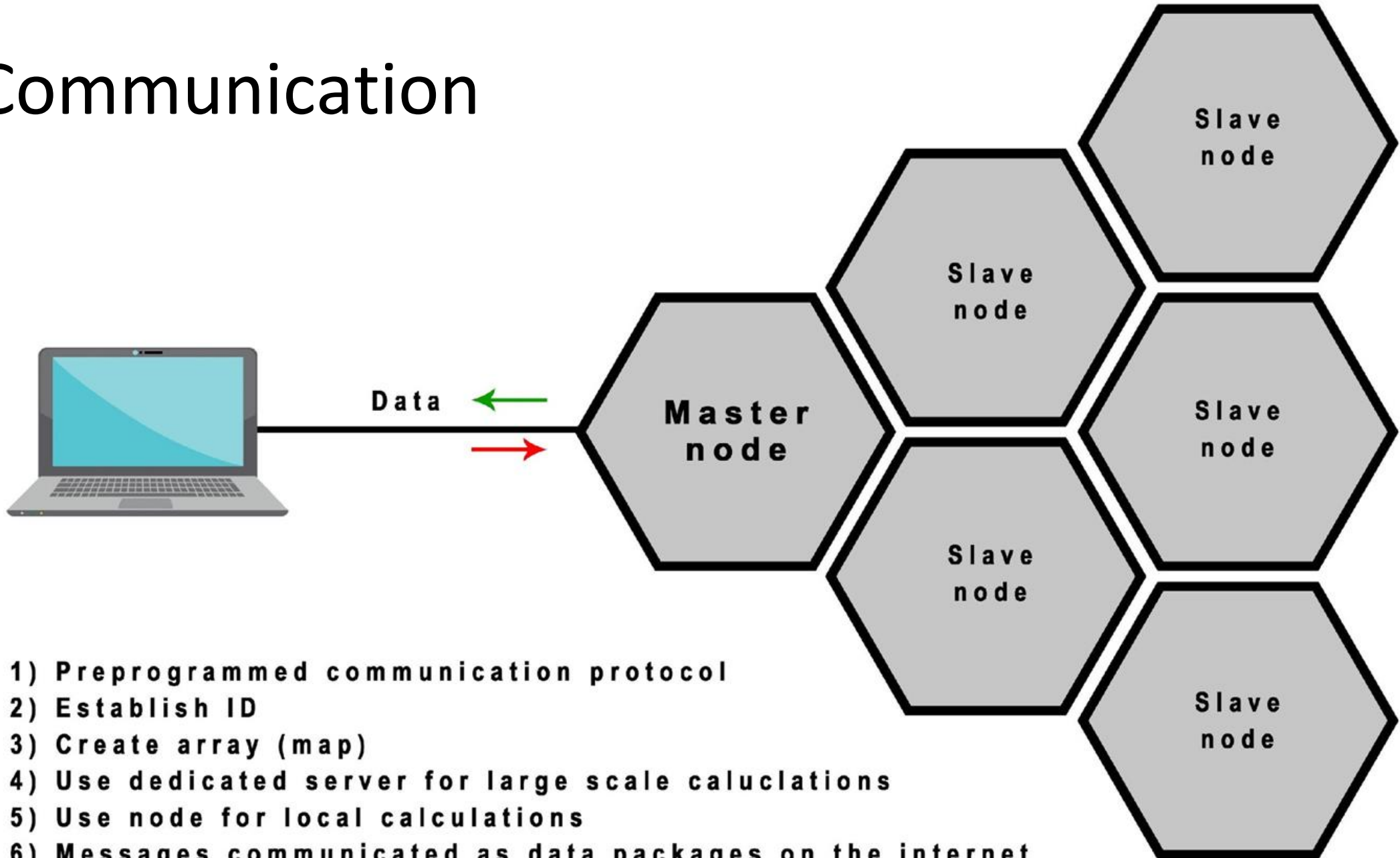
AFTER



INTERACTION OF THE "DOTS" WITH EACH OTHER → 



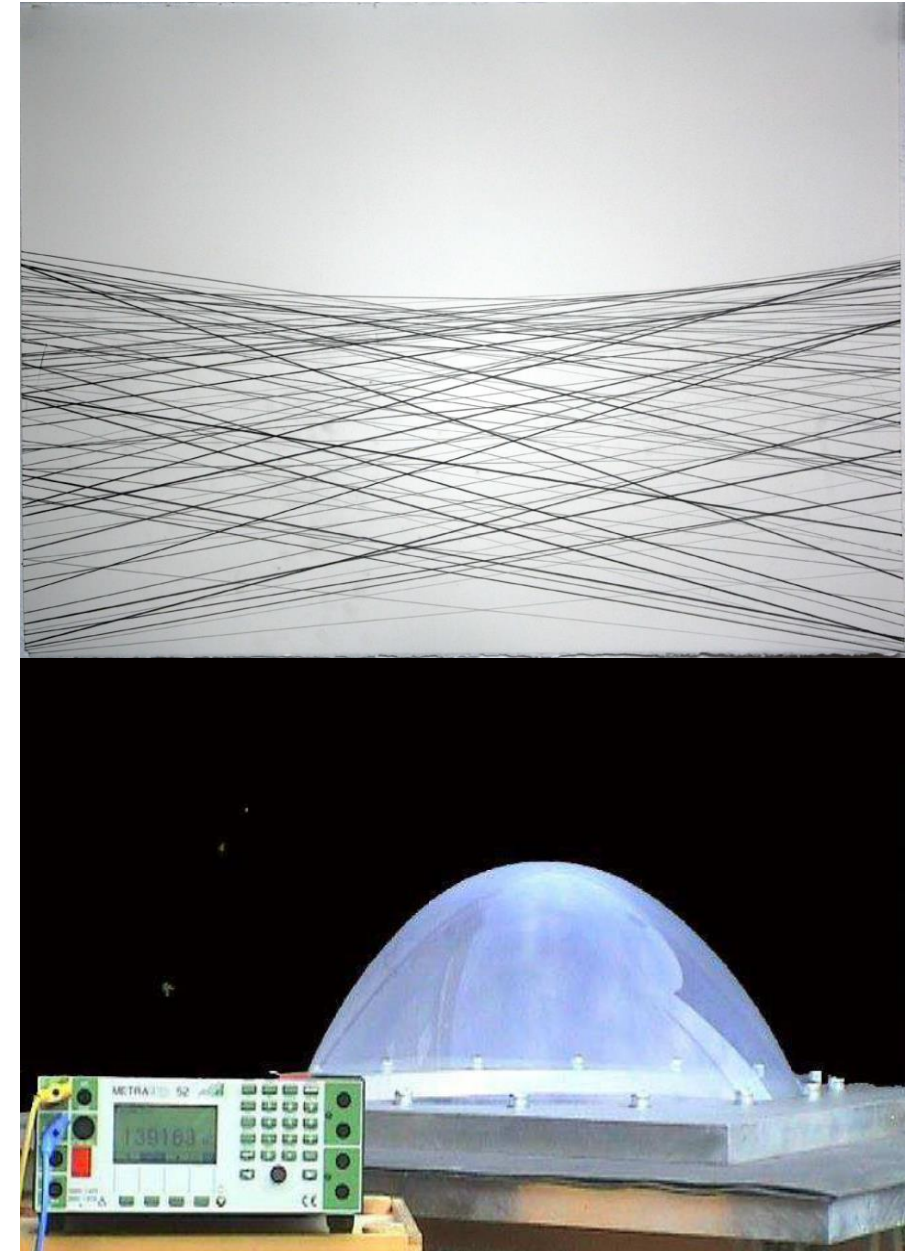
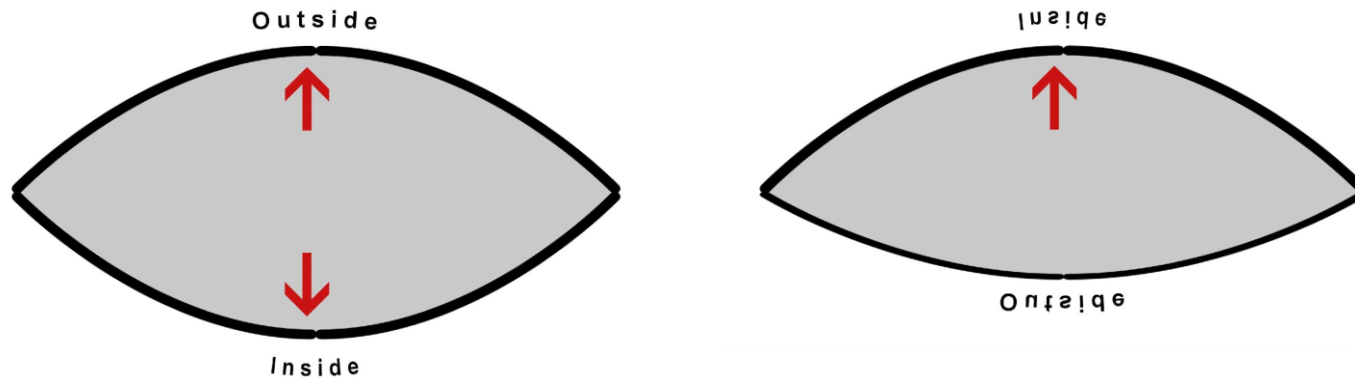
Communication



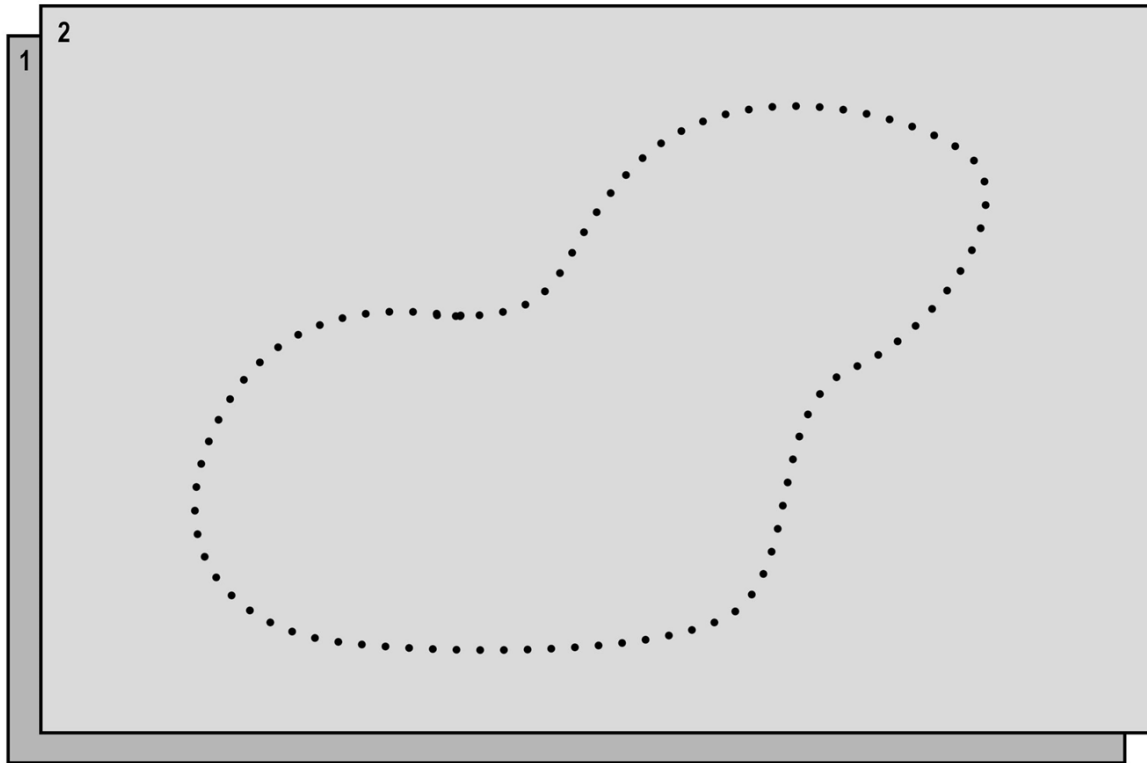
- 1) Preprogrammed communication protocol
- 2) Establish ID
- 3) Create array (map)
- 4) Use dedicated server for large scale calculations
- 5) Use node for local calculations
- 6) Messages communicated as data packages on the internet

Fiber reinforced foil

- 1) Wires limiting expansion on one side
- 2) Line intensity leads to difference in opacity
- 3) Potential to integrate LEDs with conductivity wires



D2RO strategy / materialization



Welding sheets



Pattern printing

Conclusion

- Redefined the shape to its activities
- Integration of structure and interactive elements
- Translating design into robotic operations