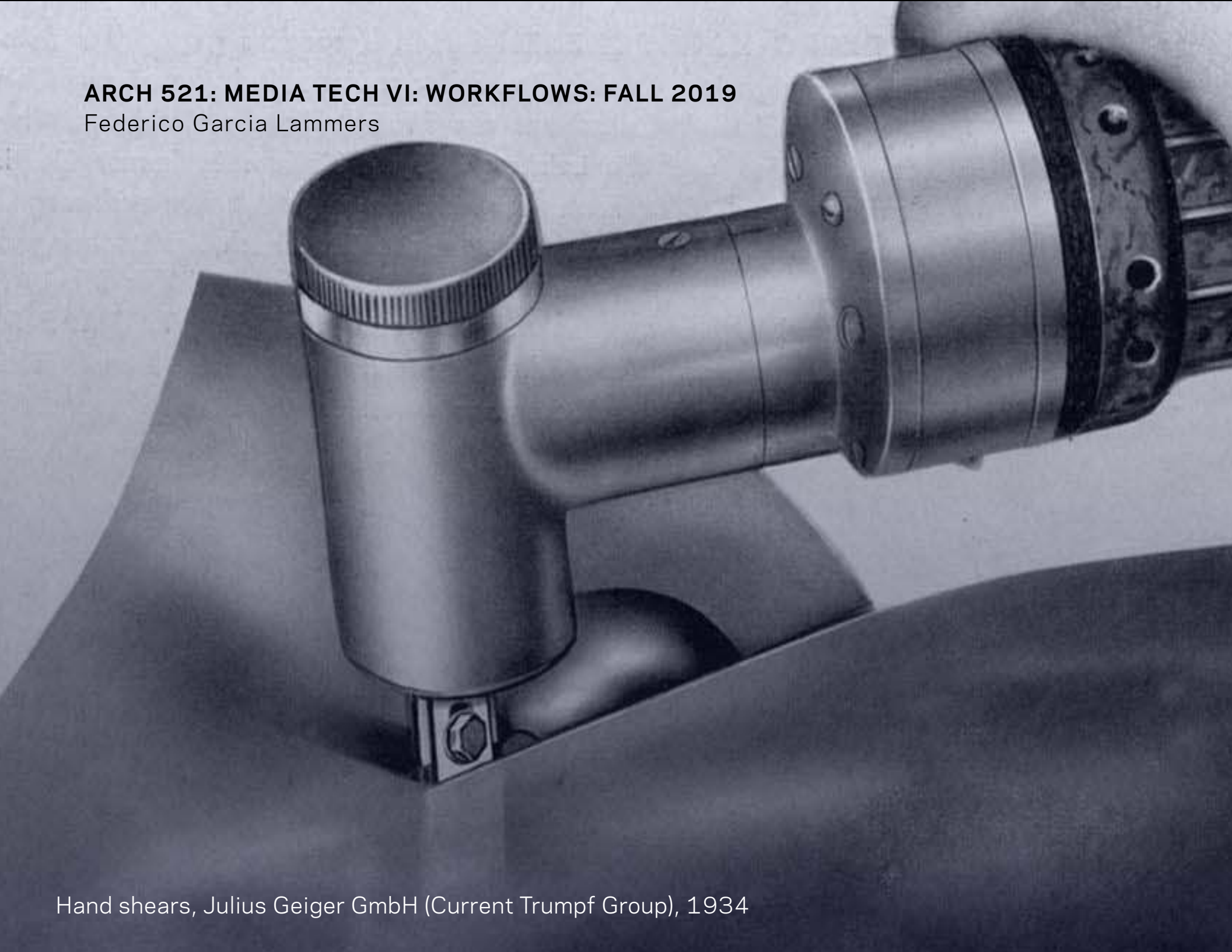


ARCH 521: MEDIA TECH VI: WORKFLOWS: FALL 2019

Federico Garcia Lammers

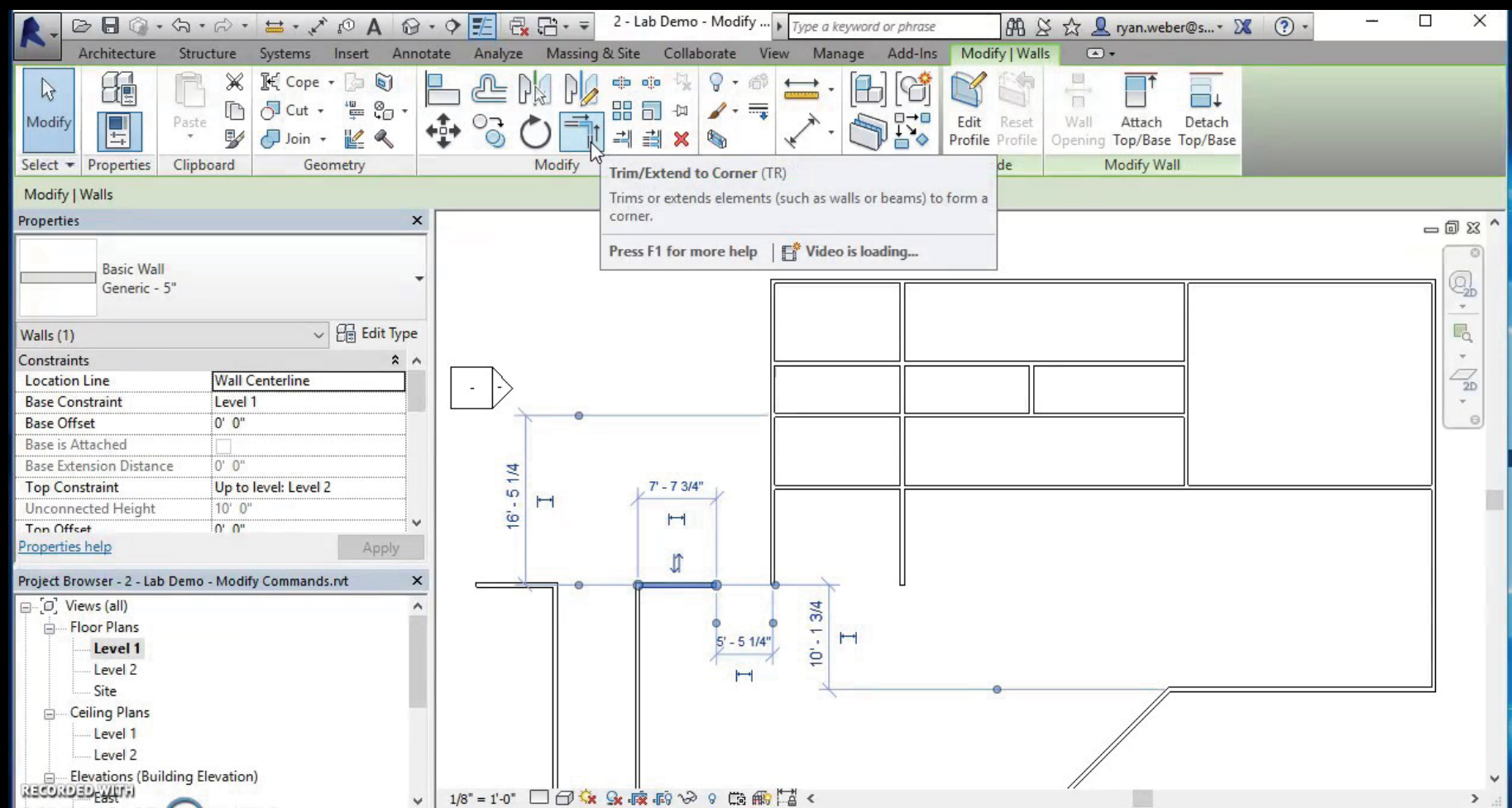
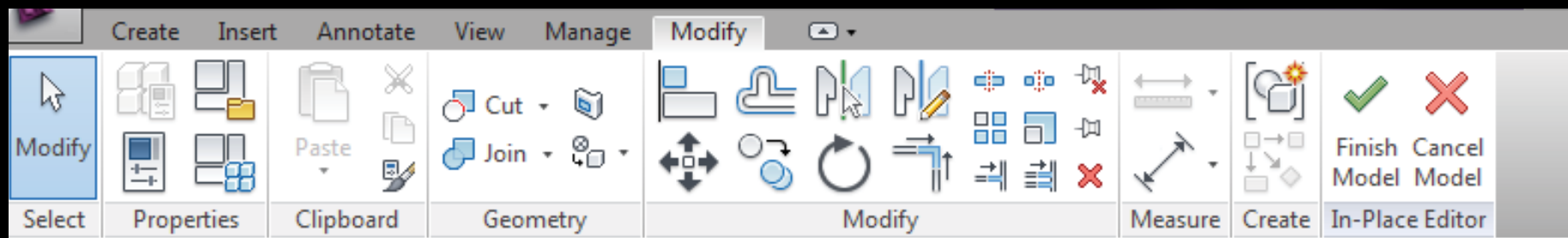
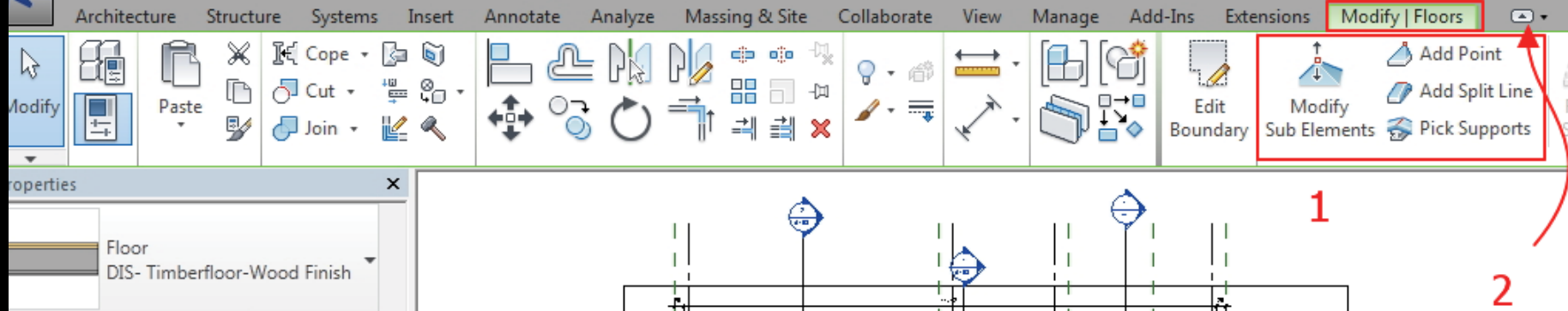


Hand shears, Julius Geiger GmbH (Current Trumpf Group), 1934

Object Modification

Getting termites out of the ground to consume a new technical order of objects.

what's our relationship to instruments? / how do instruments and tools (media) become more than means to an end?



Jane Goodall

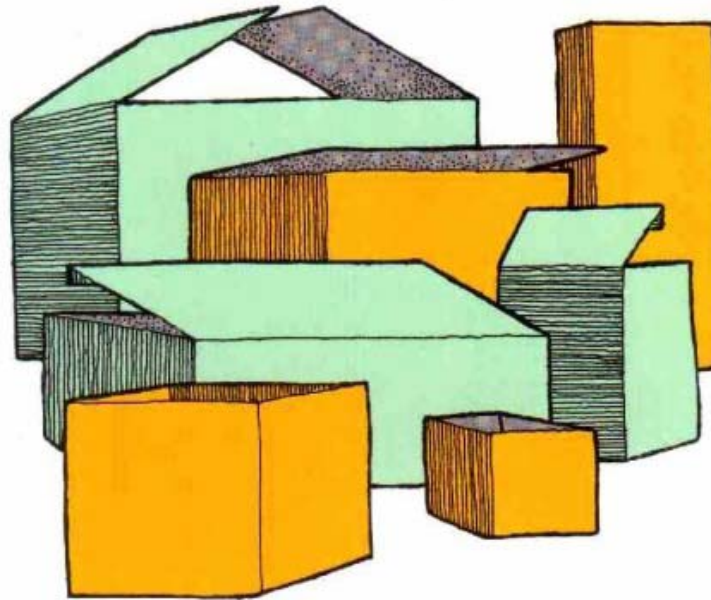




EL SISTEMA DE LOS OBJETOS

jean baudrillard

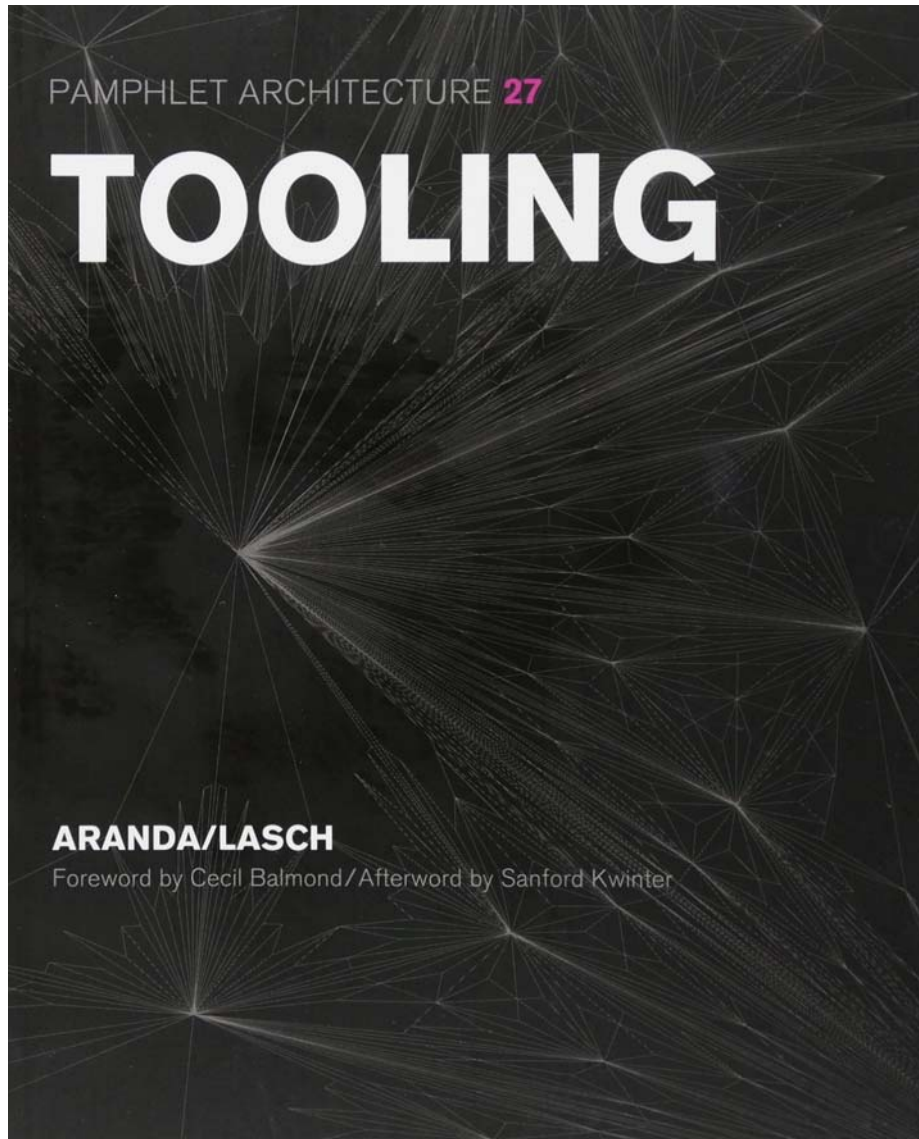

siglo
veintiuno
editores




2000



Tooling x 2



Architectural Association
School of Architecture



**BARKOW
LEIBINGER**

**AN ATLAS
OF
FABRICATION**

An Atlas of Fabrication is an exhibition and catalogue celebrating the commitment to material research that informs the buildings and teaching of Barkow Leibinger, who were AA unit masters in the late 90s. The practice's fascination with machine-tool fabrication began academically but now resonates in all ongoing building projects within the practice. The exhibition shows how the work favours a material architecture, guided by a conviction that architectural ideas and materials are inextricably intertwined. For another way architecture is a physical substance, and the point of conceptualisation is to figure out how to treat that material. It is a practice that embraces the factory, where an ongoing dialogue is established with the industries that make the machines and the people who operate them. This knowledge informs the work and frees it from the standard building catalogue.

The Director of the AA School of Architecture Brett Steele invites you to a private view on Thursday 26 February 2009 6.30–8.30pm

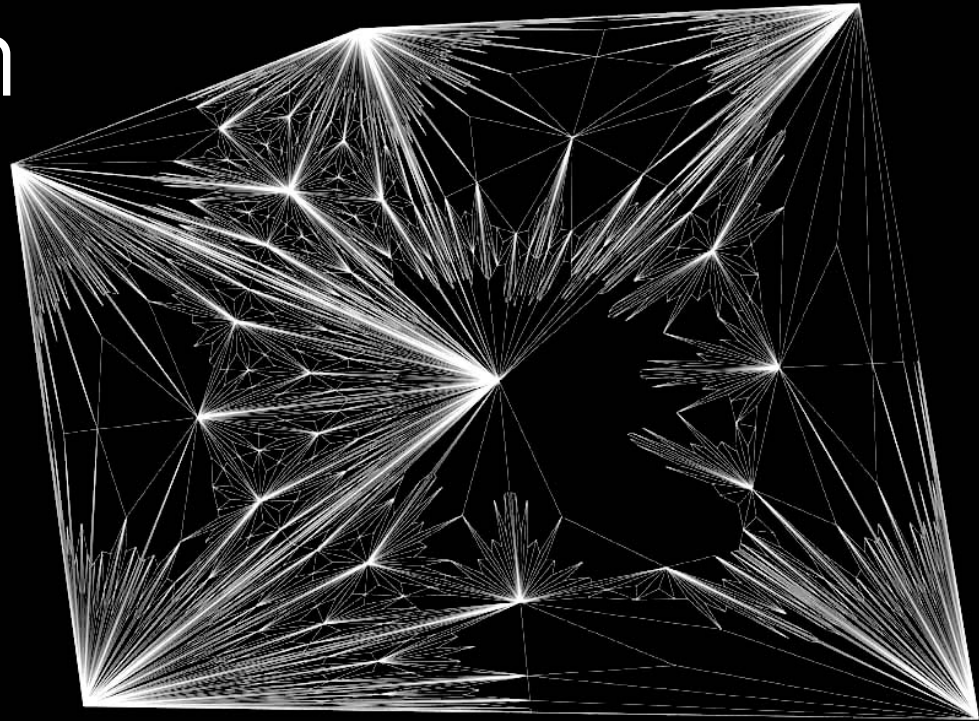
AA Gallery
27 February to 27 March 2009
Monday to Friday 10am–7pm
Saturday 10am–5pm

Roundtable
Frank Barkow, Michele Meridini,
Gramazio & Kohler and
Thomas Demand
Wednesday 18 March 2009
6pm Lecture Hall

Architectural Association
36 Bedford Square
London WC1B 3ES
Information 020 7887 4145
aaschool.ac.uk

Printed at Bedford Press, London / bedfordpress.org

Aranda / Larsch



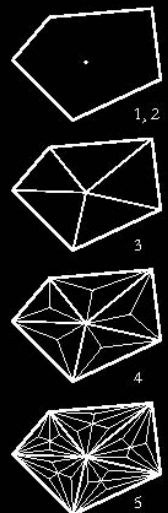
Recipe for Cracking

1. Choose a shape to be cracked.
2. Find its centroid.
3. Create subsidiary shapes by connecting the centroid to each end of one edge of the parent shape.
4. Repeat steps 2 and 3 for each new shape.*†
5. Continue until a limit is reached. Choose an iteration of the algorithm whose subsidiary shapes will be left whole.‡

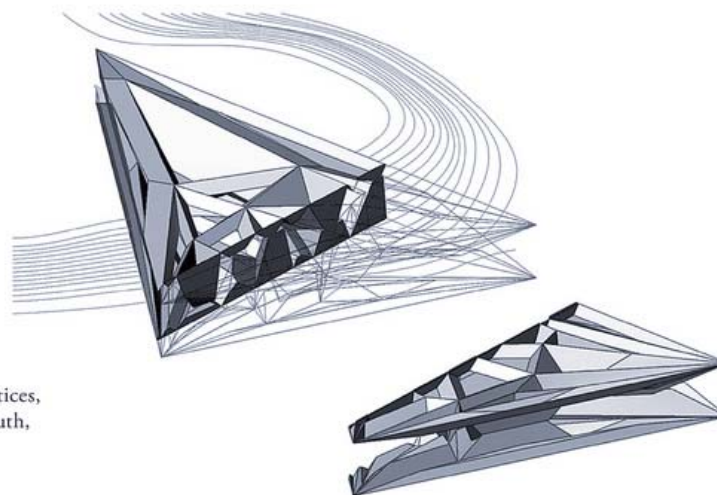
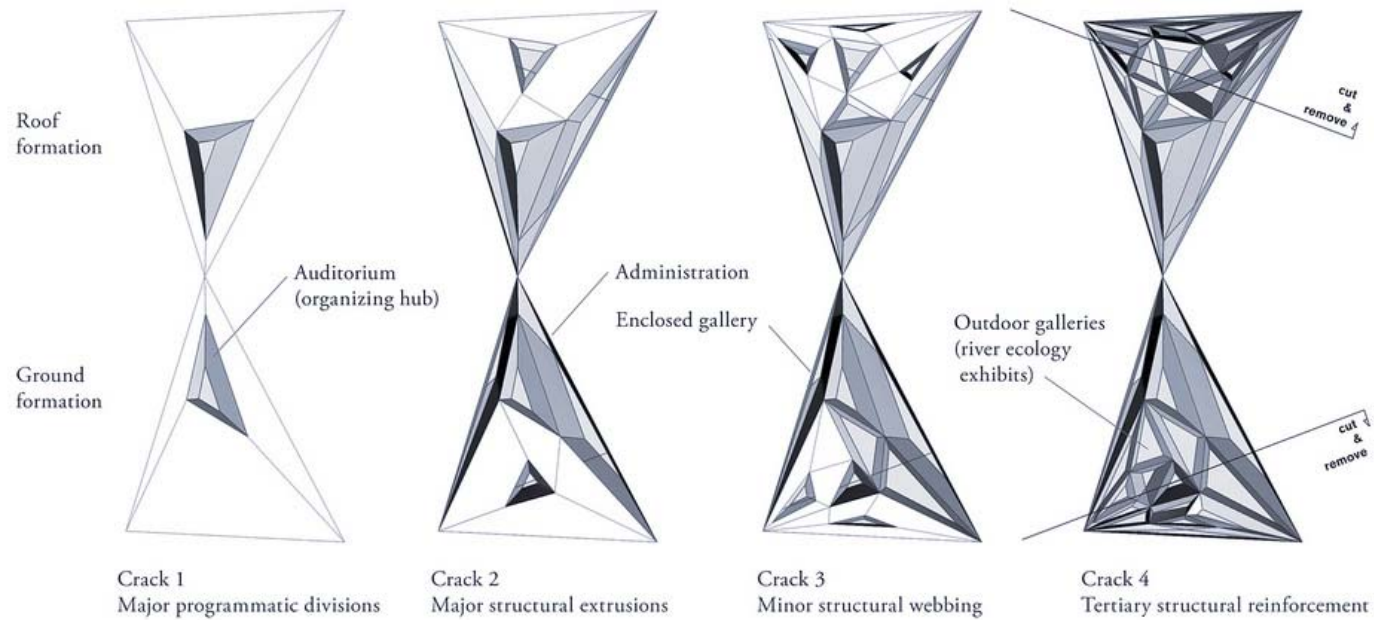
* This algorithm produces a construction in which each edge is shared by exactly two shapes and each edge is continuous—connected to an edge which is connected to an edge, and so on—no matter how dense the mesh becomes.

† If one were to localize the cracking—crack more in one part of the structure than another—one could create patches made up of a higher number of shorter members.

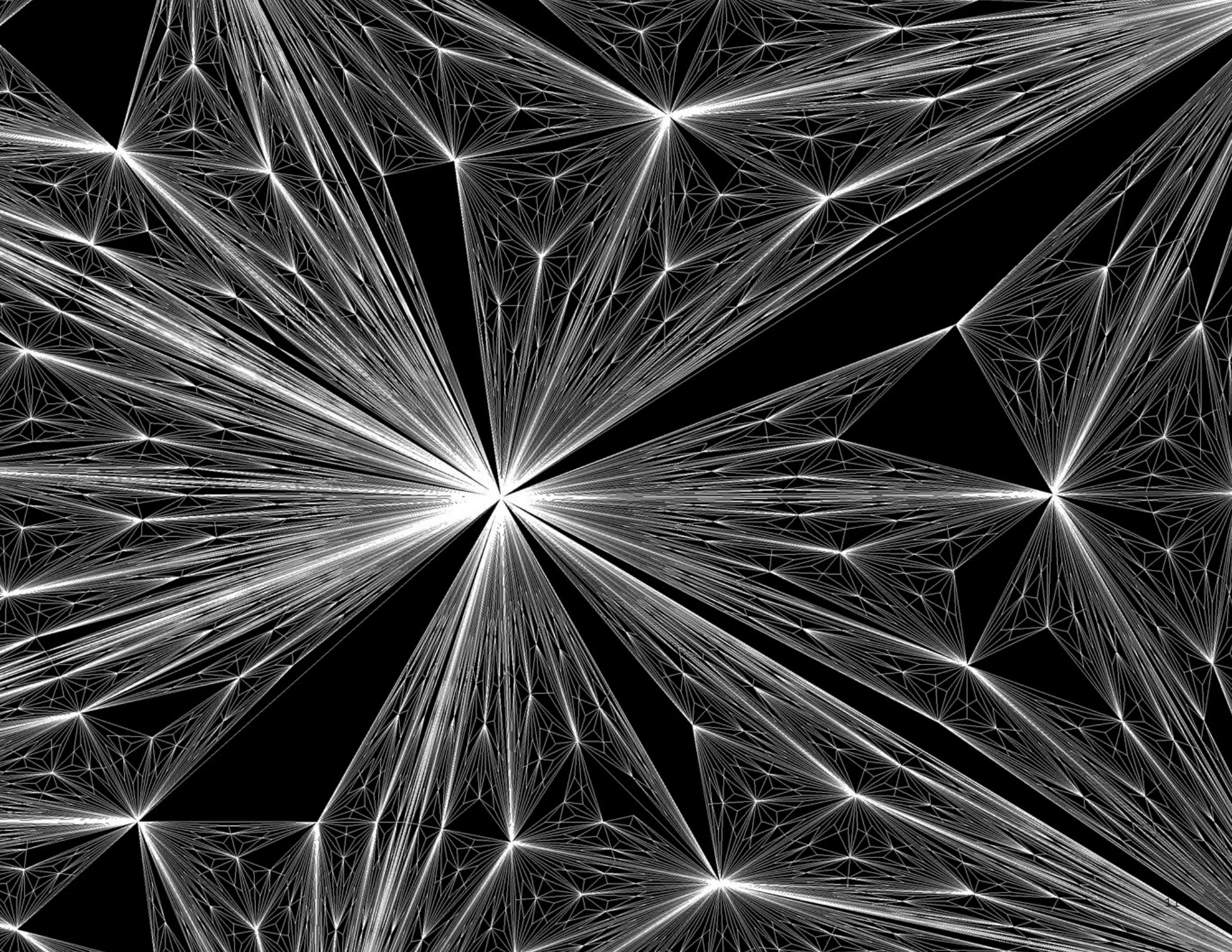
‡ Each iteration contains an exponentially greater number of shapes than the one before it. Each iteration takes an exponentially longer time to process.



Delta Formation



Cut & Remove
Cracking always tends toward vertices, and since a delta has only one mouth, the elimination of the other two vertices was necessary.



Barkow Leibinger Architects
are at the forefront of a
generational shift in architectural
experimentation based upon
sustained forms of material
research, digital fabrication, and
the machinic assembly of buildings.

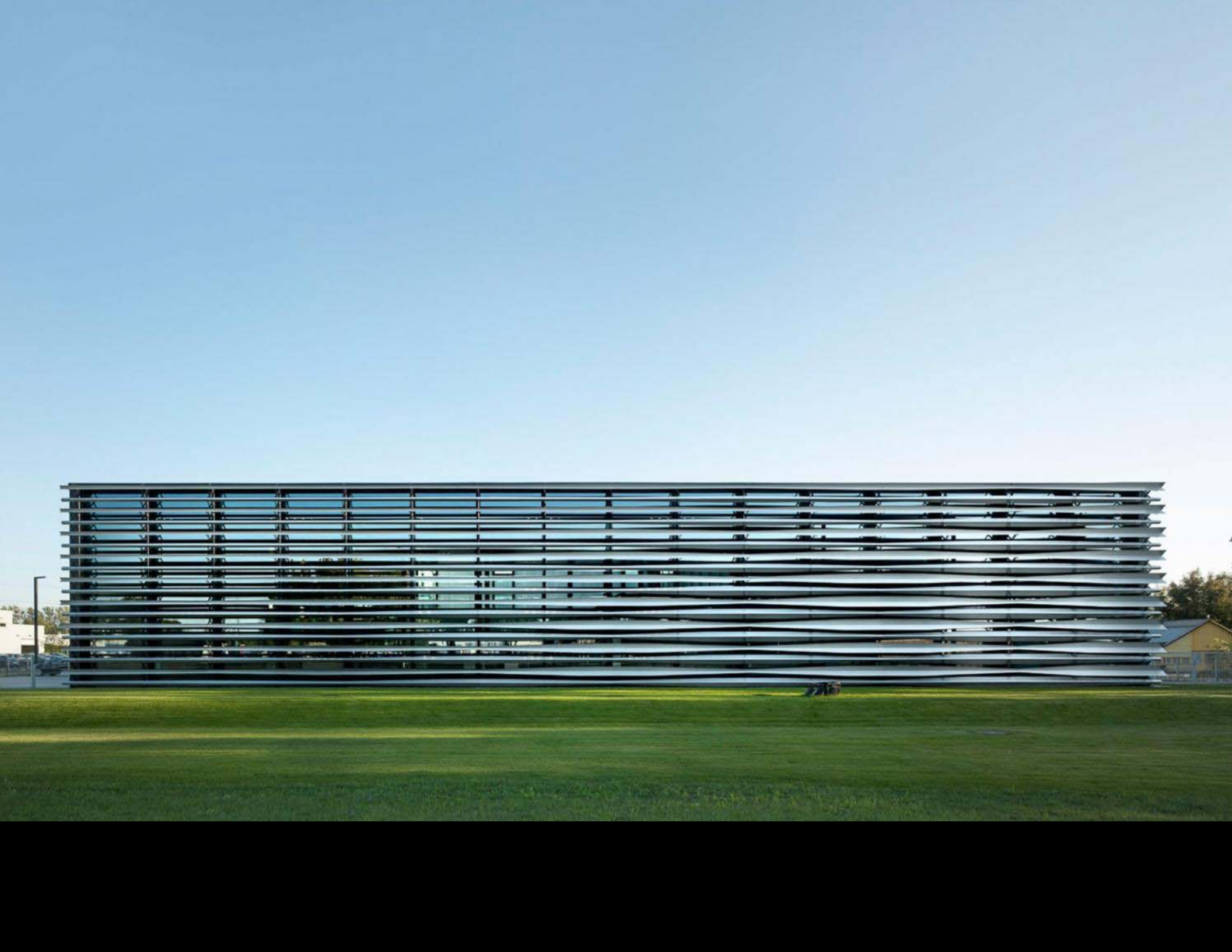
In the early years of the 21st century a global proliferation of new networks, tools, and other technologies are transforming not only how architects work and think with industrially-manufactured building materials,

but also how these otherwise familiar elements can now be subtly transformed into entire systems embodying greater malleability, variation, and control than ever before.

032c workshop





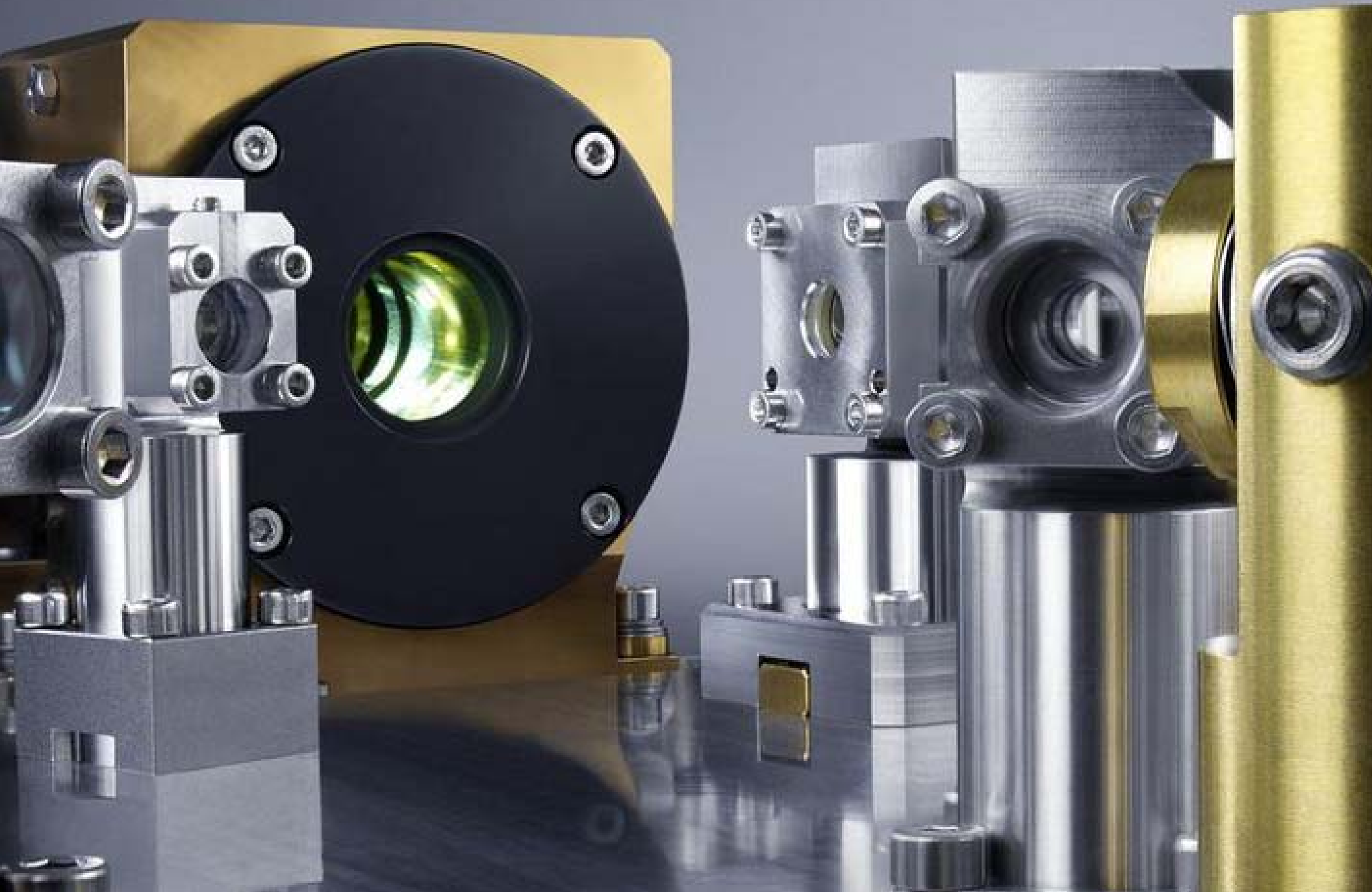








Trumpf Group

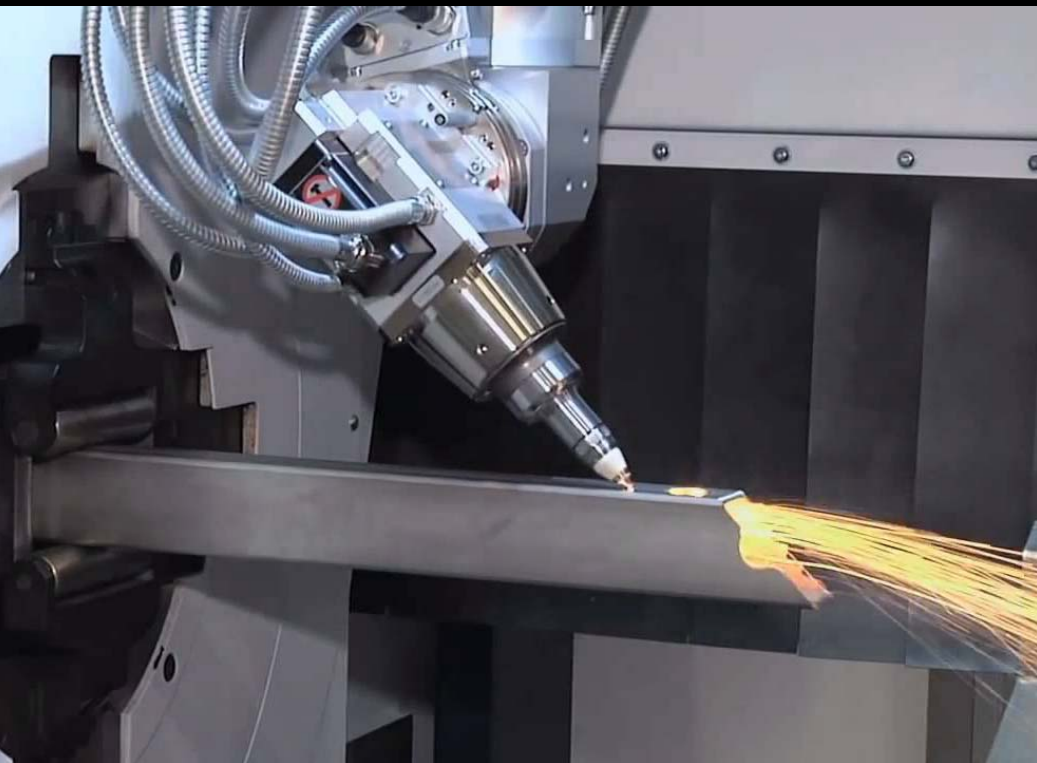












**Setup a tool customization
research area based on
experimental prototyping with
digitally controlled tooling
technology.**

Test materials against a machine to develop a range of possibilities for transforming the material independent from a particular utility, purpose or economic constraint.

This produces a body of work or archive that is architecturally latent, scale-less (other than its own physical size) and open-ended as to how it might be applied.

Tools are explored in terms of their ability to **transform a material**.

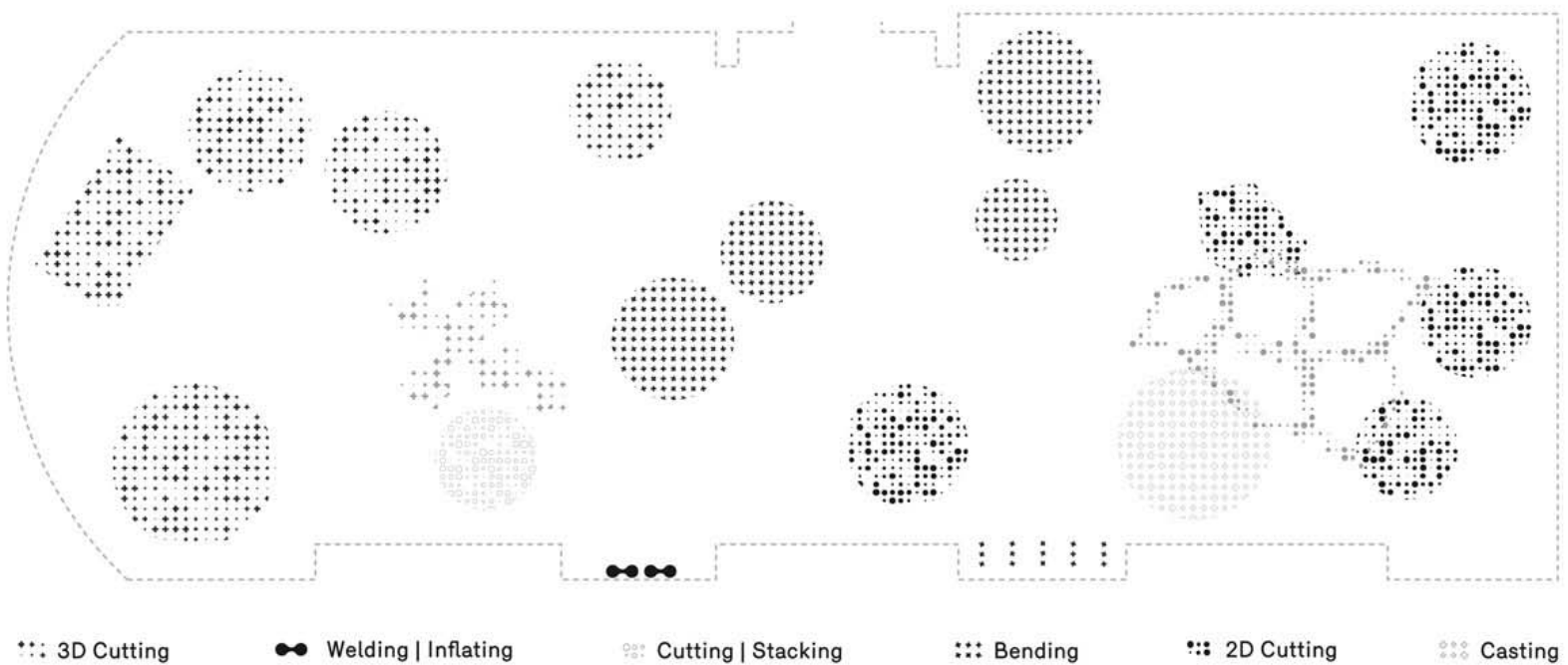
Barkow Liebing tooling method described in Scott Marble's Digital Workflows in Architecture.

**The best philosophies of techinics
are, strictly speaking, useless.**

John May

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LEIBINGER**

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OF
FABRICATION**



Barkow Leibinger

Tooling and Material Partners

