

# **THE NEW FRONTIERS OF DESIGN**

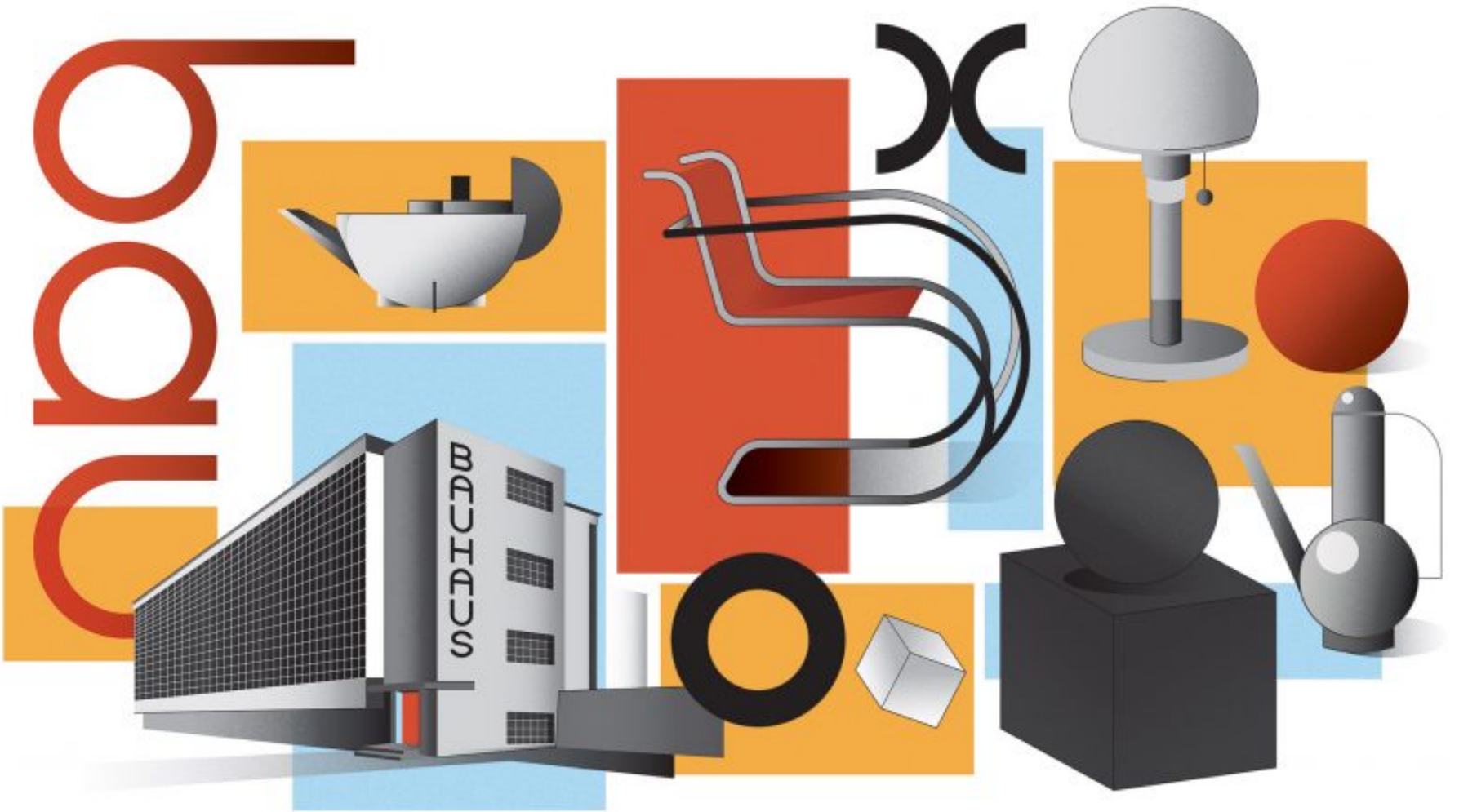
**Every great advance in science has issued from a new audacity of imagination.**

**John Dewey**

**DESIGN is “purpose, planning, or intention that exists or is thought to exist behind an action, fact, or material object.”**



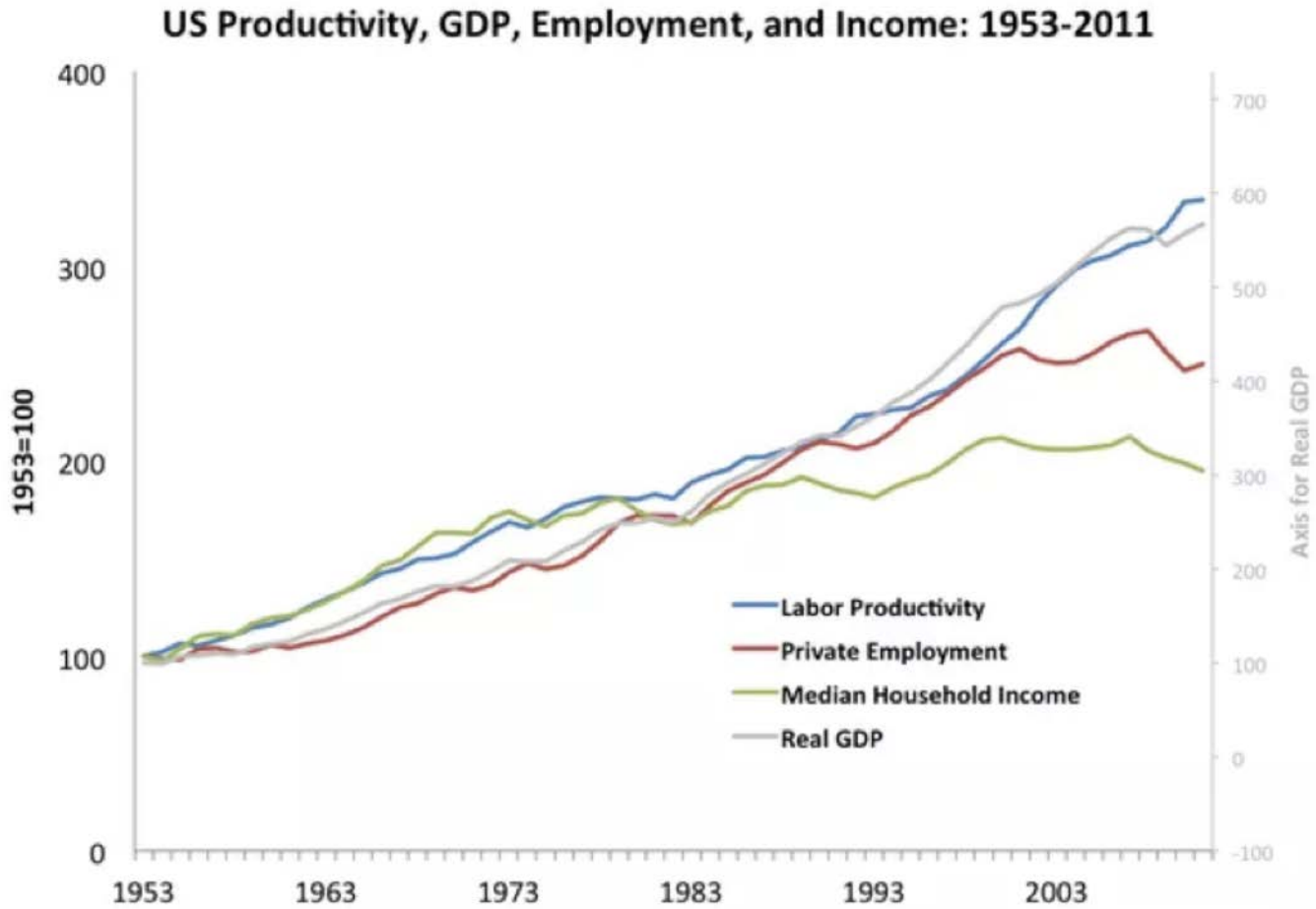
# DESIGN is ... Arts and Crafts, Bauhaus, ...



# DESIGN is Simplicity in a Complex World



# DESIGN is the Future Job Market



# DESIGN is Creative Thinking



# DESIGN is EVERYWHERE:

There are more than **50 units** at MIT, outside the School of Architecture and Planning, that consider design to be one of their key undertakings or methods of inquiry.





**DESIGN is a Thick Concept**

**DESIGN is a Thin Concept**



# DESIGN at MIT is The “Better” in the “Better World”



**8x10m**  
Each bay measures 8x10 meters, and can be replicated in an undulating pattern.

Stabilized by double vault curvature, the structure is held in place by friction and compression forces.

**3**  
The three-layer brick construction uses clay tiles from Spain for the base layer.

**3x6**  
The prototype bay in Venice was built in only three weeks by six people.



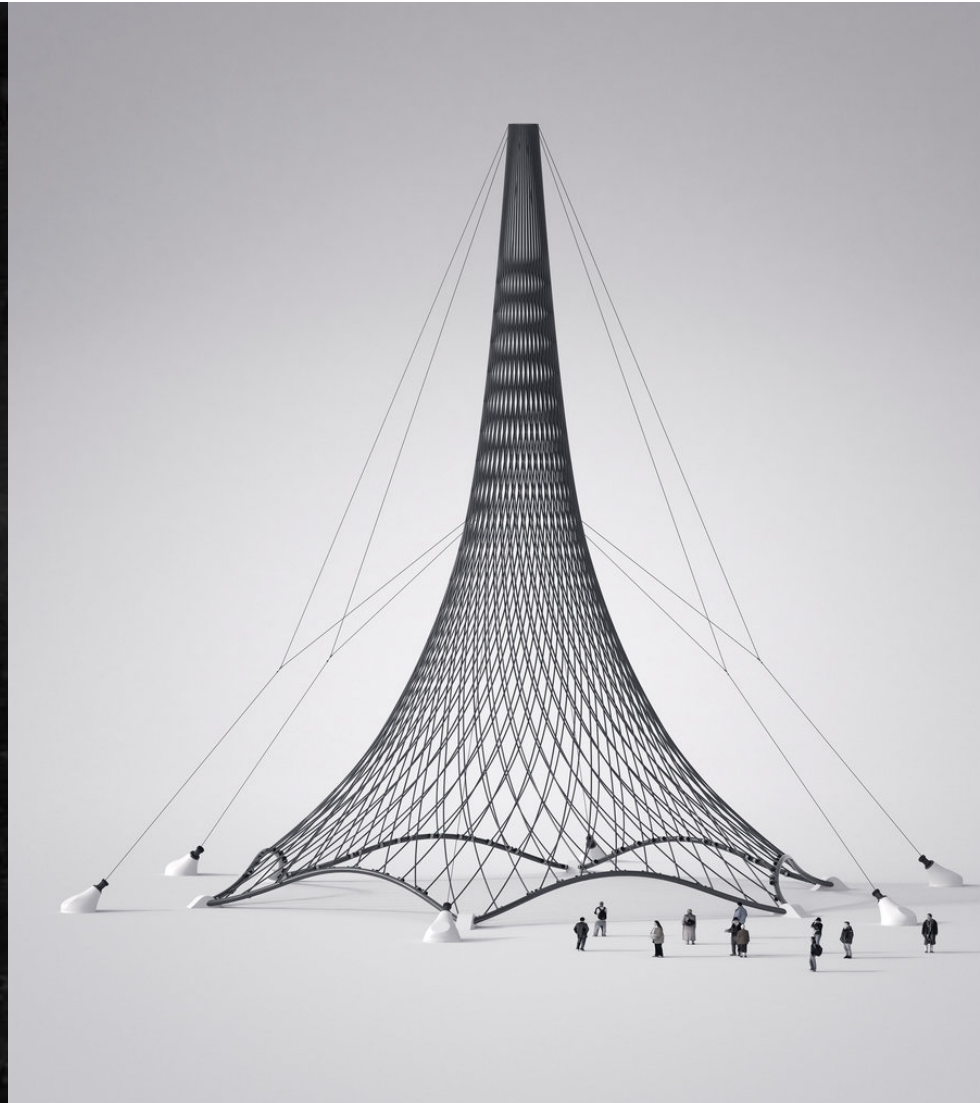
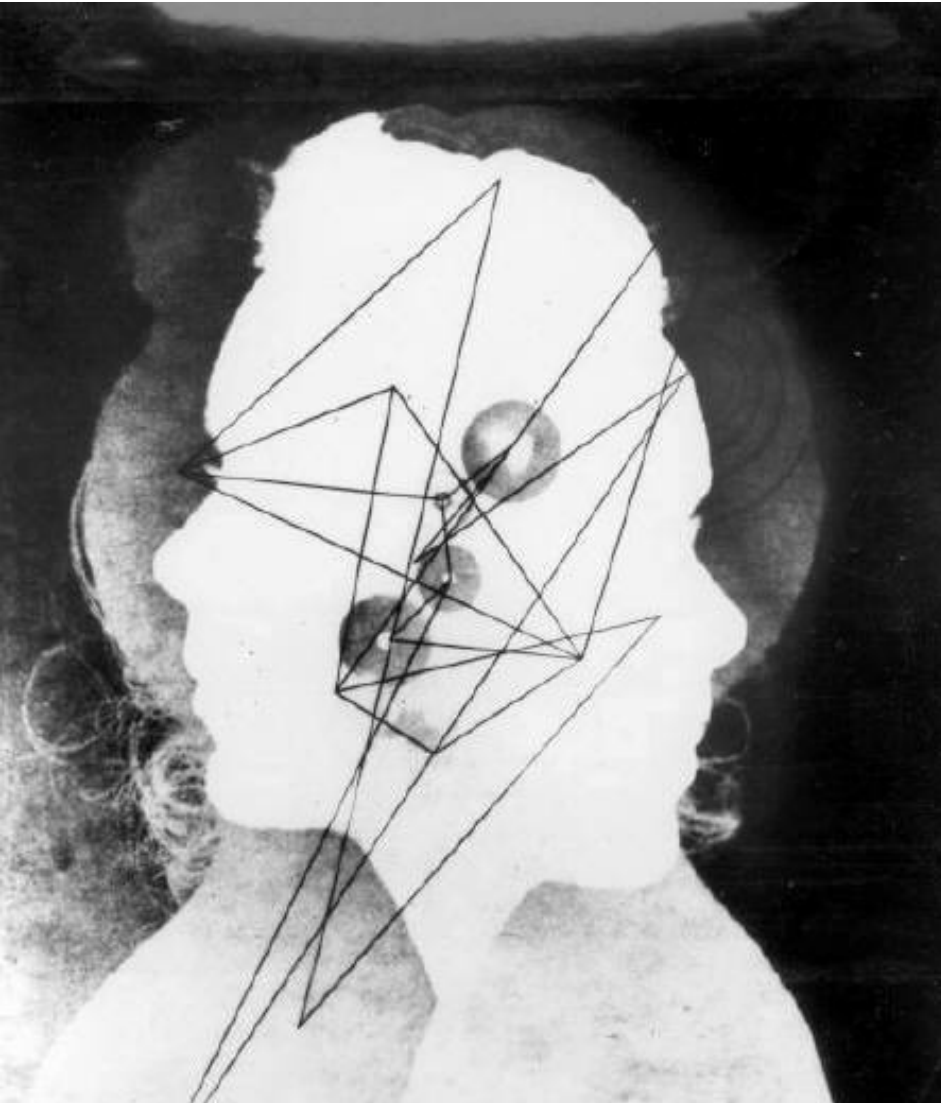
**18k**  
France's LafargeHolcim Research Center developed Durabric and provided 18,000 units for the Droneport construction.

Reusable steel tubes form a temporary framework over which the vault is built.

"Durabric," a naturally cured block of compressed earth and cement designed for local manufacture in the developing world, makes up the two outer layers.

# DESIGN at MIT: A Tradition of Innovation

From : Donald Schon, Gyorgy Kepes, Seymour Papert, Nicholas Negroponte, Muriel Cooper, ...  
To : Maria Yang, Steven Eppinger, Skylar Tibbits, Neri Oxman, Peko Hasoi, ...

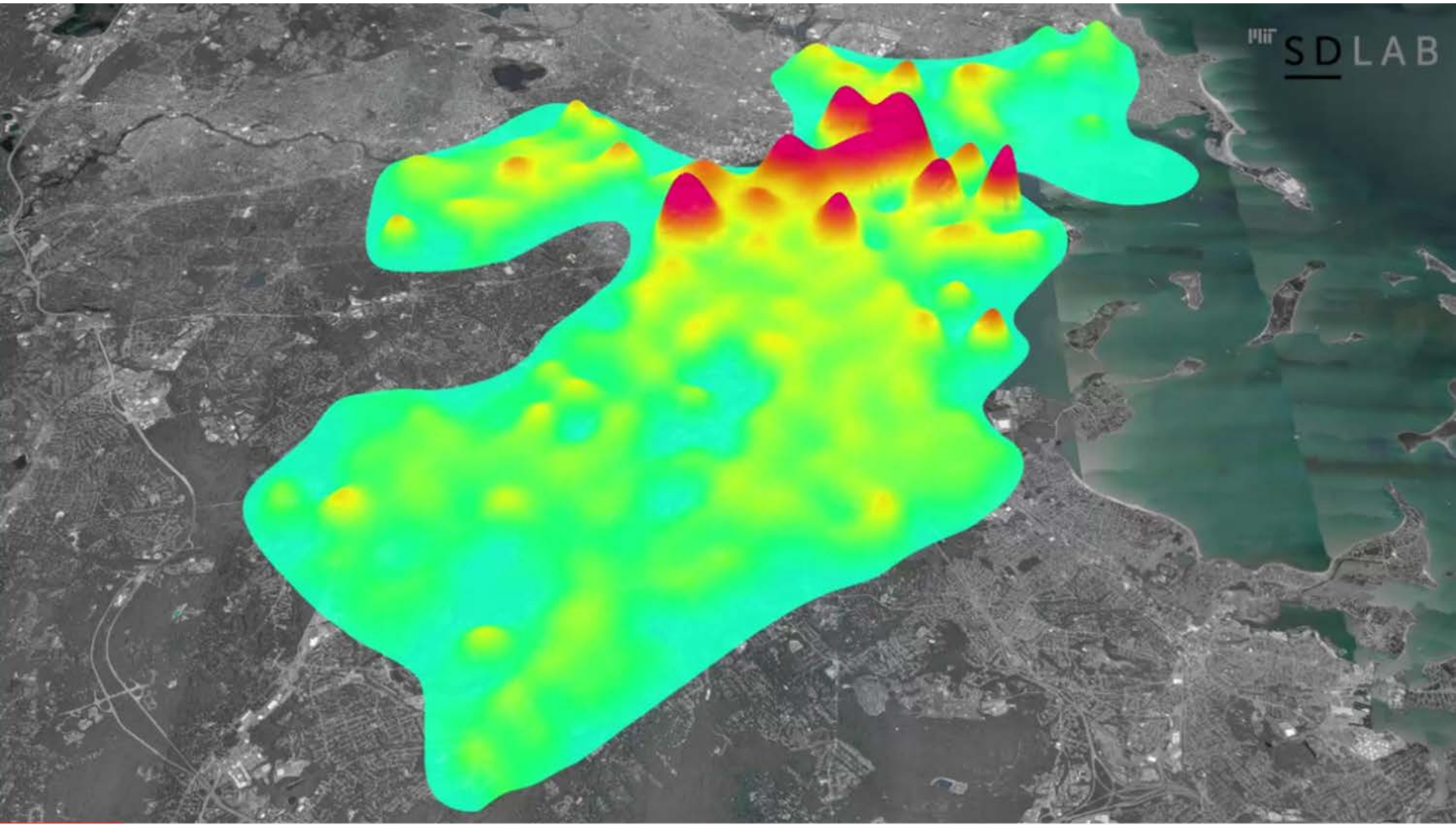


**DESIGN** is the art and science of improving the interface between human beings and their environment



# **THE NEW FRONTIERS OF DESIGN at MIT**

# Enlarging the Table: From Nano to Planetary



# Changing the Object: from objects to systems



# Changing the Values: from single source to open source





## **Five Attributes of Design:**

**Modesty**

**Attention to Detail**

**Meaningful**

**Re-design**

**Qualitative**

**from Bruno Latour's  
"A Cautious Prometheus"**





# Changing the Hierarchy: From Engineering to Science



Gene Drive



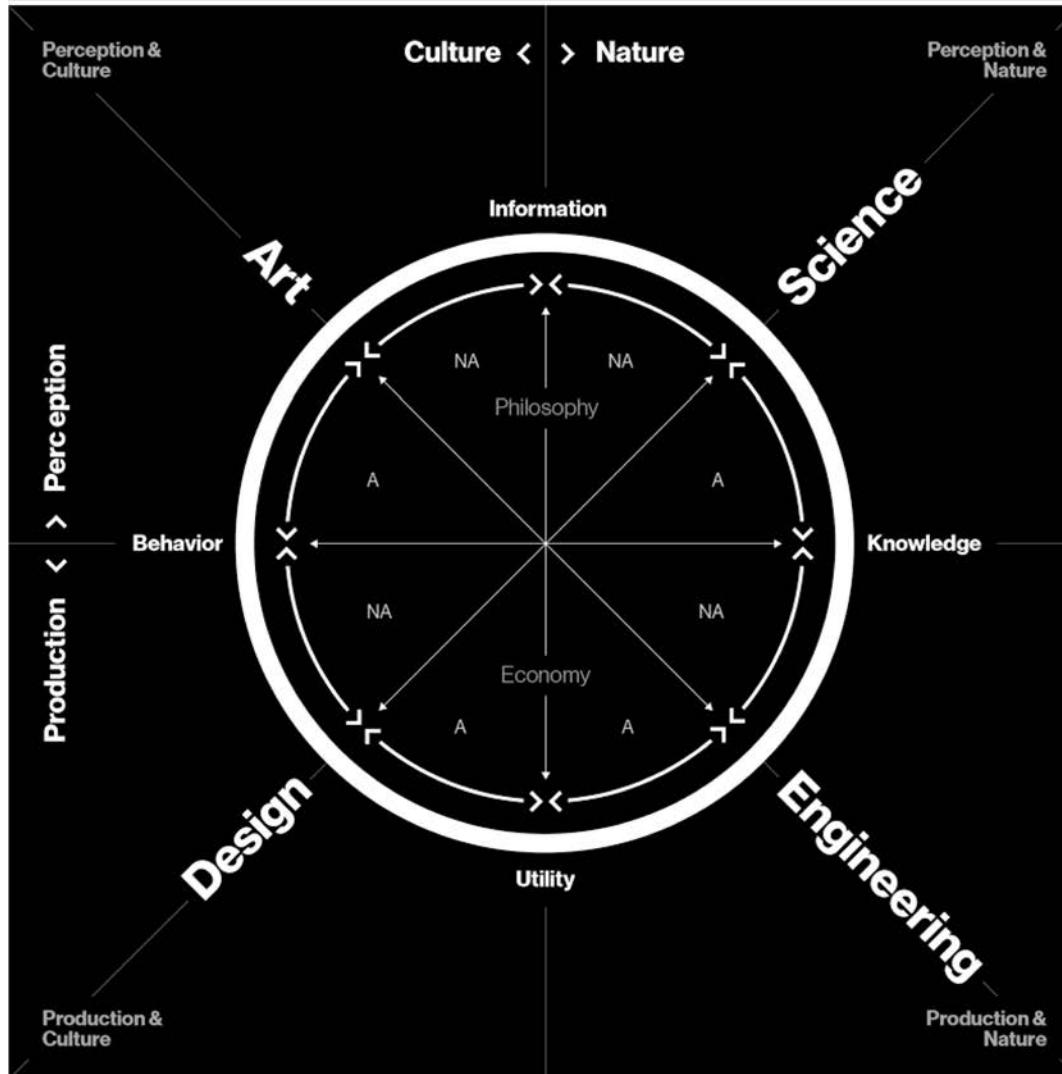
# Krebs Cycle of Creativity

Neri Oxman, January 2016

Key

A Applied

NA Non-Applied





# Changing the Approach : From Solve to Resolve



## **NEW DESIGN BASED PROGRAMS**

**Design Minor (4)**

**Art and Design Major (2 +4)**

**Urban Science Major (6 + 11)**

**NEETs (Engineering)**

**Super UROPS (Media Lab)**

**Integrated Design Management (Sloan + Engineering)**

**New Masters in Design Areas (SA+P and Engineering)**

**Scheller Teacher Education Program (SHASS + SA+P)**

**Design X Accelerator (SA+P)**

# The METROPOLITAN Building: A New Hub for Design at MIT





# A New Hub for Design at MIT

**Design Major (4 + 2) + Urban Science Major (6 +11) + New Masters**

**Design Minor + Design X (Accelerator) + Design Learning Initiatives**

**Design Research Center + Fung Maker Spaces + Design Library**

**Art and Design Gallery + Auditorium + Project Rooms + City Arena**

**Art Culture and Technology + Arts at MIT**

**Integrated Design Management + Center for Real Estate**

**Norman Leventhal Center for Advanced Urbanism**

**ARCHITECTURE + URBAN PLANNING + MEDIA ARTS and SCIENCES**

**SA+P + SOE + SLOAN +SHASS**

**SEE YOU AT THE MET IN 2021**

