



# FabLabs

## Perspectives

2015

# Origine des FabLabs

# Digital Nations

# Boston 2001 + Bangalore 2002

# dyd01 workshop

on collaborative open source design  
of appropriate technologies



## development by design

sunday 22 july 2001

in conjunction with thinkcycle.org  
& the Digital Nations Symposium  
24-25 july 2001  
MIT Media Lab  
Cambridge MA

### Workshop Proceedings

- \* [submission guidelines](#)
- \* [papers nominated](#)
- \* [revised papers submitted](#)

Upcoming dyd02: 2nd International  
Conference on Open Collaborative Design  
for Sustainable Innovation  
Dec 1-2, 2002, Bangalore, India  
Paper Submission Deadline: Sept. 15, 2002

[overview & call](#)

[workshop program](#)

[panel sessions](#)

[working groups & summaries](#)

[read 74 papers online](#)

[view video footage \(all clips\)](#)

[Intro Session](#)

[Panel A: Design Processes](#)

[Panel B: Open Source & IT](#)

[Panel C: Design & Education](#)

[Closing Session](#)

[install free RealPlayer 8 Basic software](#)

[workshop photos](#)

[frequently asked questions](#)

[organizers & sponsors](#)

[participants](#)

[Digital Nations Symposium](#)

[thinkcycle.org](#)

**dyd in the Press:**

[Knowledge City, Brazil \(July 22, 01\)](#)

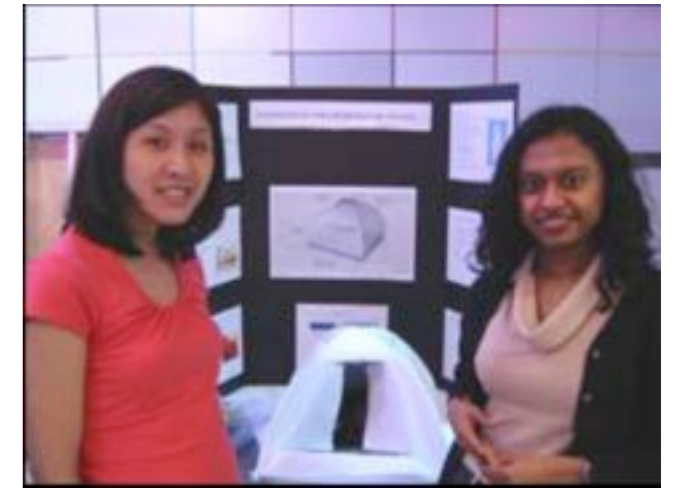
[Article by the MIT Tech \(Aug 8, 01\)](#)



# Thinkcycle

Nitin Sawhney, Yael Maguire, Saul Griffith, Ben Vigoda, Tim Prestero, Leo Burd, Neil Cantor

# Thinkcycle



- Cours de Design et d'Ingénierie
  - [Etudiants](#) - ressource précieuse
- Comment faire une [difference](#)?
- Traiter des problèmes à grande échelle à l'aide de [machines](#) PAS des [gens](#)
  - [SETI@home](#)
- Site web, cours
- [Hardware](#) open source



# Projects

- Dispositif de traitement **Cholera**
  - trois brevets associés
- **Lunettes** à très bas coût
  - 1st place Social Enterprise Track, HBS Business Plan Contest, 2001
- **Battery**
  - 2-5 watt bull roarer
- Incubateur **passif**
  - MIT Lemelson International Technology Award, 2002 (prix de \$5000)
- Filtrage de l'eau: Filtres **Céramique et Bio-sablonneux**
  - MIT IDEAS Award, 2002 (prix \$5000)

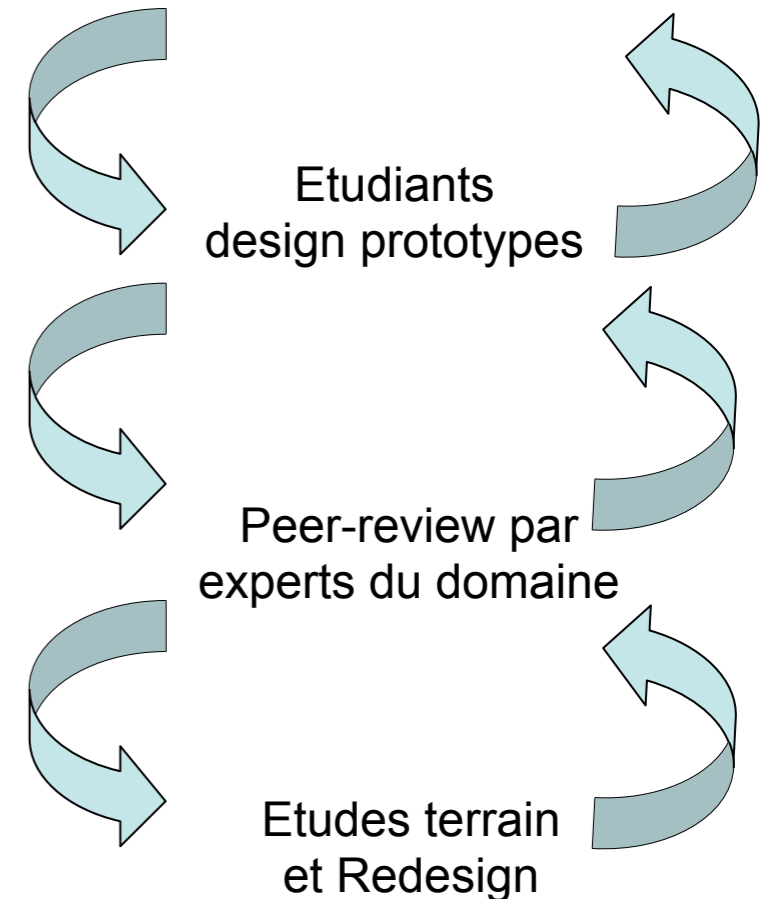




# ThinkCycle.org: Open Collaborative Design

The screenshot shows the ThinkCycle.org website with a navigation bar (HOME, TOPICS, WHAT'S NEW, MIRROR SITES, LOGIN, TEXT ONLY) and a search box. The main content area includes a 'What is ThinkCycle?' section, a 'TOPICS' sidebar with links like ThinkSpaces, Publications, and Discussions, and an 'Ongoing ThinkCycle Initiatives' section with various articles and links.

Challenges proposés par Nonprofits & Communities



But: Faciliter les Innovations Design dans des Domaines d'Intervention Critiques

# Tools for Distributed Design



Fab Labs  
d'Universités

## ThinkCycle.org Open Design Repository



Fab Labs  
d'Ecoles



Fab Labs en  
Zones Rurales

TTT



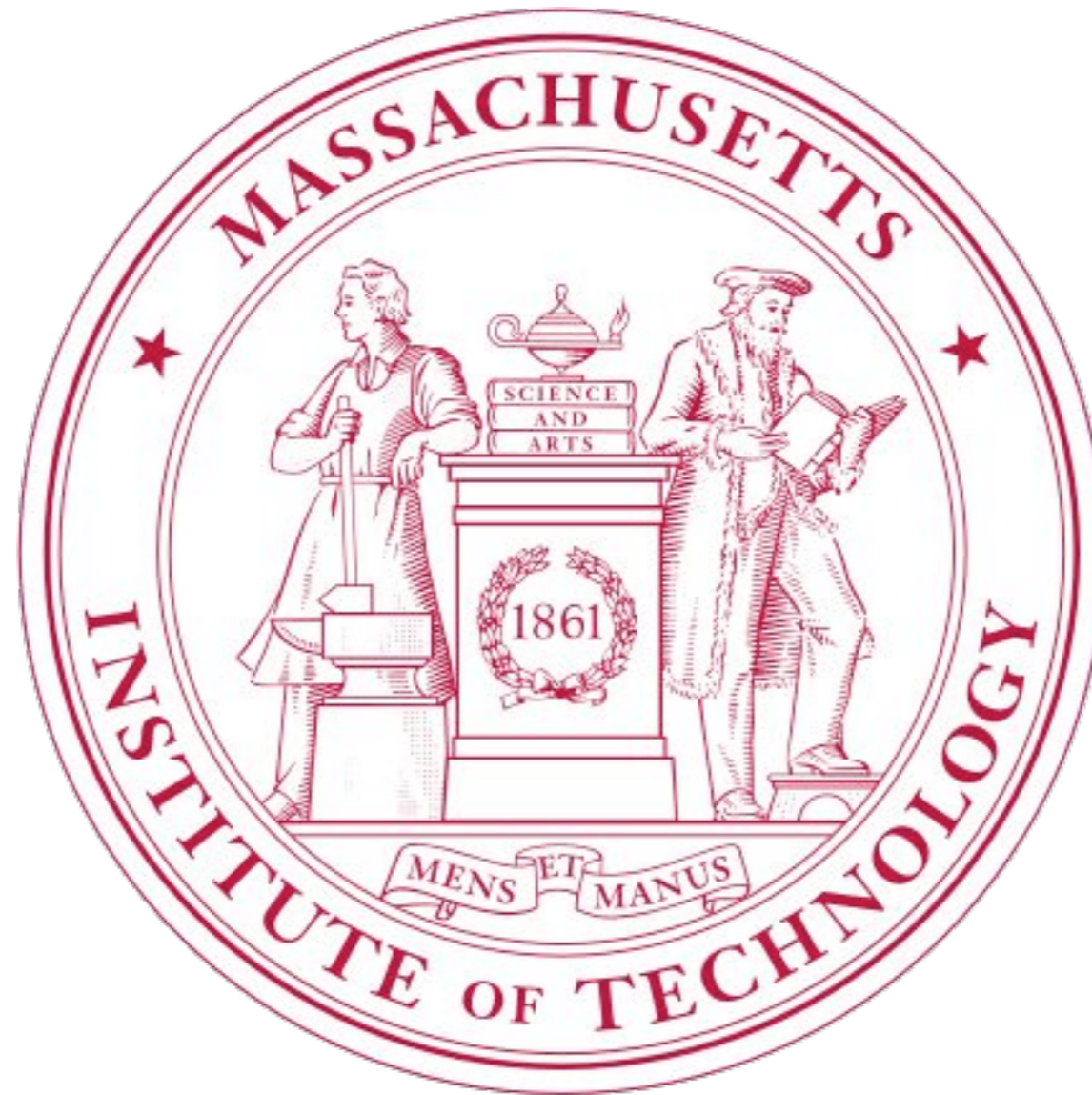
## THINGS THAT THINK



Things That Think is inventing the future of digitally augmented objects and environments. We bring a unique, boundary-breaking perspective to research, uniting leaders in science, engineering, design, and art. Grounded by extensive corporate sponsor interaction, our prototypes and demonstrations aim to inspire the products and services of tomorrow.

Things That Think greatly appreciates your sponsorship. If you are interested in ways to extend your relationship with the MIT Media Lab, please [contact TTT](#).

Thank you!











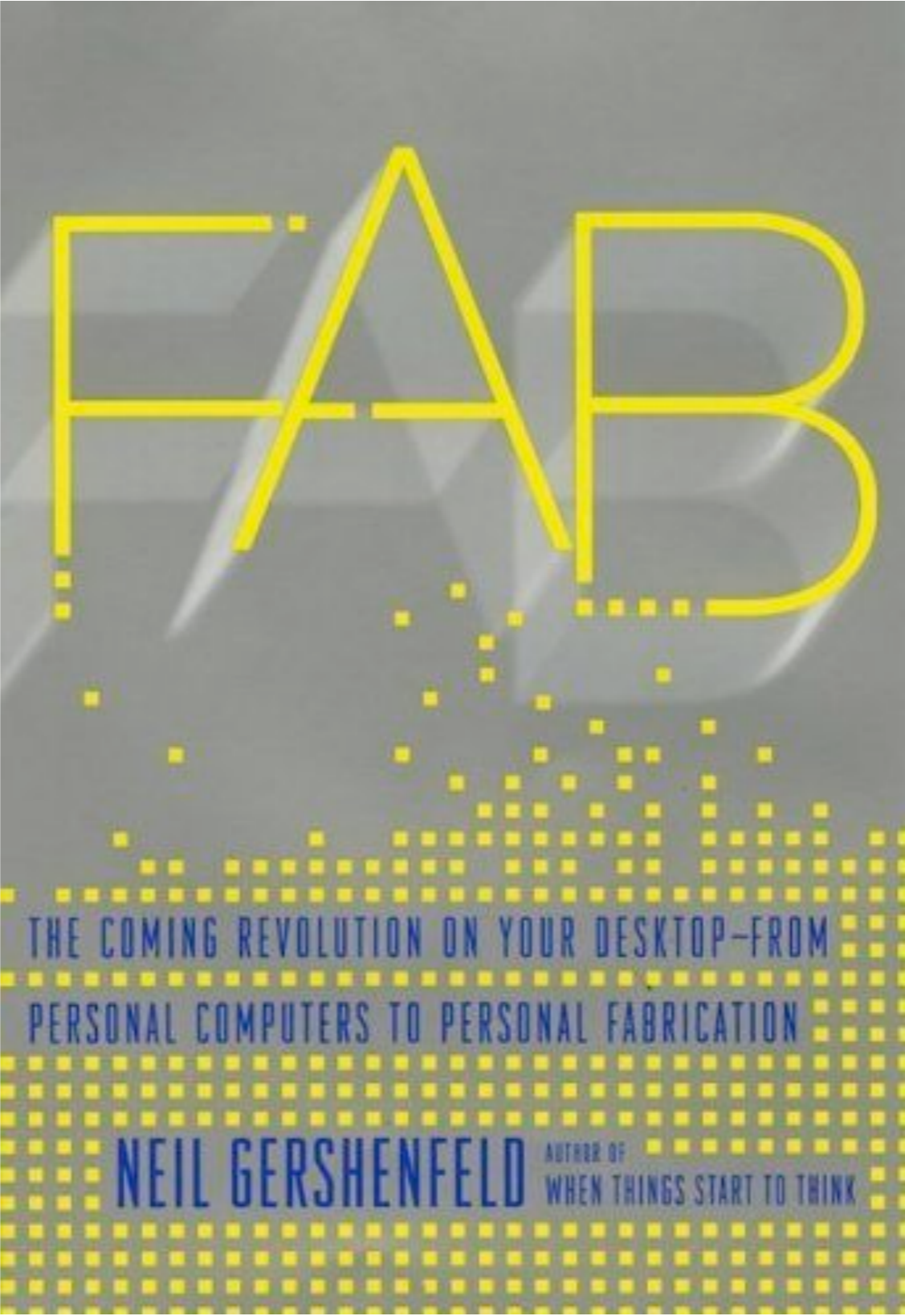
HTMAA





<http://fab.cba.mit.edu/classes/863.12/people/calisch/14/foot.html>











# AS220







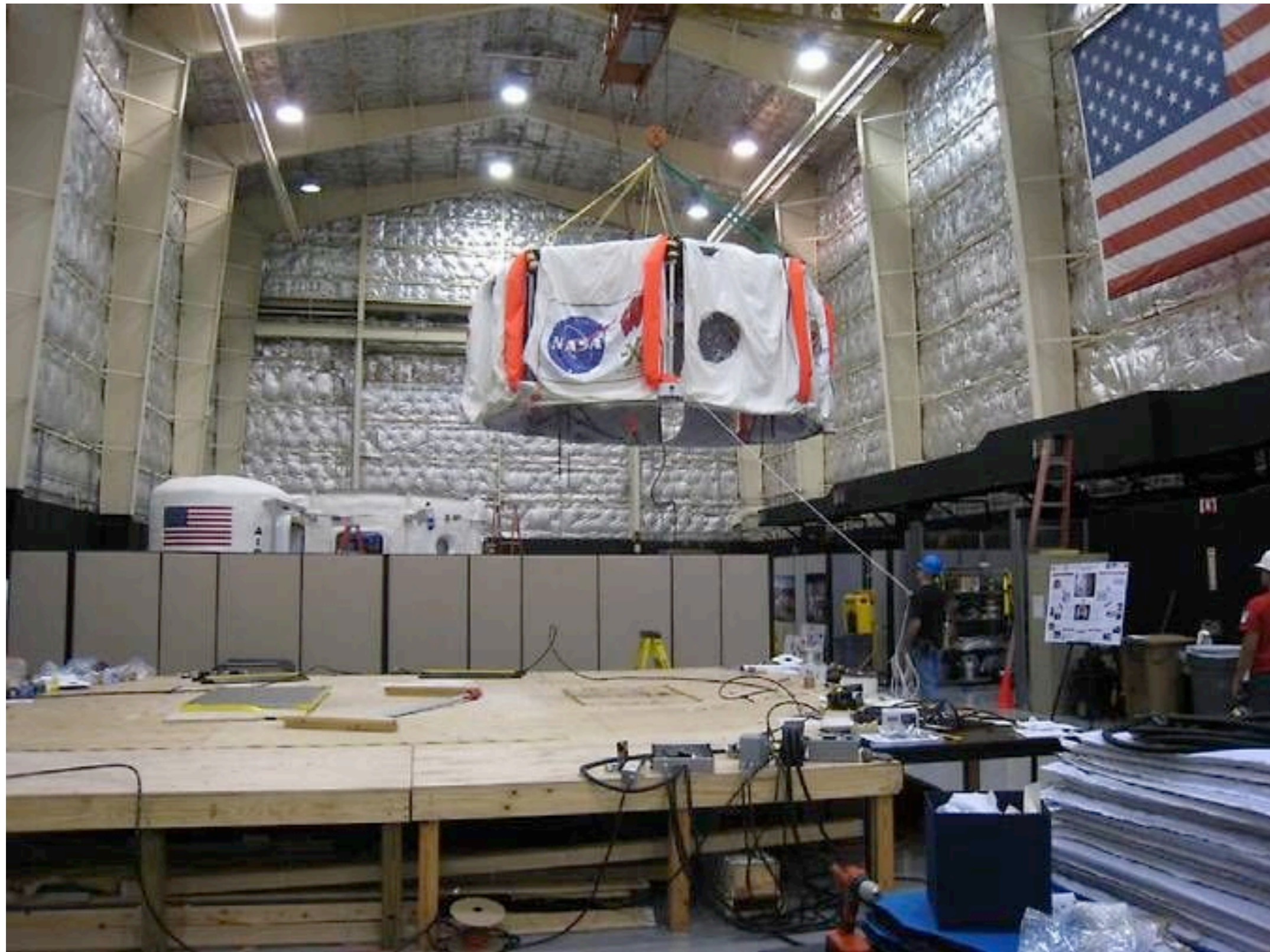




# Expansion des Fablabs

USA















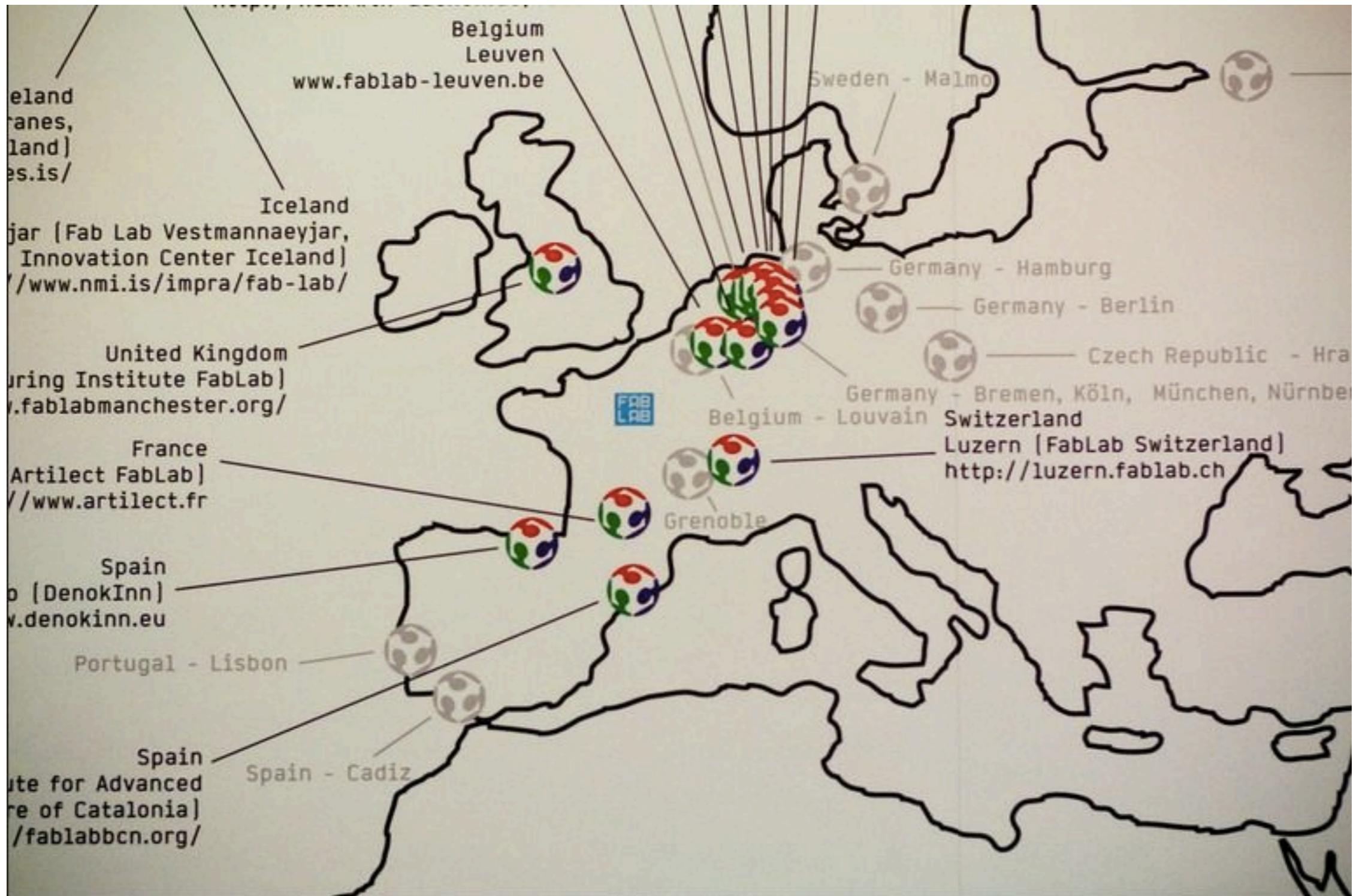
# Europe











2011











# Pays émergents





Pune



# Afghanistan







Ghana



# Futur des Fabblabs

**Fablab 100k > 10k**

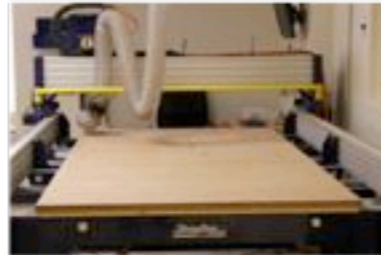




# - Fab Lab Equipment -



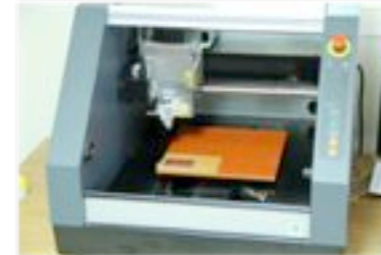
Omax/Maxium abrasive waterjet with 5'x10' table



ShopBot 4'x8' 3 axis mill w/ spindle and closed loop control



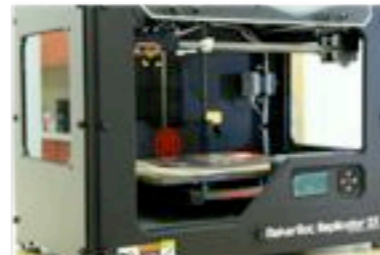
Precision 3 axis mill with tenth mil resolution and 12" x 12" build area - Roland Modela MDX-40A



3D printing: small FDM machines using ABS and PLA



3D Printing: Stratasys/Objet Connex 500 with multi material capability, 16 micron layer height and 490x390x200mm build volume



Laser cutter & Engraver 75W with 24"x36" material capacity



Vinyl cutter used for graphics, flexible electronics, antennas and sensor structures



Array illumination Technology - NextEngine



Structured light

3D scanners including feature extraction to SolidWorks 3D shapes



Electronics assembly and test lab supporting the creation of SMT boards and incorporating micro controllers, sensors and actuators



Molding and casting equipment including a 4'x8' vacuum bagging system for composites







# Fablabs Mobiles







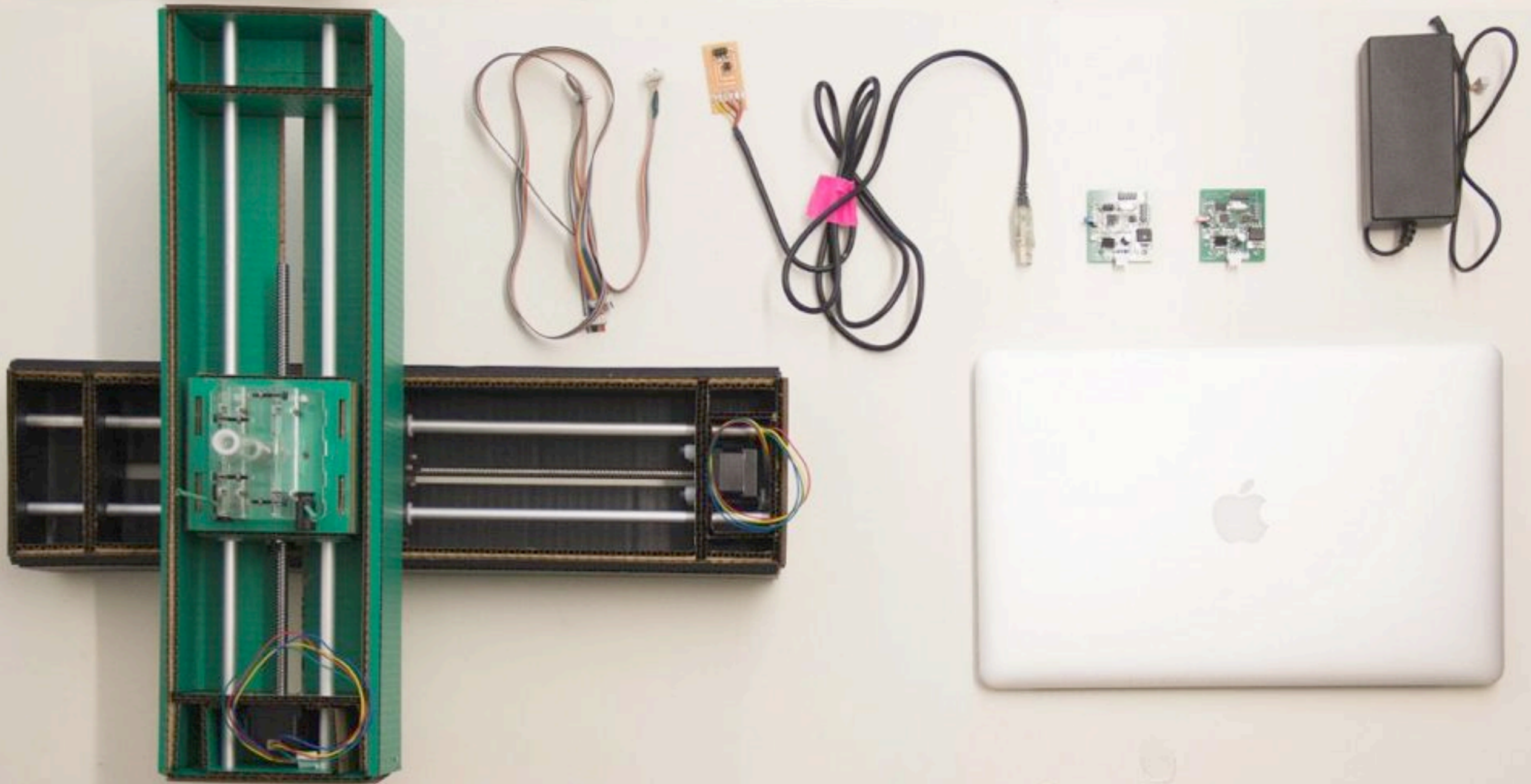


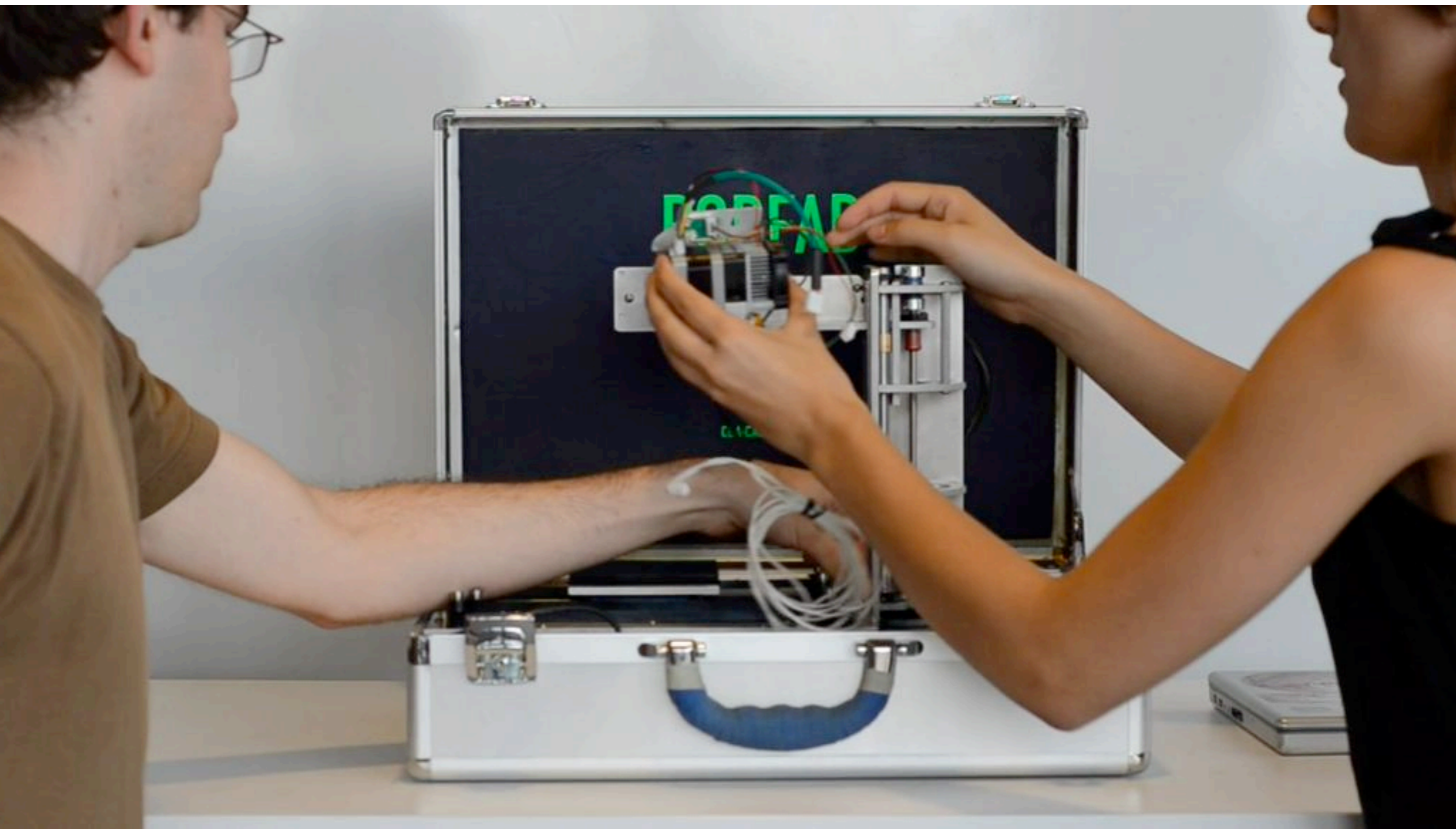














# Fablabs Pliables

# Multi-échelle



# Laboratoire





Pierre-Gilles  
de Gennes

Françoise  
Brochard-  
Wyart

David  
Quéré

ÉCHELLES

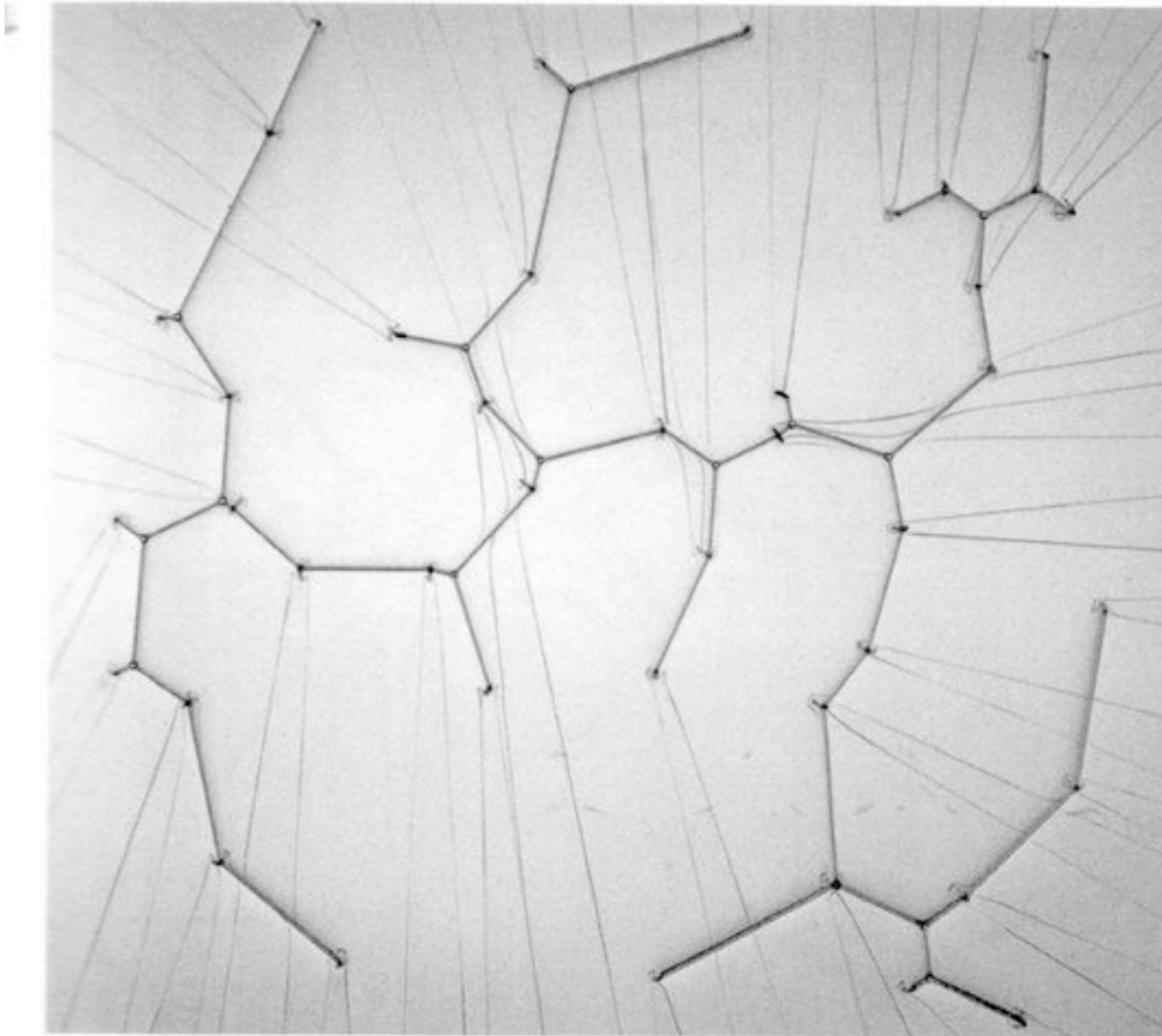
Collection



# Gouttes, bulles, perles et ondes

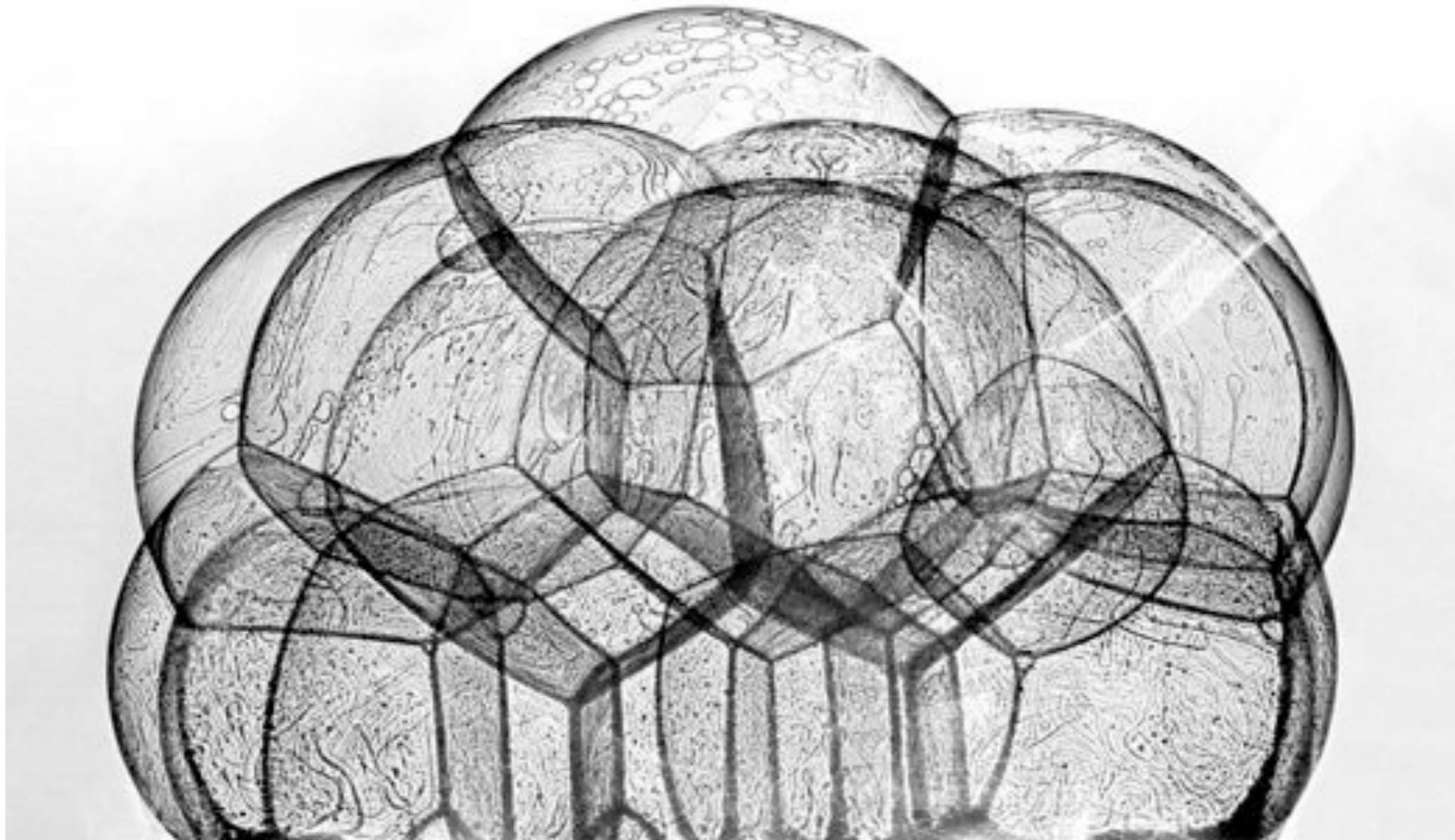
*NOUVELLE ÉDITION AVEC CD-ROM*

Belin



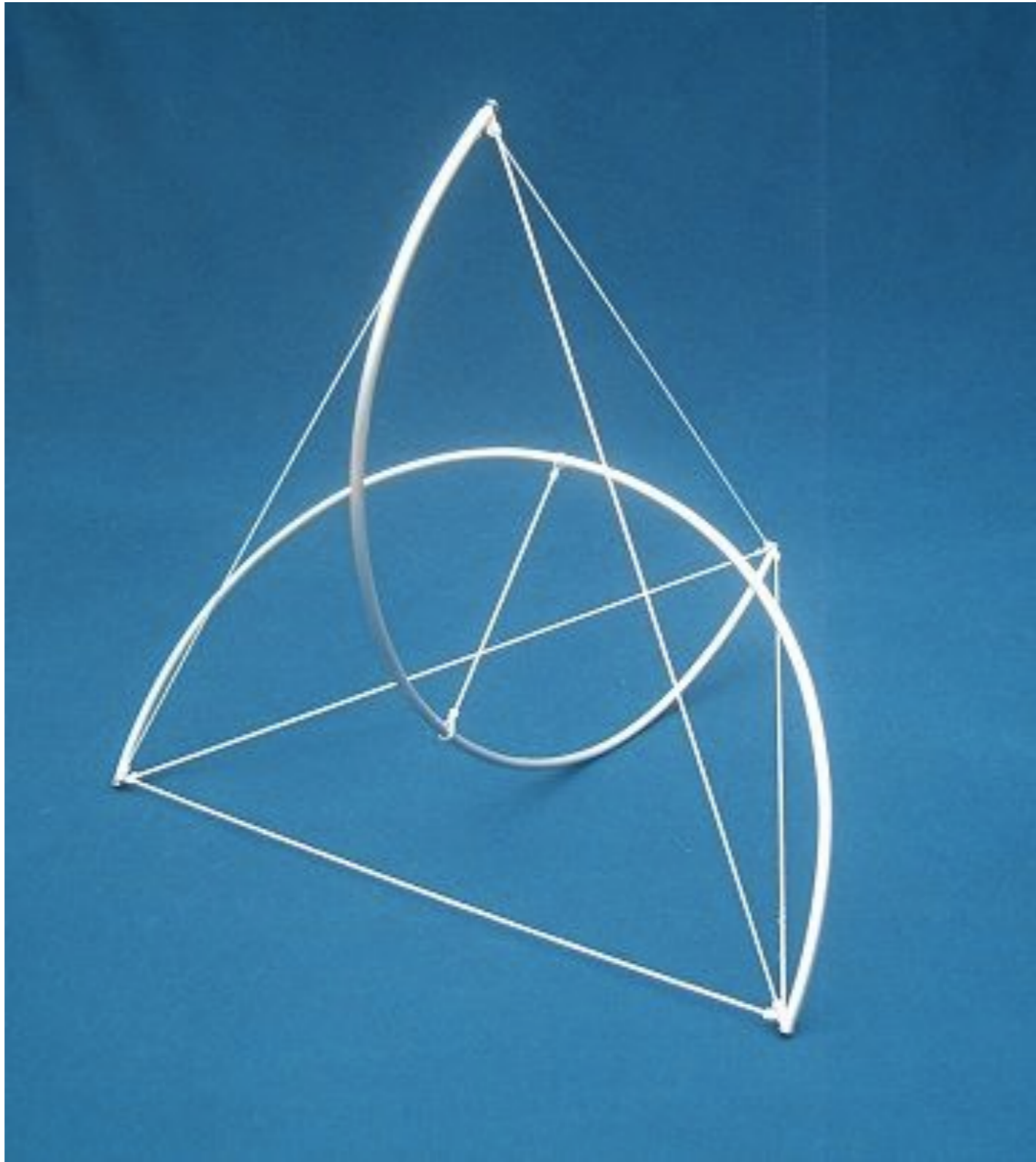
Minimal Path System Frei Otto, 1962





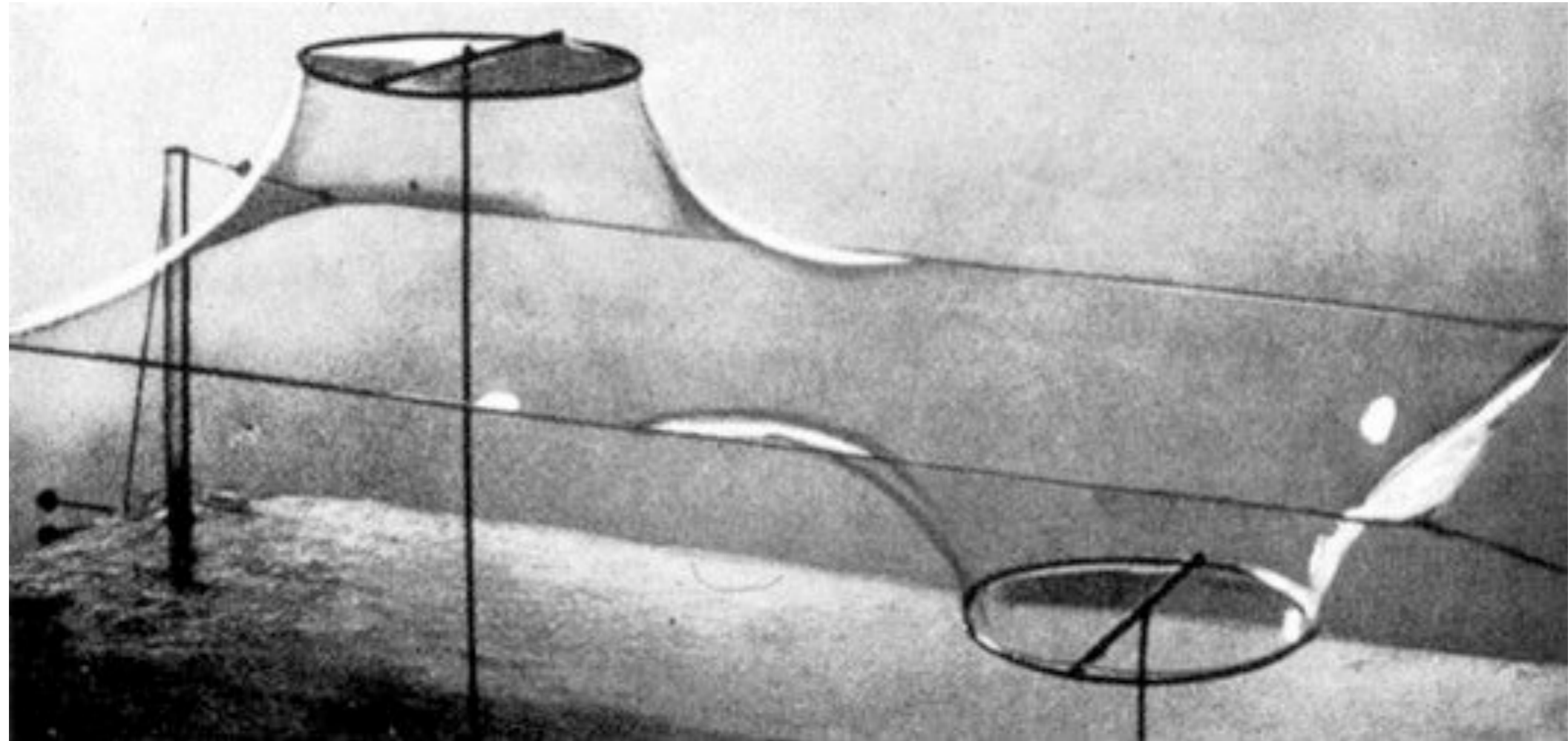
# Maquette

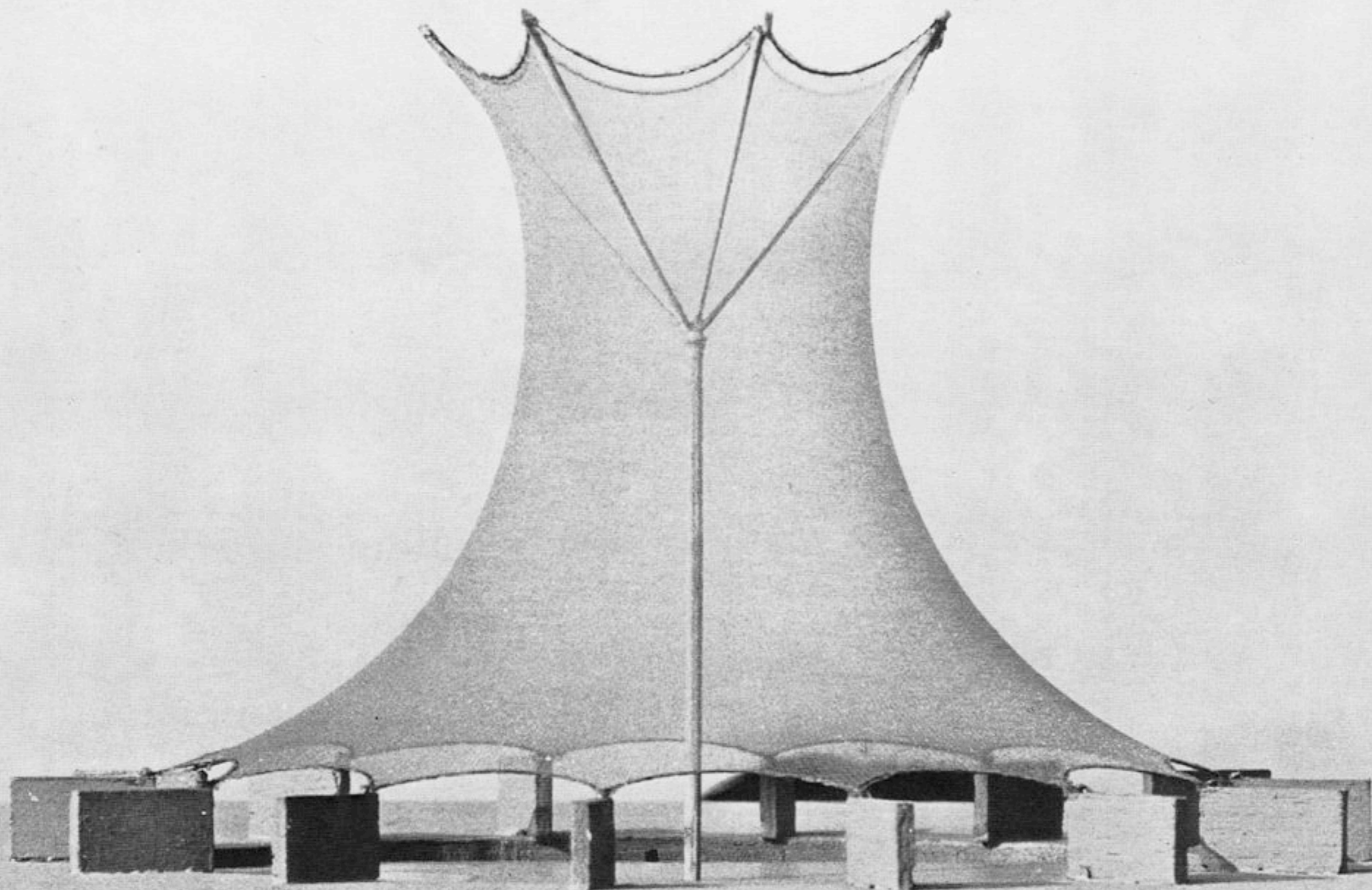




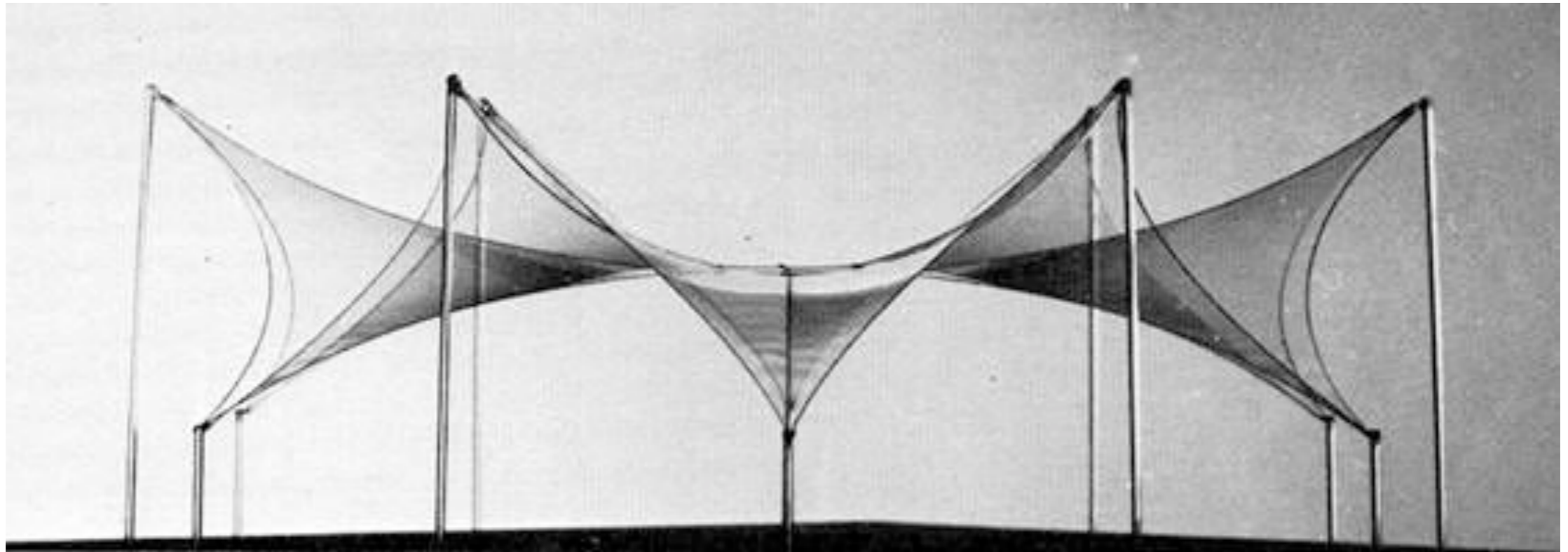








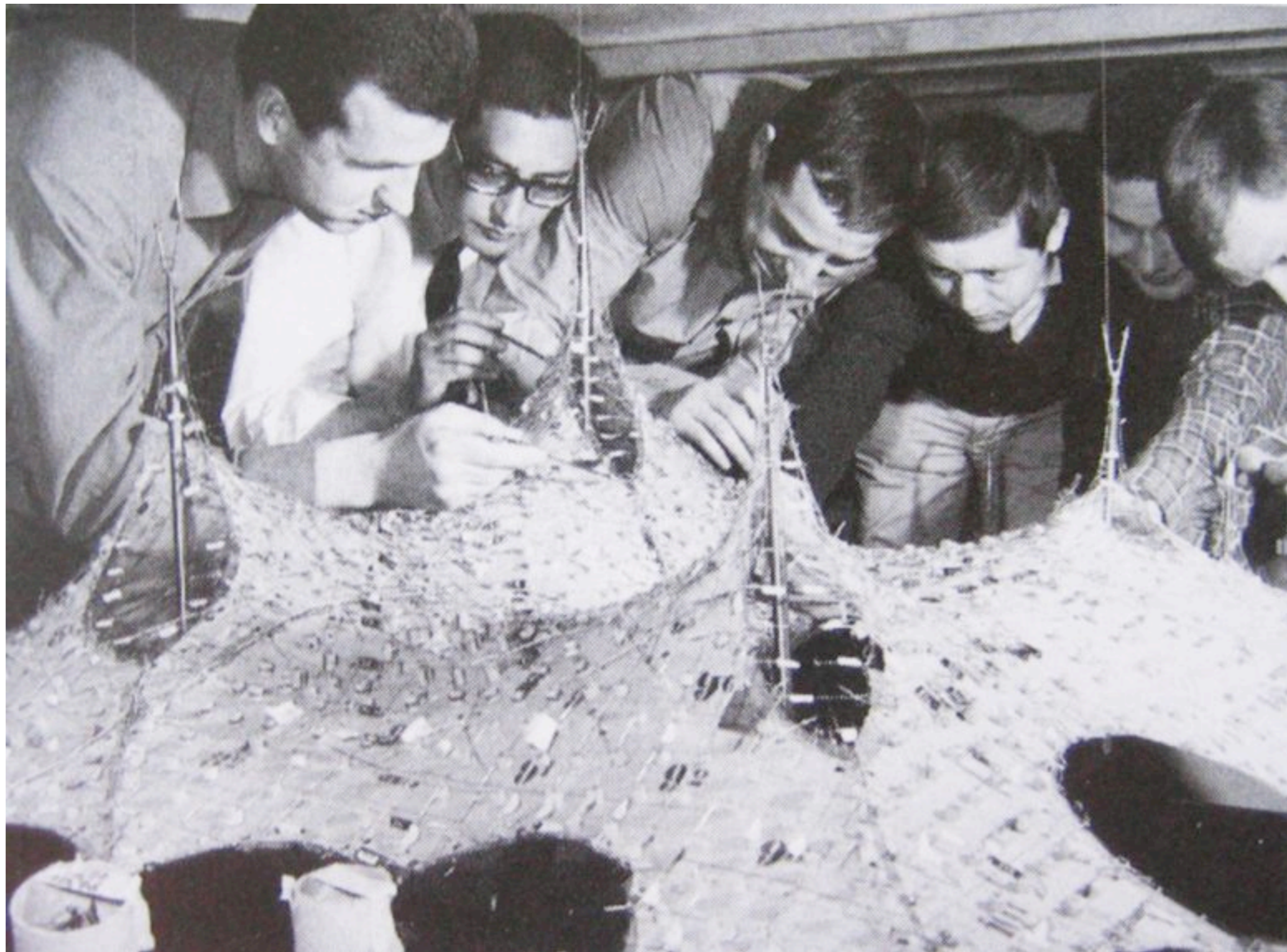






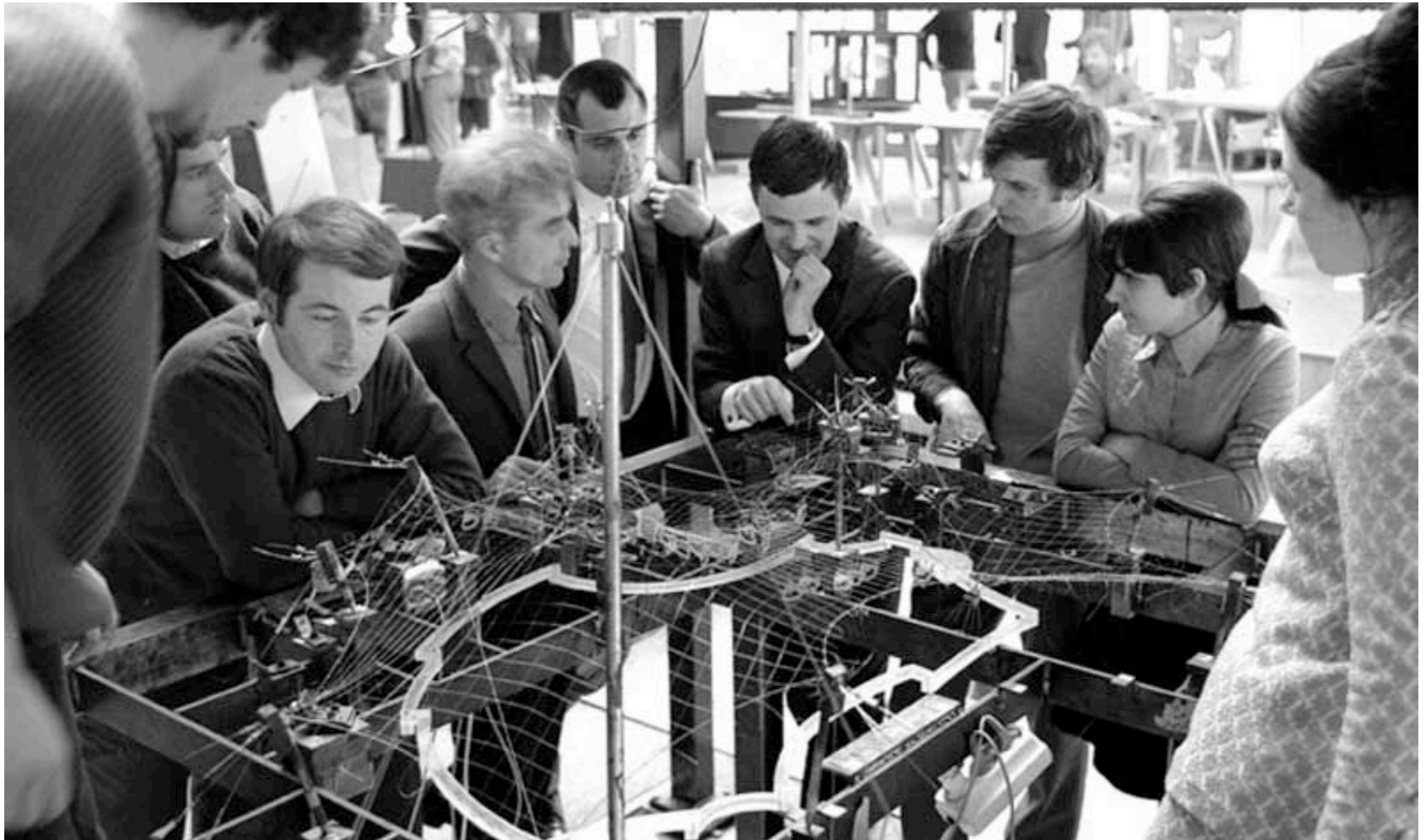


# Prototype

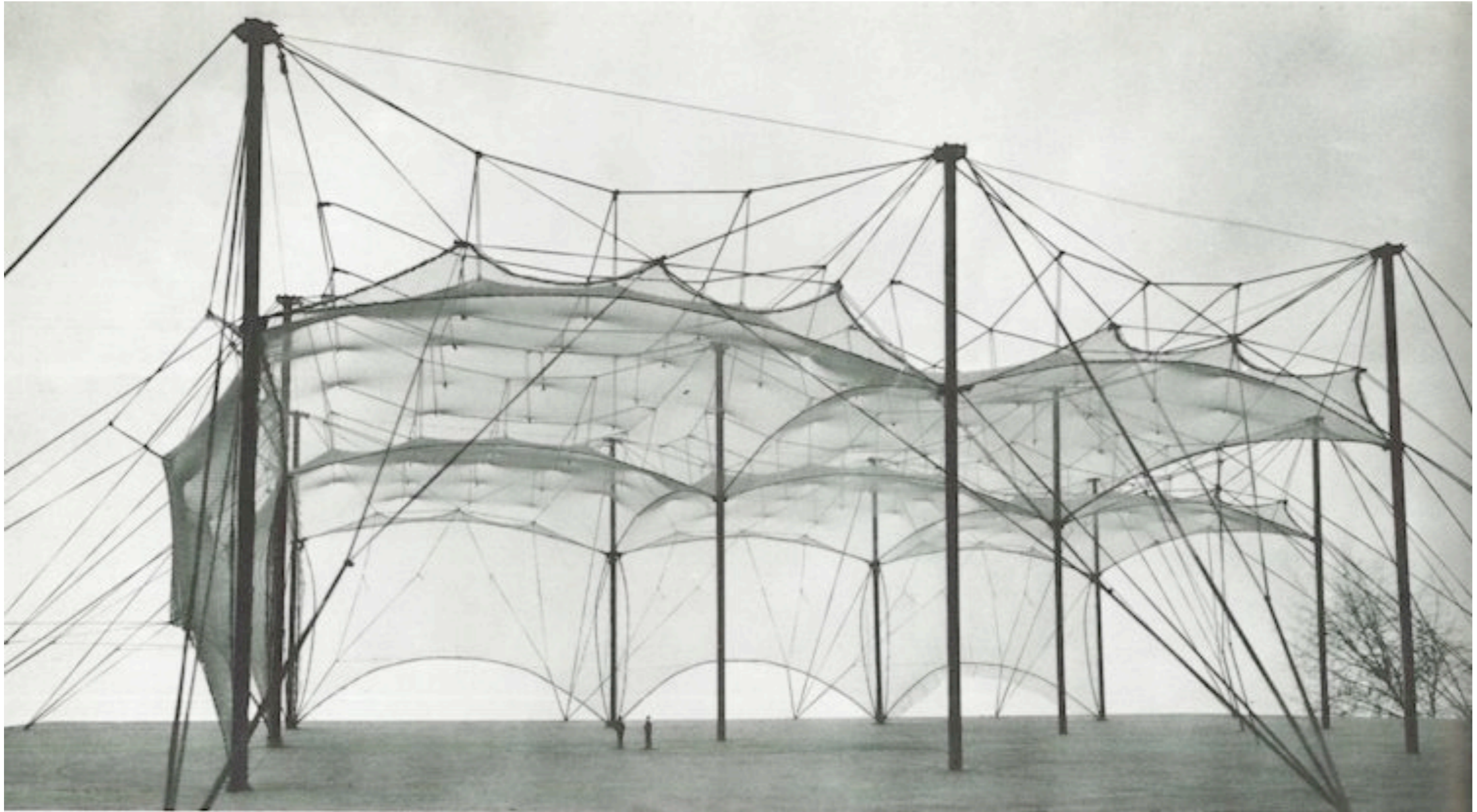












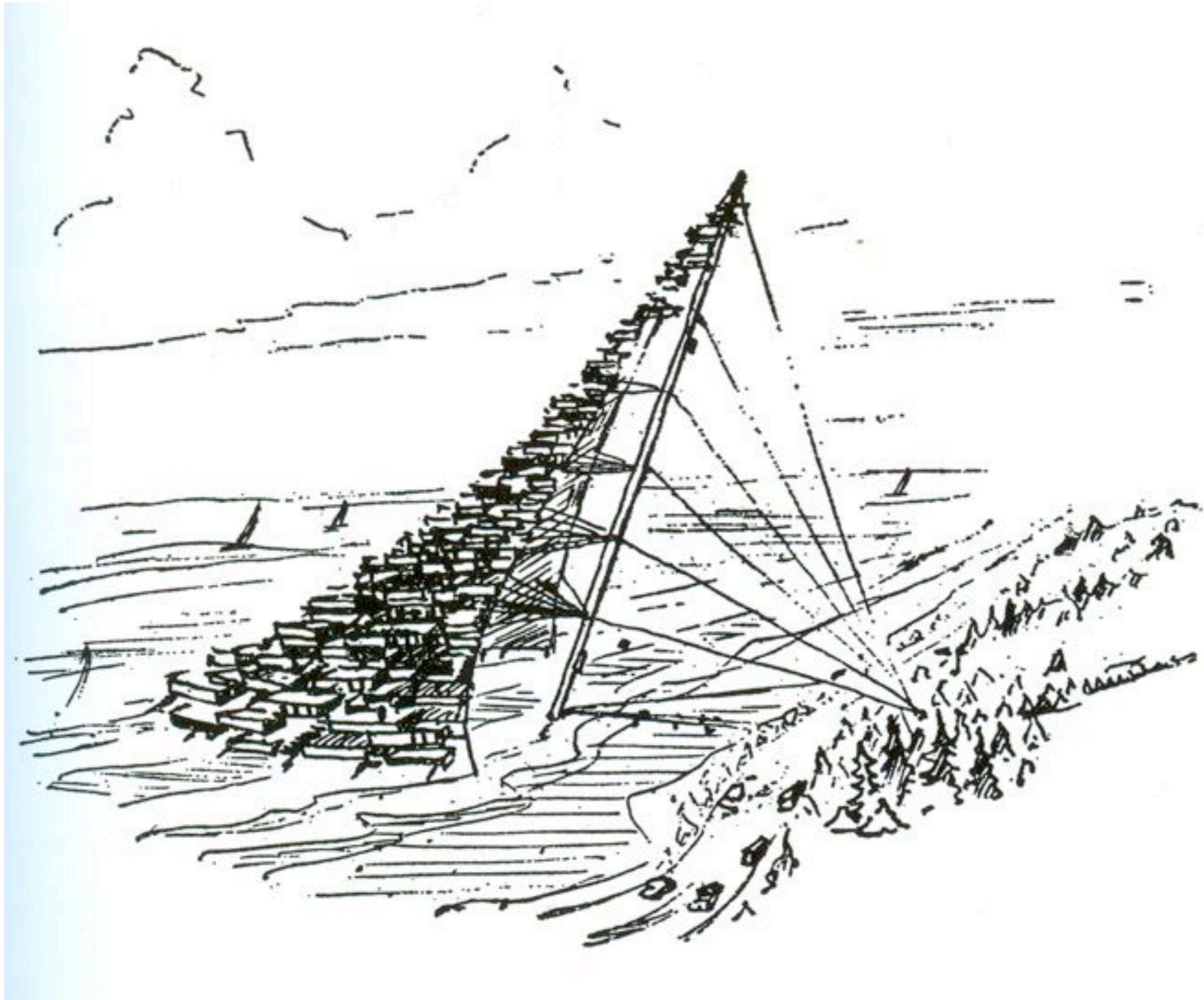












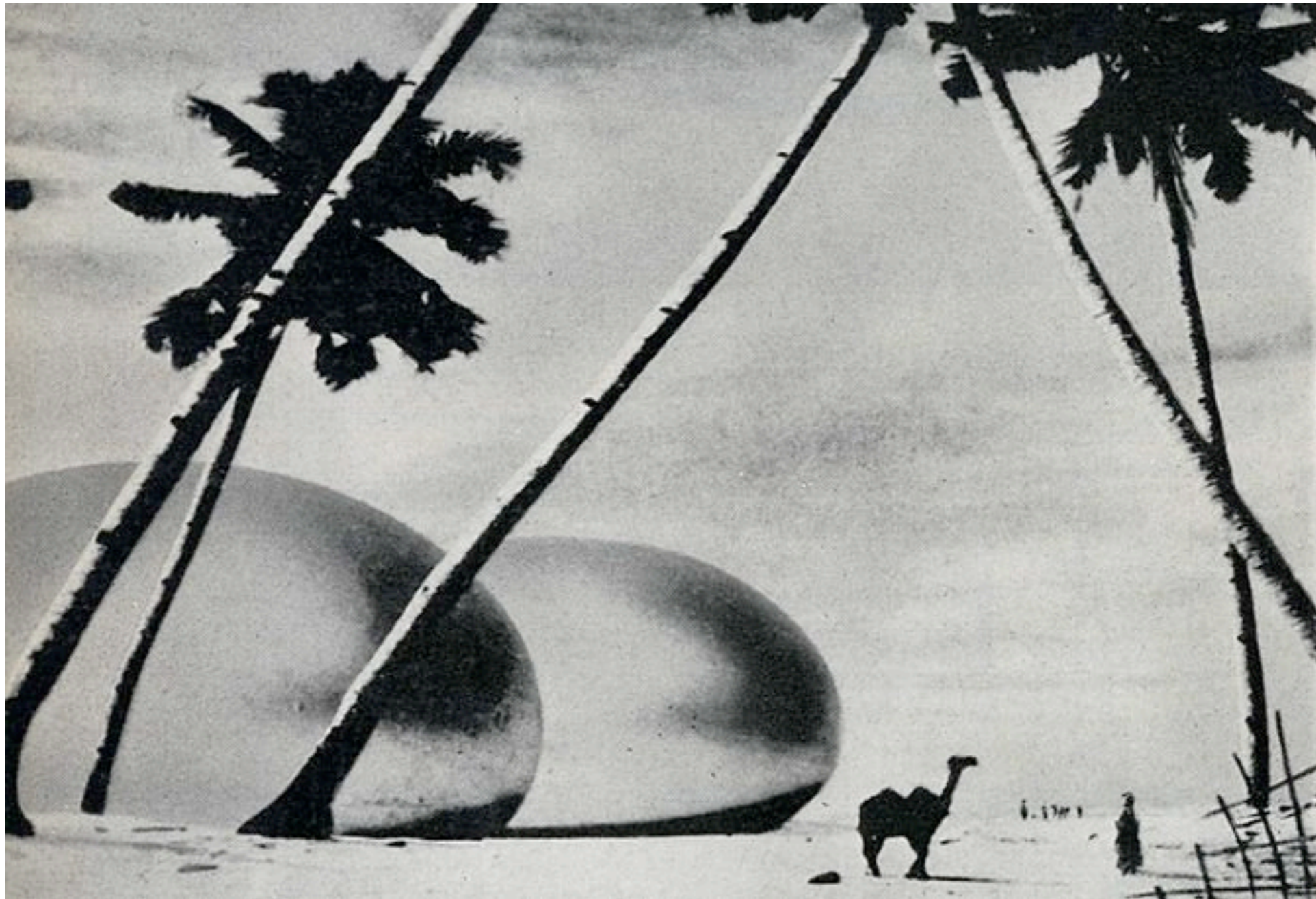
Frei Otto, Highrise of homes



# FoldLab

**Léger + Pliable  
+ Démontable**

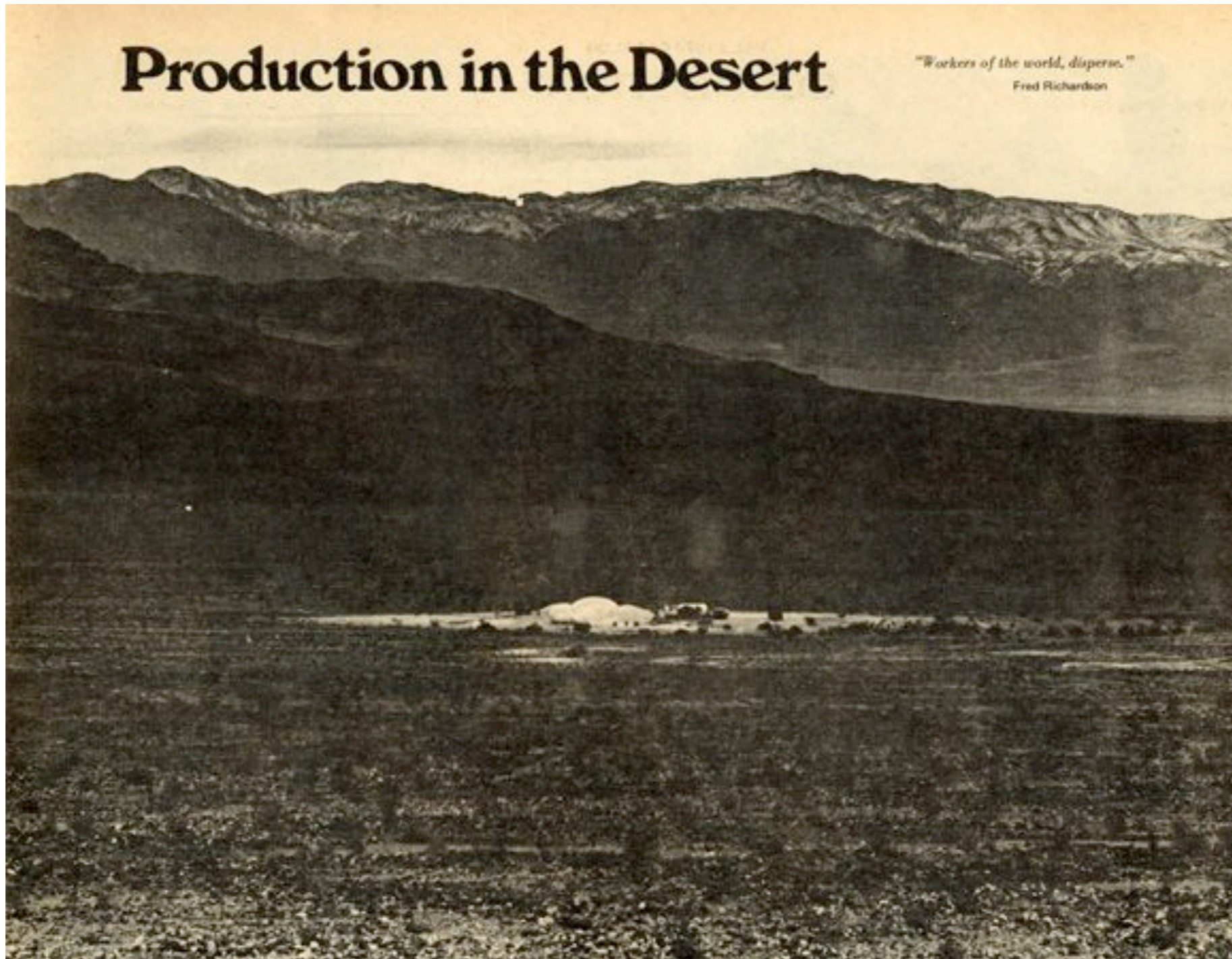






# Production in the Desert

*"Workers of the world, disperse."*  
Fred Richardson



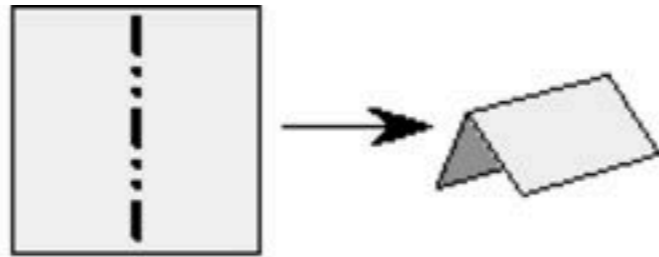




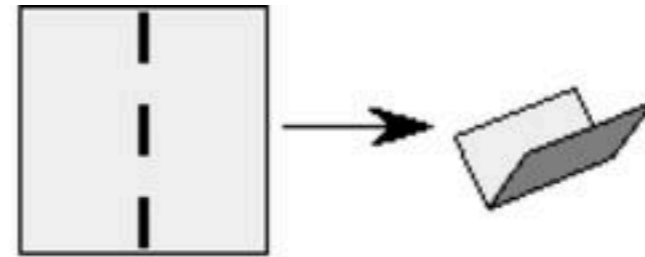




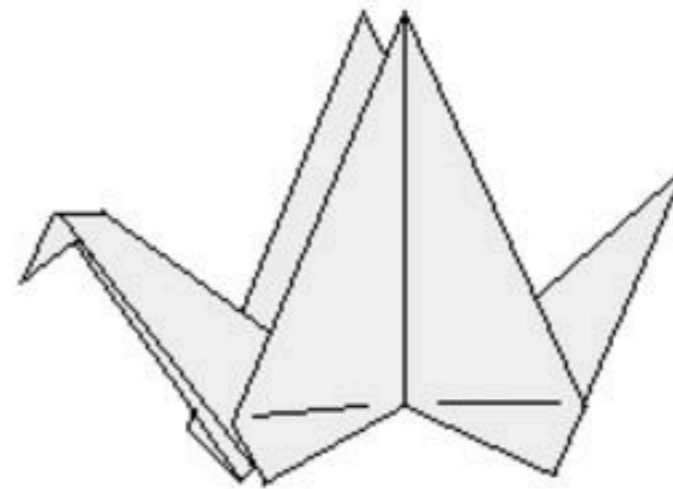
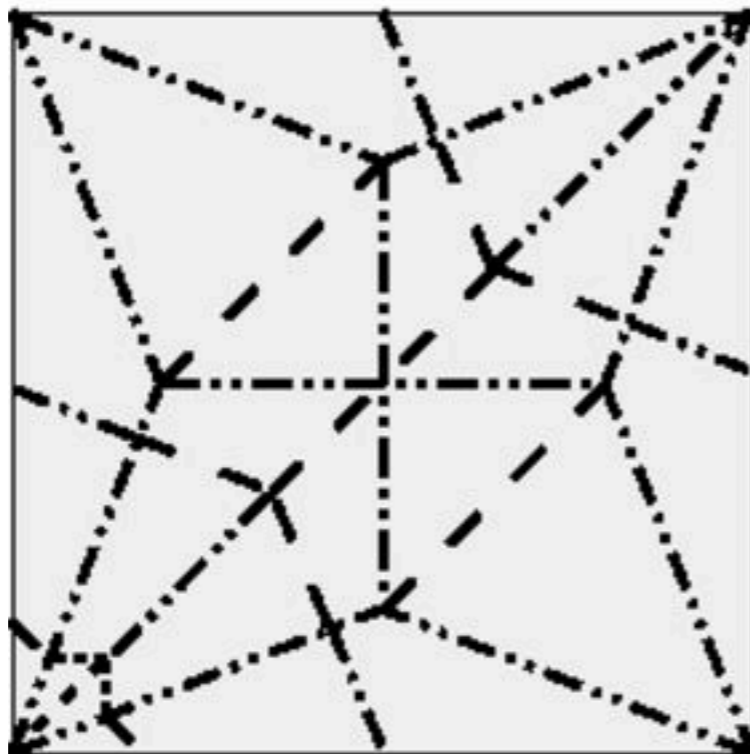




mountain crease



valley crease



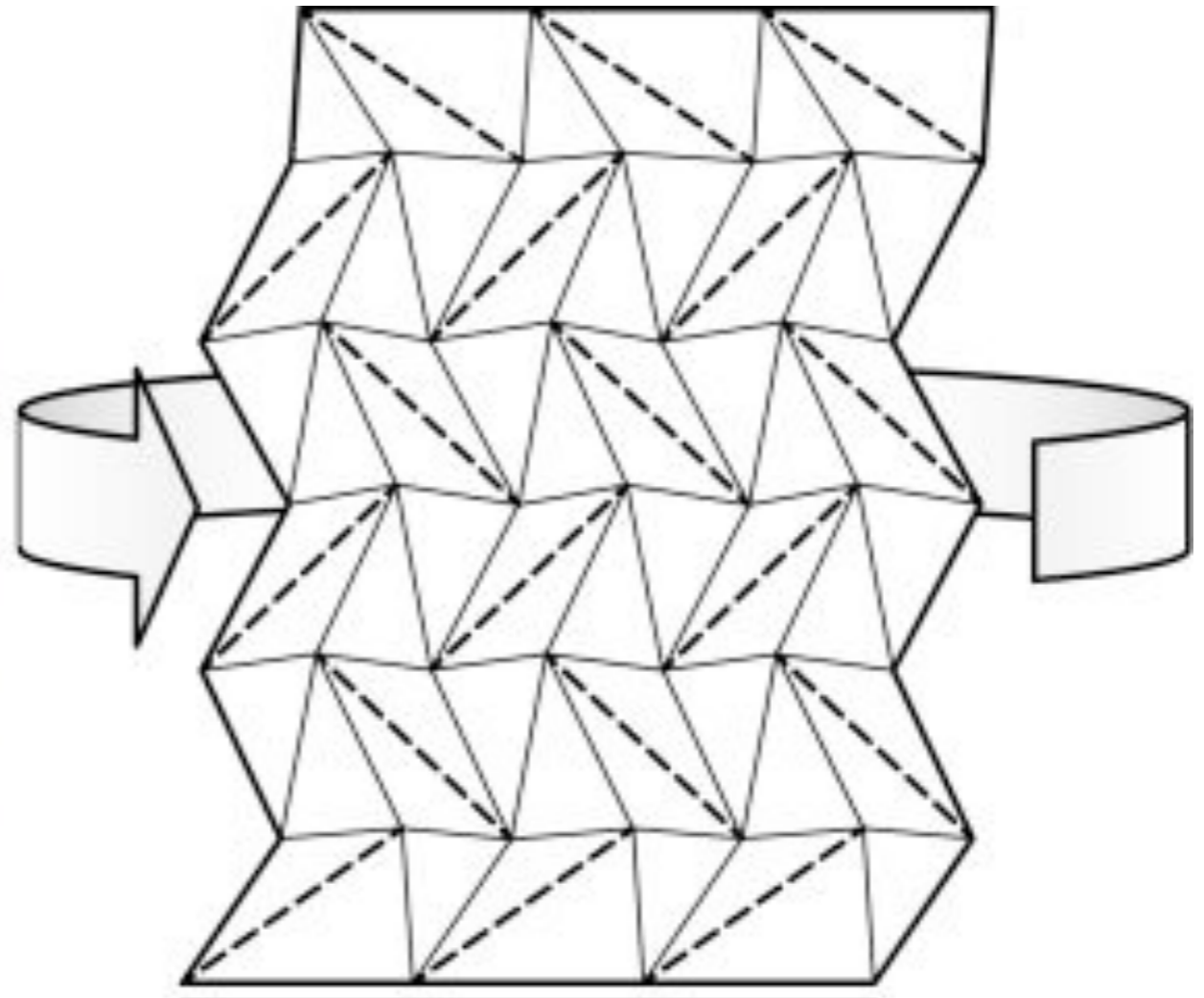




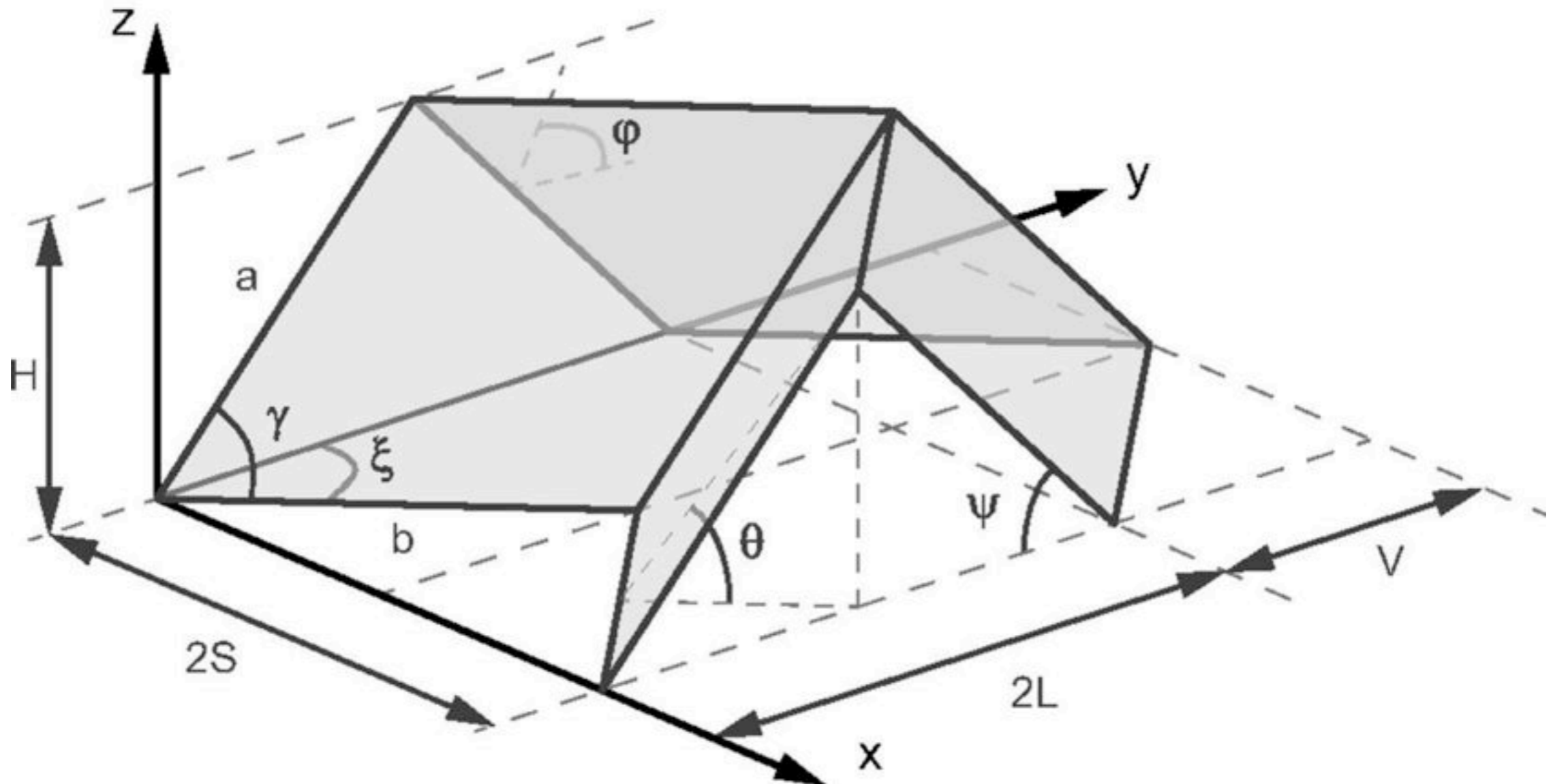
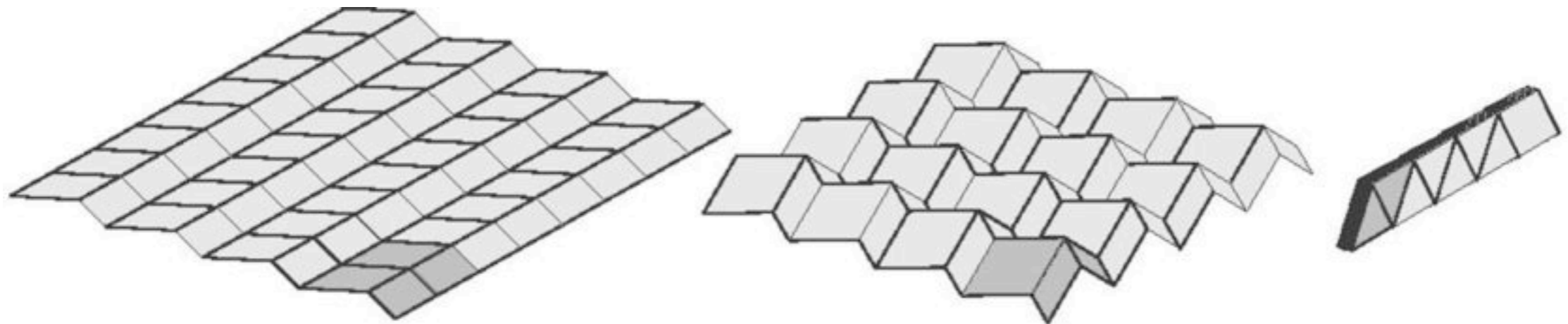


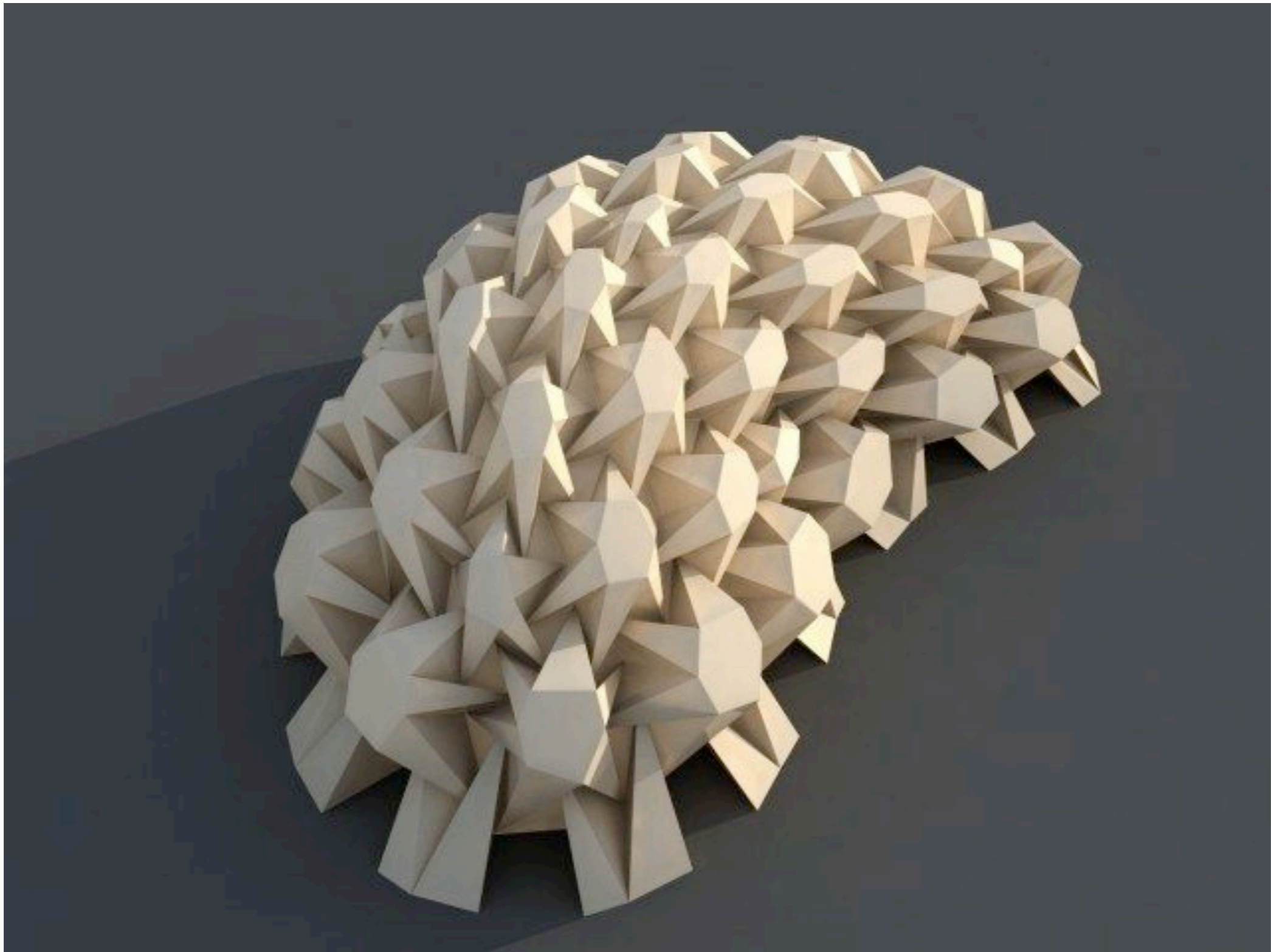






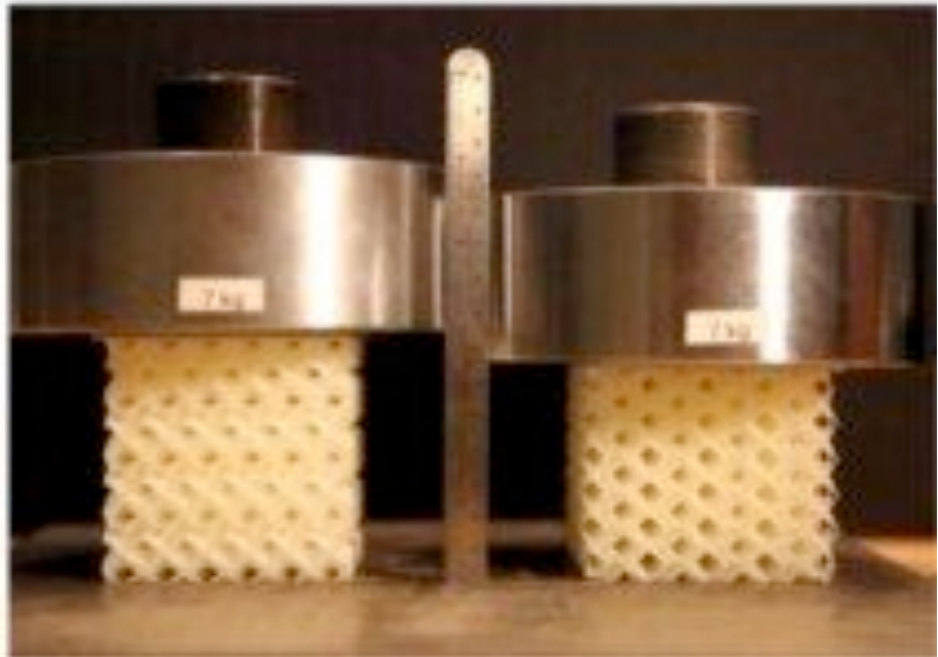
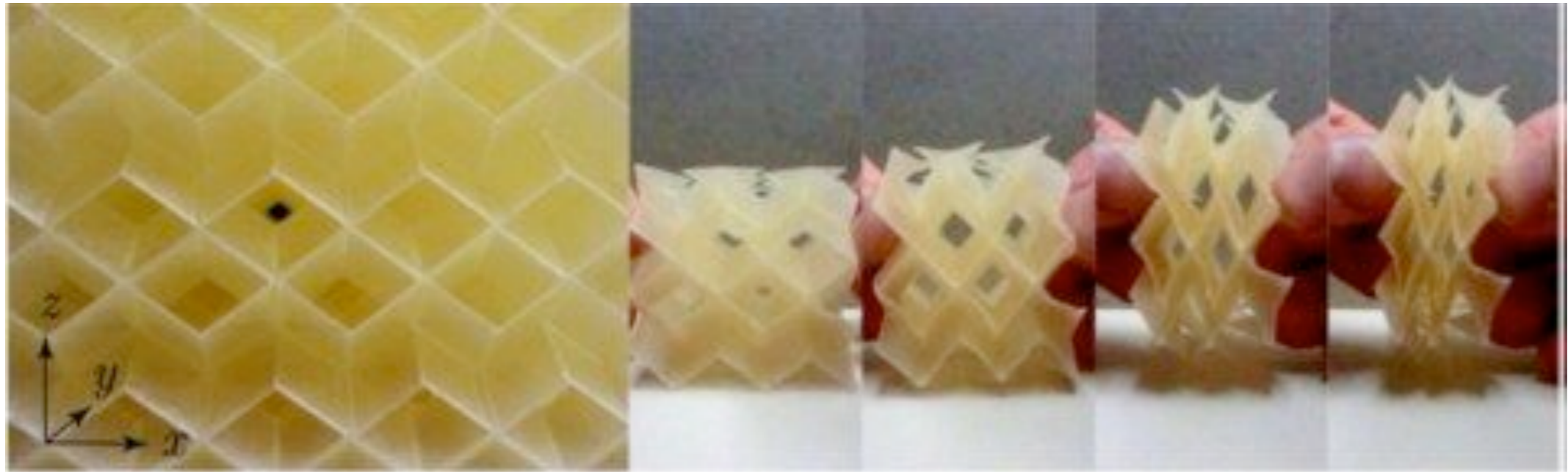














# Prototyper le FoldLab

# Ecoles



















# Universités









# Initiatives Citoyennes





Limma lüs





வாழ்க்கை  
வாழ்க்கை

8.25%  
FIXED DEPOSIT  
Just 1 year 15 days

Widest Collection of Tamil & Telugu  
வாழ்க்கை

வாழ்க்கை  
வாழ்க்கை

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