

UNIVERSITY OF APPLIED SCIENCES

Leibniz
Universität
Hannover

DLA 2021

M. Sc. Daniel Theidel

"Physical-digital tools in the landscape architectural design process and their feedback on the designer"





## CV / M. Sc. Daniel Theidel

#### activities at universities

09 / 2016 - Current University of Applied Sciences Osnabrück / scientific assistance

workshop landscape architecture

#### activities outside universities

12 / 2015 - 04 / 2019 Büro Drecker, Hannover

09 / 2013 - 02 / 2015 Hammerich Landschaftsarchitekten,

Neustadt am Rübenberge

### Independent work

02 / 2015 - aktuell self-employment with services in architectural model making

#### Education

WiSe 2010 - WiSe 2012 / 13 Leibniz Universität Hannover

Master of Science (M. Sc.) Landschaftsarchitektur

WiSe 2007 - SoSe 2010 Fachhochschule Osnabrück

Bachelor of Engineering (B.Eng.) Freiraumplanung

WiSe 2007 - SoSe 2010 Fachhochschule Osnabrück

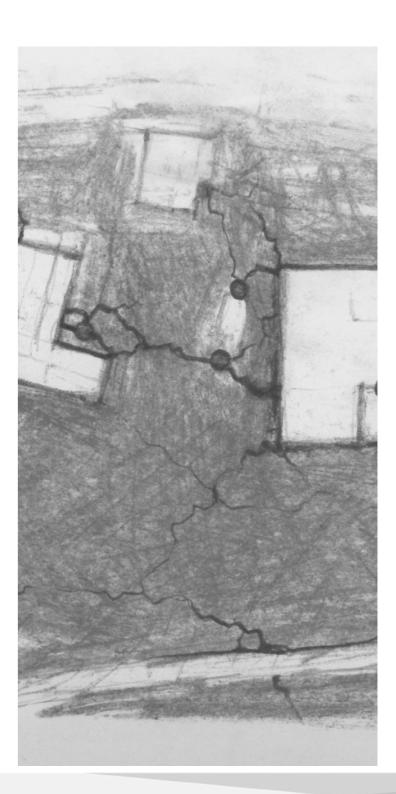
Bachelor of Engineering (B.Eng.) Freiraumplanung



# <u>Arbeit</u>



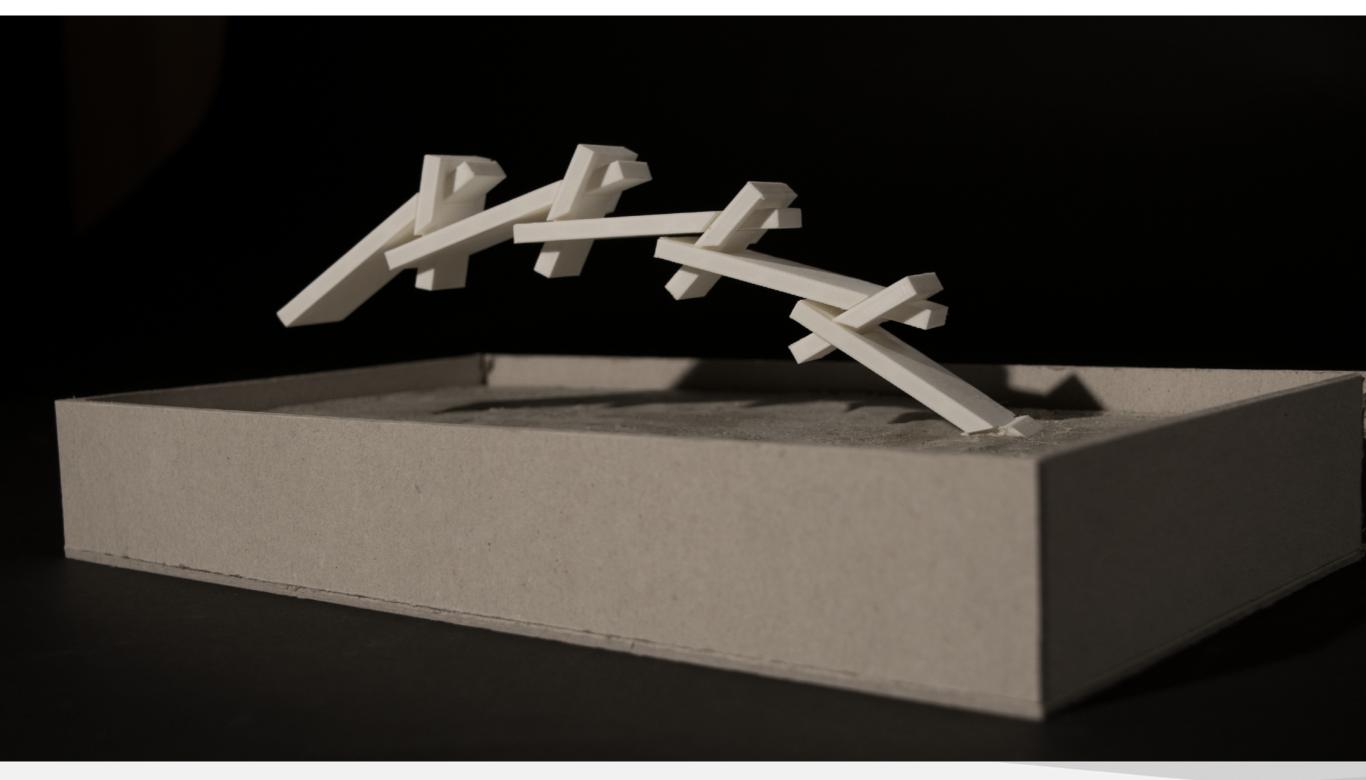








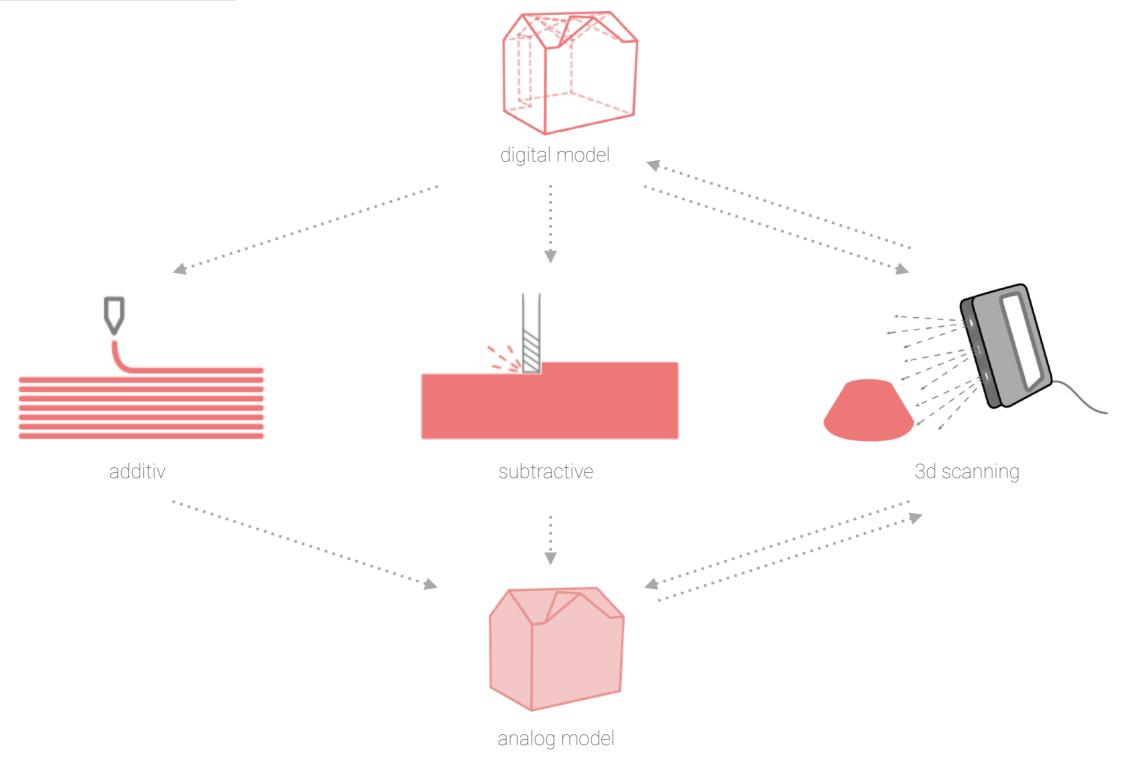
# <u>Arbeit</u>







# Consideration: Model







## Goal

## Research question

How does the physical-digital workflow influence the landscape architectural design process in the context of the model and what are the consequences for the use of these?

### Theses:

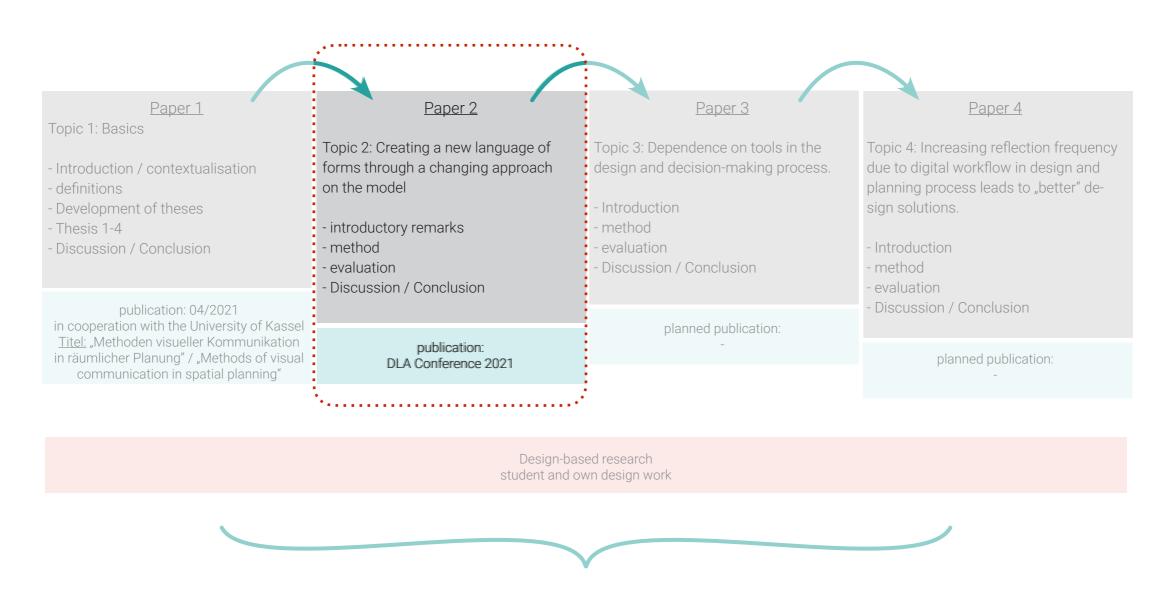
- 1. Increasing precision and thus dwindling imagination in the model / digital as well as analog.
  - → feigned exactness?
- 2. Dependence on tools in the design and decision-making process. → The feigned freedom?
- 3. Increasing frequency of reflection in the design and planning process leads to more informed design solutions.
- 4. Creation of a new design language through a changing approach to the digital and analog model.
  - → a practical example.





## Struktur





<u>Cumulative Dissertation</u> Summary discussion and conclusion

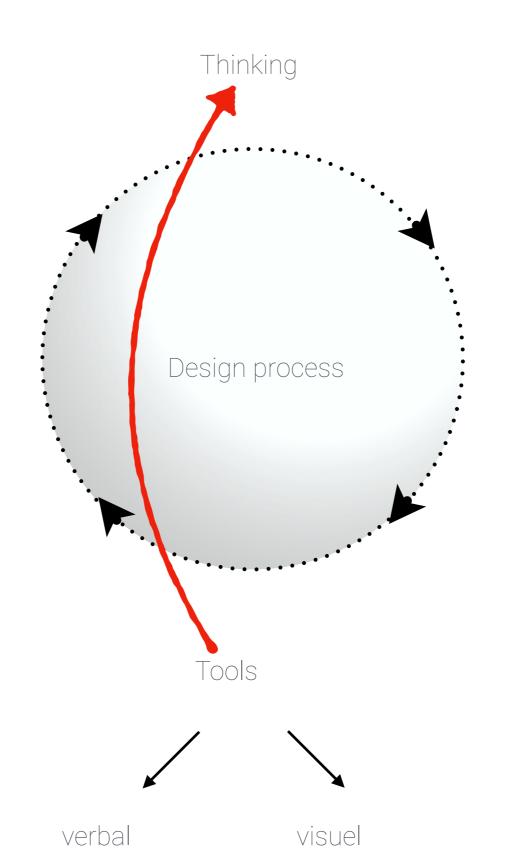




# Consideration: design

(cf. Gänshirt)

Perception



Expression





# Paper 2

### **DLA Konference 21**

Titel: Searching for New Ways to Design Landscape

- Experience with parametric design in interaction with computer-aided manufacturing methods in landscape architecture and their effects on the design process -

### Content:

Based on a practical example (Pocket Park Roche / BRYUM / Basel) and the experiences made in connection with physical-digital technologies, the 4th thesis from Paper 1 is supported. (Creation of a new design language through a changing approach to the digital and analog model.)

Method: Expert interview according to Mayring

Peer-review: double-blind

Publication: 2021





## Case Studie

The Pocket Park in Kaiseraugst, Switzerland, was chosen as the subject of this case study owing to its special type of development, its formulation in relation to the formal language of the ground covering, and the great precision of its execution.



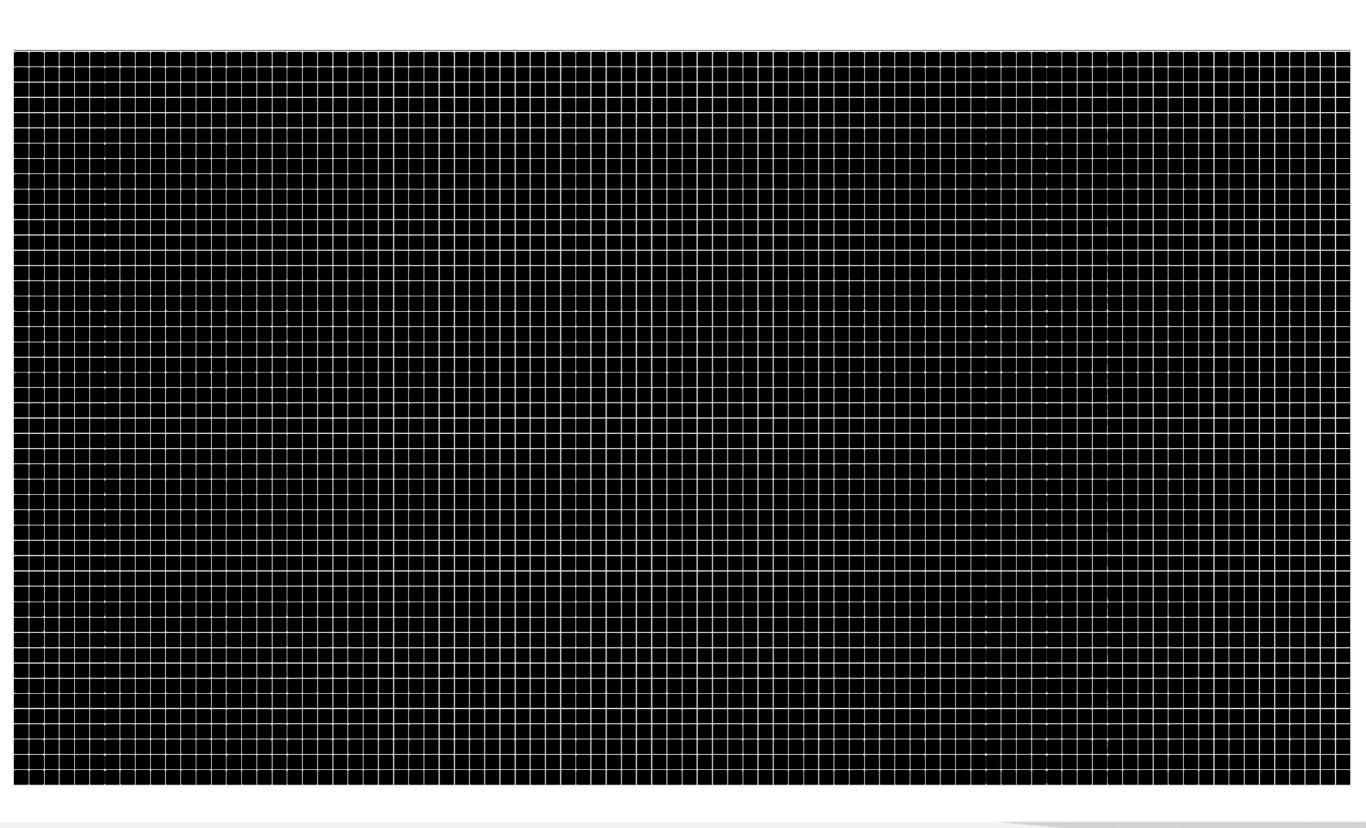


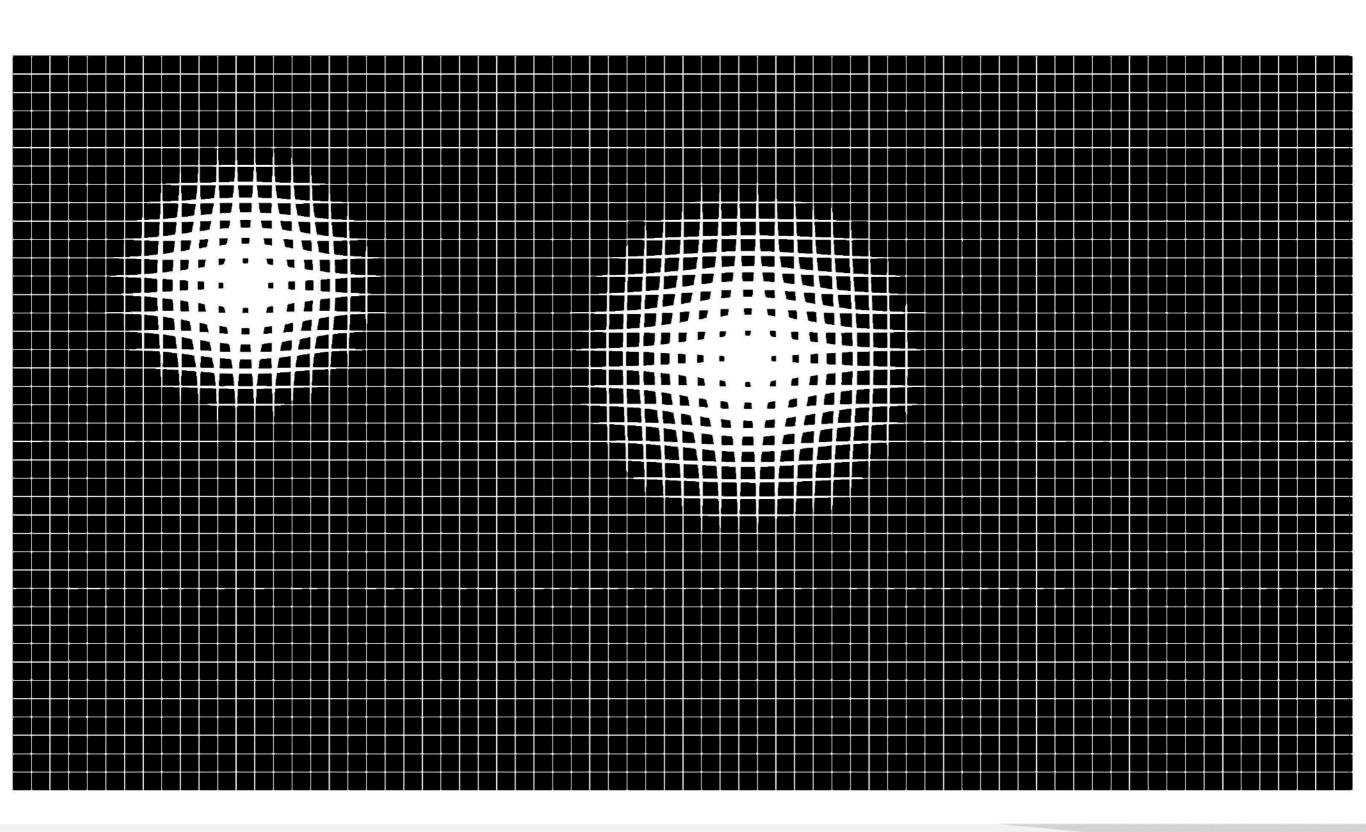


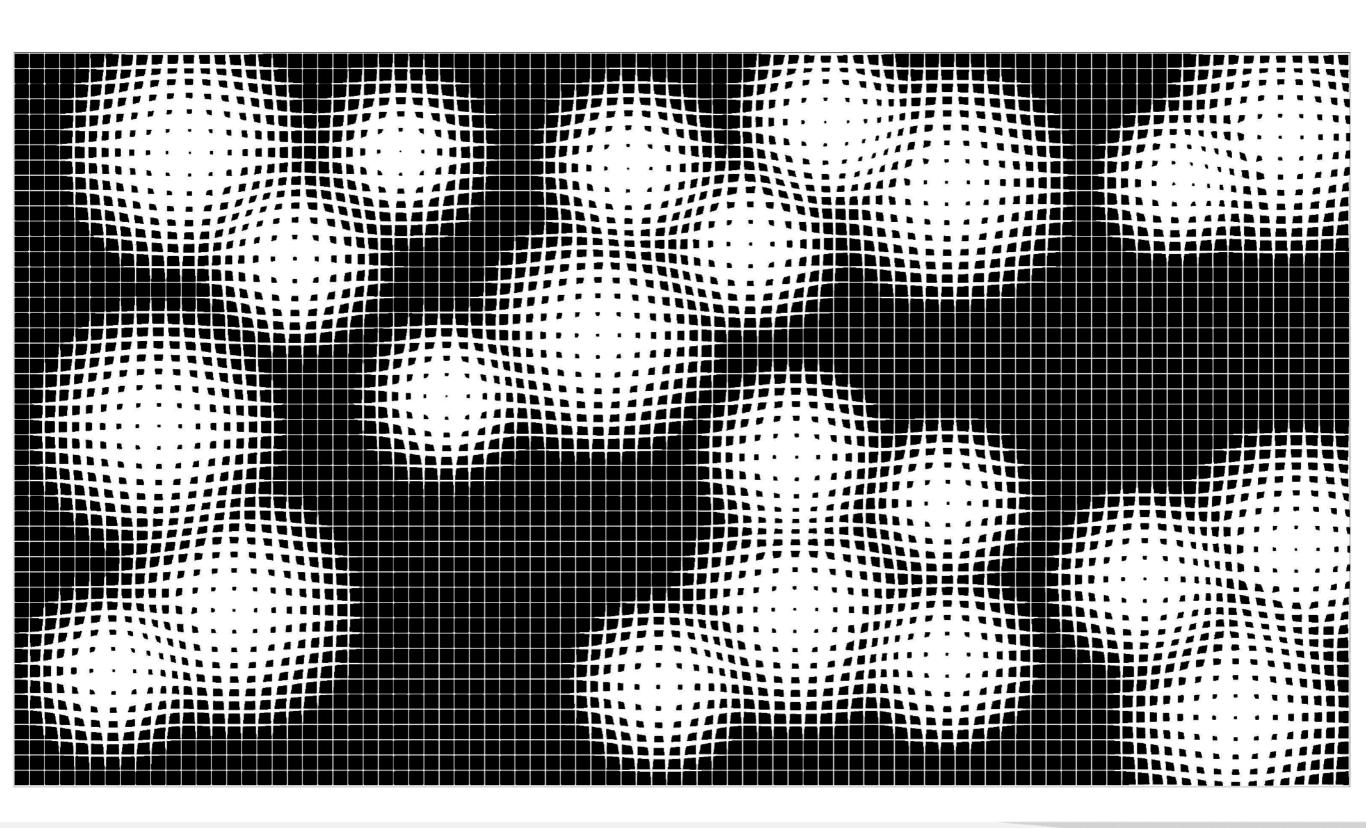
## Case Studie

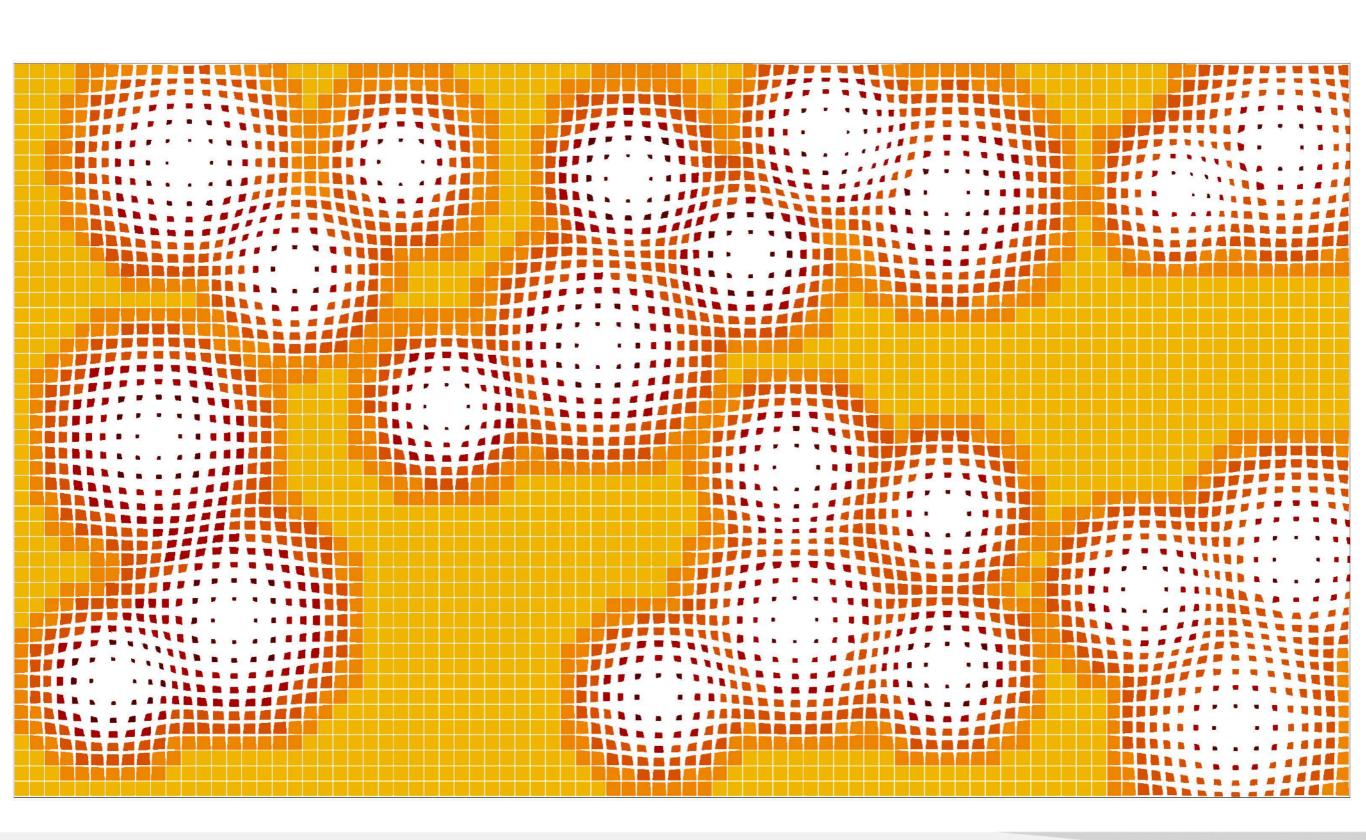
### Method:

- 1. How would you define the term *design tools*?
- 2. Which design tools did you use during the design phase of the project (Pocket Park)?
- 3. Are there any design tools that are particularly helpful to you in the development of "new forms"\*?
- 4. What advantages and disadvantages do digital models offer you compared to analog models in your design process?
- 5. What influences (other than the given task) guided you during the form-finding and design process?
- 6. ...





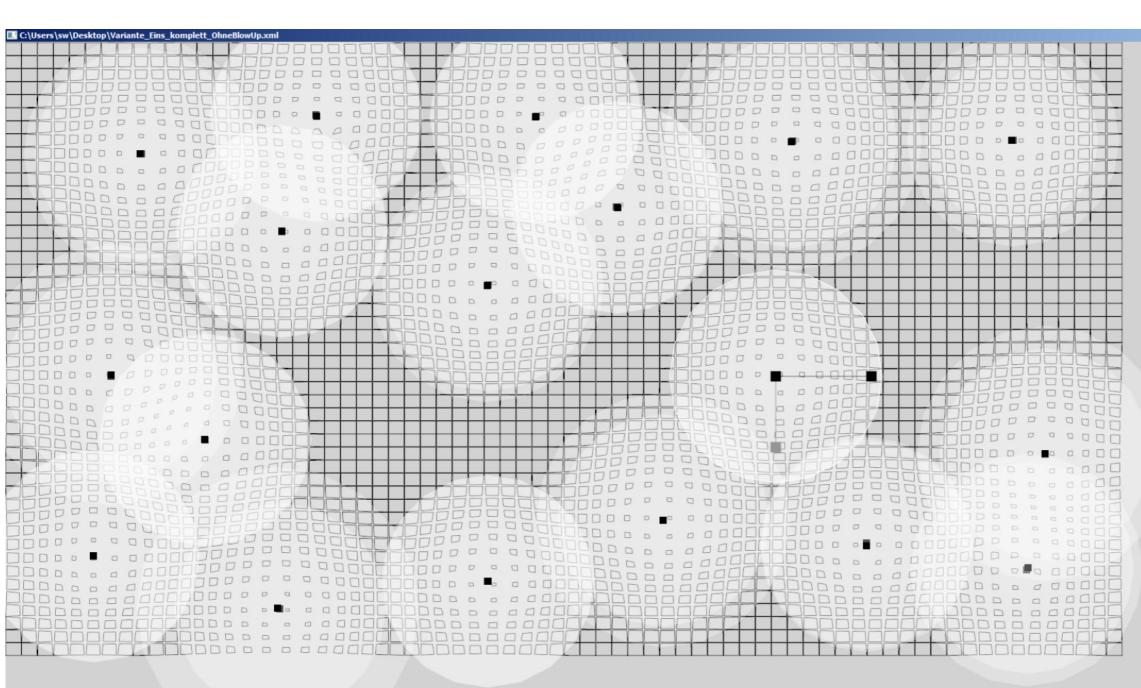


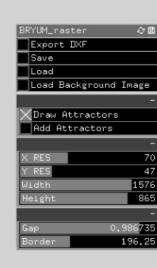






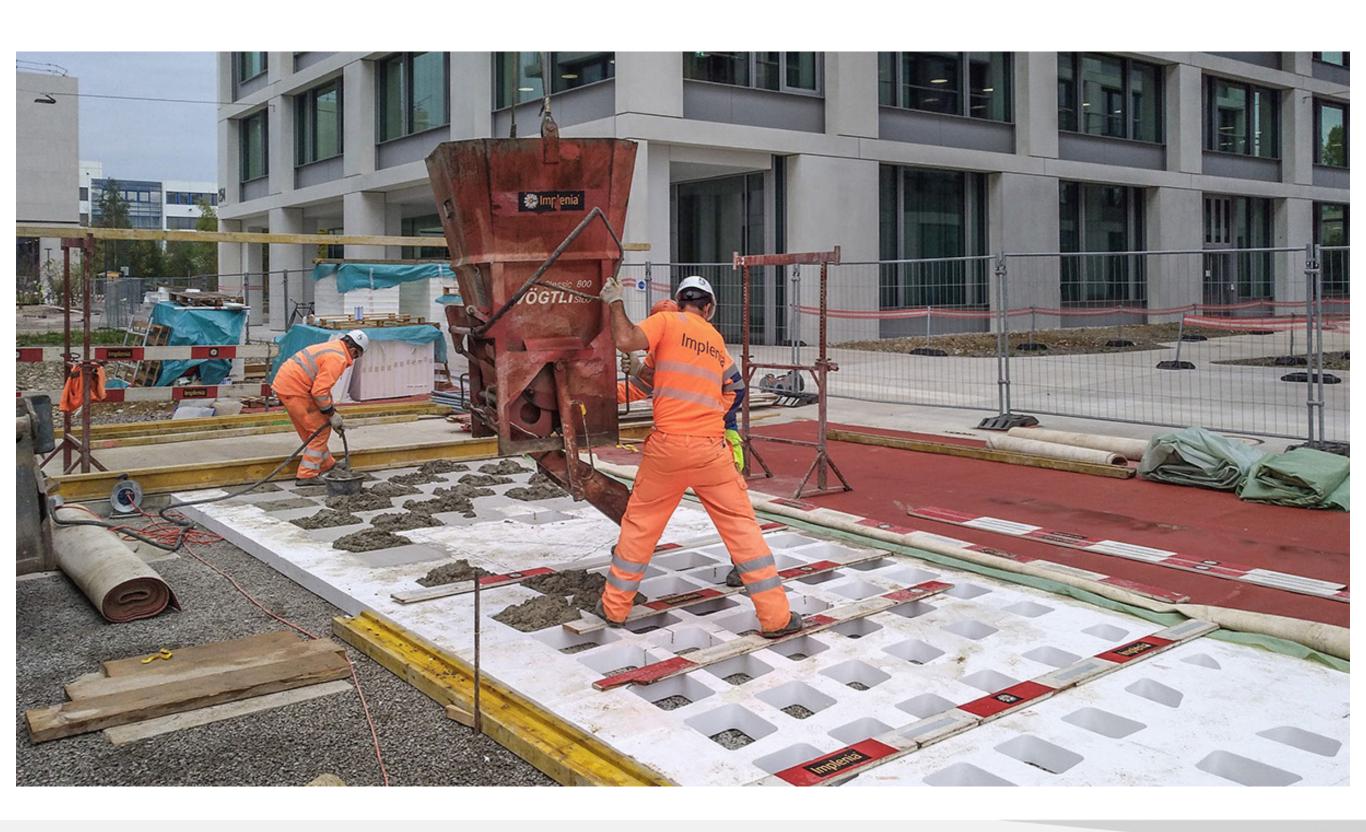
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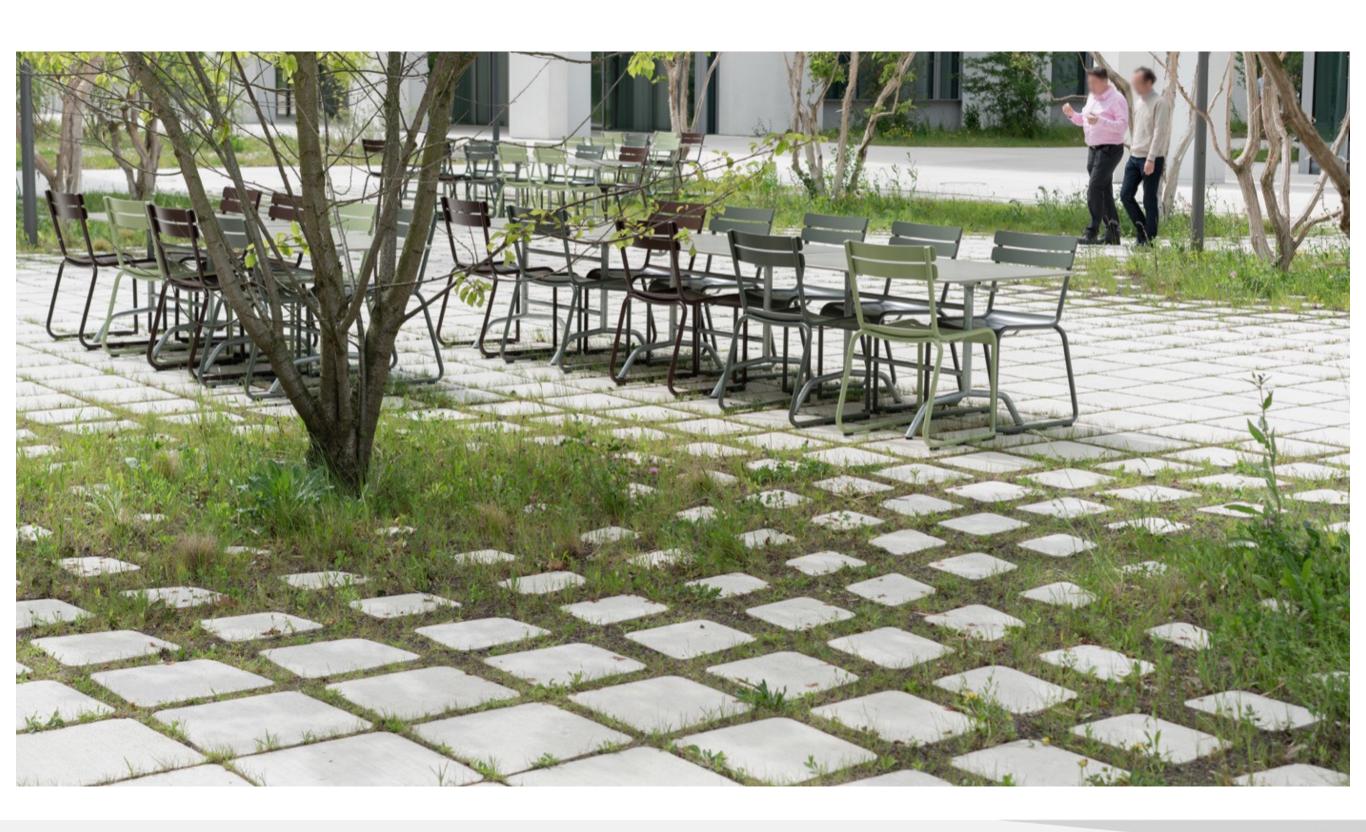


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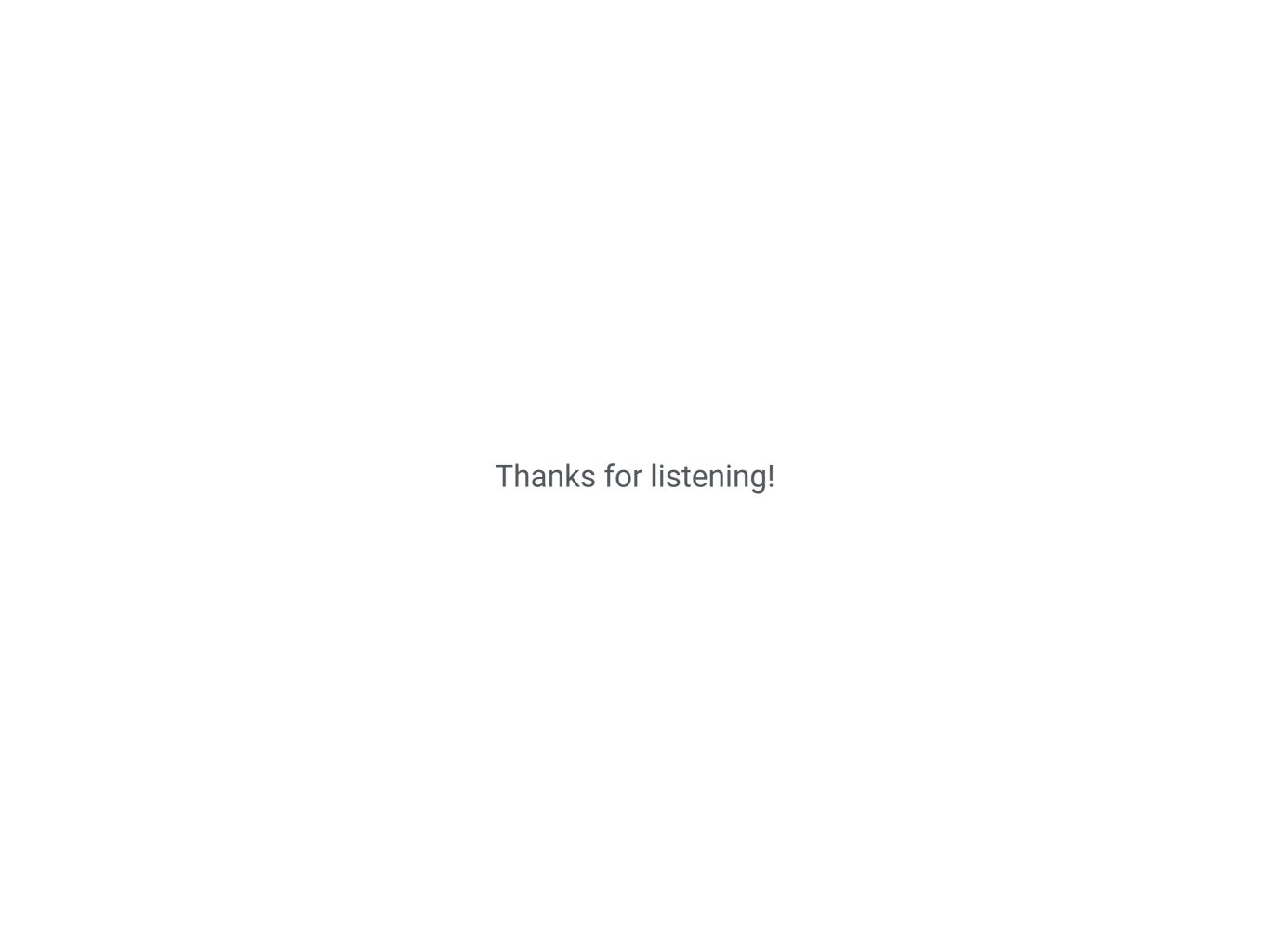






## Results

- 1. Digital practices influence the designer.
- 2. Computer-aided manufacturing processes may encourage the renunciation of standardized results.
- 3. Curiosity and openness lead to innovation.
- 4. New styles can result from digital or physical-digital workflows.







## <u>sources</u>

## Images / Videos

Seite	Quelle	Zugriff
2	eigene Darstellung	
4	Zenke / Gudewehr / Auer	
5	eigene Darstellung	
7	eigene Darstellung	
8	eigene Darstellung	
10	<u>www.BRYUM.org</u> / S. Weinsberg	16.02.2019
12	<u>www.BRYUM.org</u> / S. Weinsberg	16.02.2019
13	<u>www.BRYUM.org</u> / S. Weinsberg	16.02.2019
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