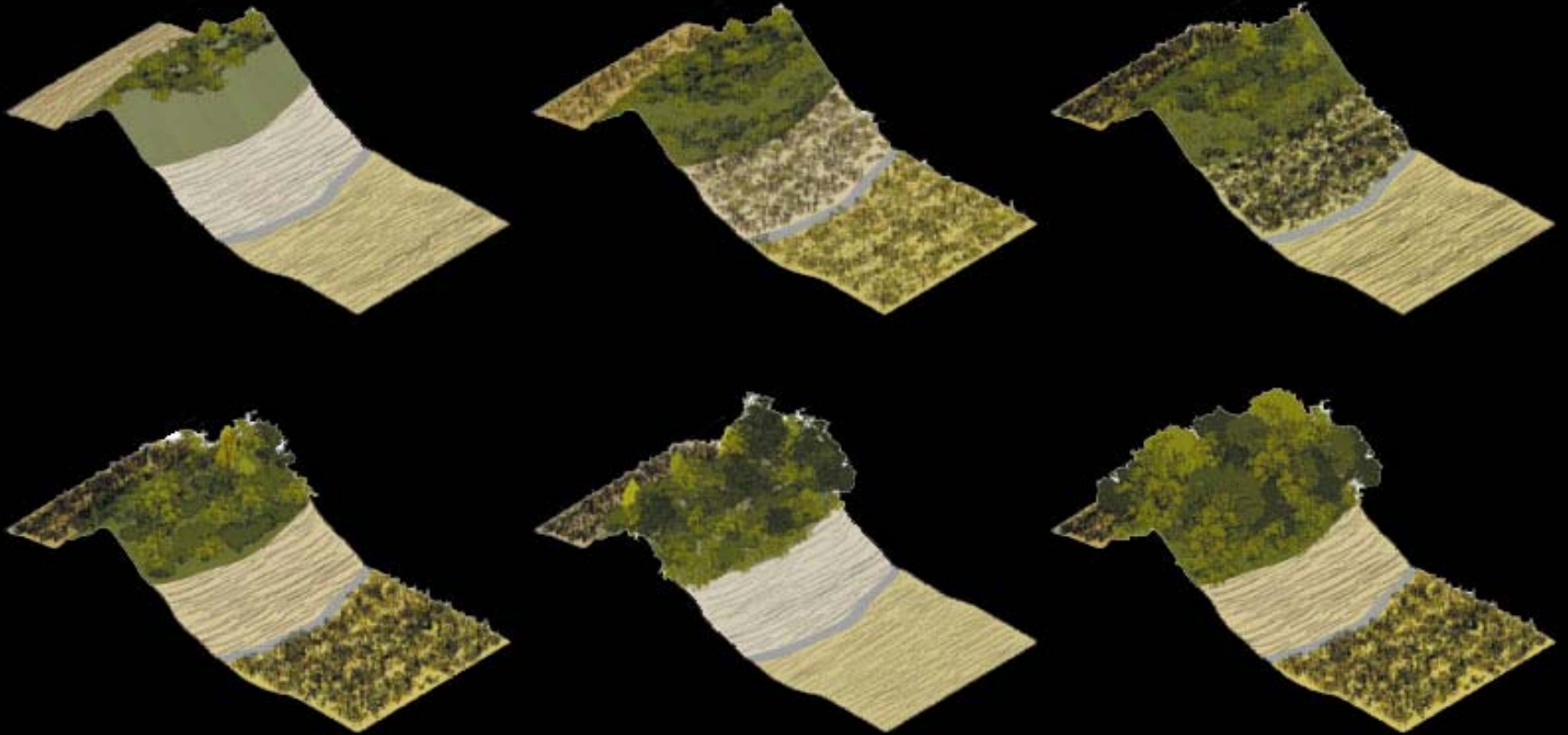


The Complexity of Landscape Architecture



Prof. Dr. Martin Prominski

**Assistant Professor for Theory of Contemporary Landscape Architecture
University of Hannover**

- 1. Complexity**
- 2. Complexity of Landscape**
- 3. Complexity of Landscape Architecture**
- 4. Conclusion**

1. Complexity

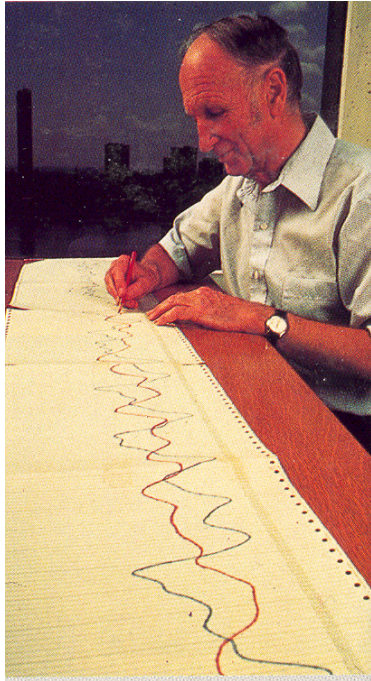
CLASSICAL SCIENCE

Criteria for scientific knowledge:

- Universality
- Predictability
- Timelessness



COMPLEXITY THEORY



Example: The „Butterfly Effect“ by Edward Lorenz, Meteorologist (1961)

Slight changes in the initial variables have a profound effect on the weather development.

For example:

14,972813 °C + 7,058372 mm = Sunshine

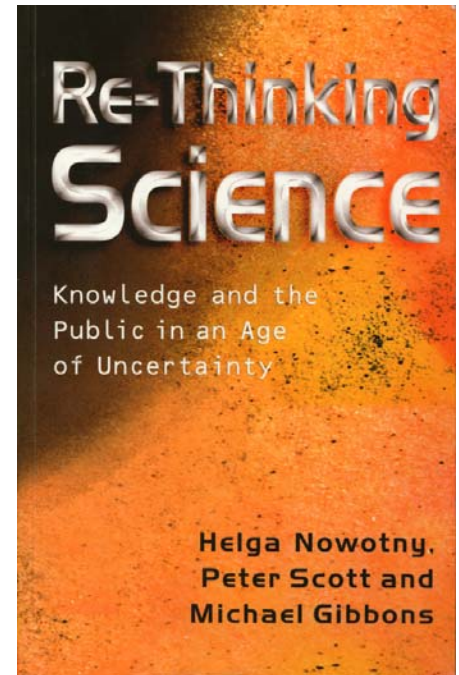
14,97281 °C + 7,05837 mm = Rain

=> predictable Unpredictability („Deterministic Chaos“) – the flap of a butterfly in Hongkong can cause a hurricane in Florida



MODE 2 - PRODUCTION OF KNOWLEDGE

“The development of science has now reached a stage where many scientists have lost interest in the search for first principles. They believe that the natural world is too **complex** an entity to fall under a unitary description that is both comprehensive and useful, in the sense of being able to guide further research.”

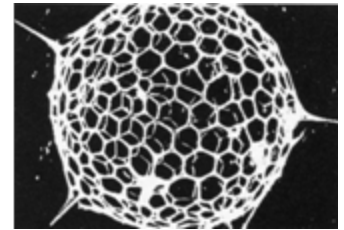
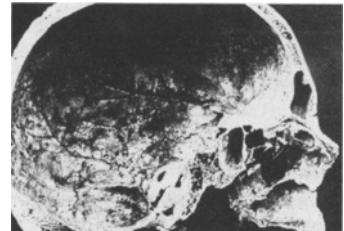
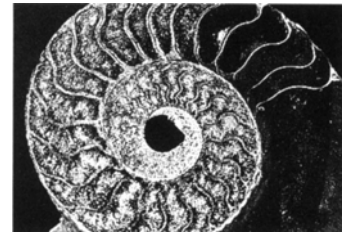
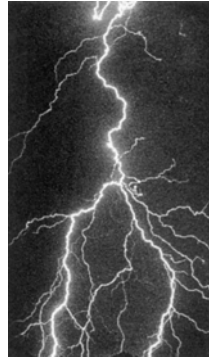
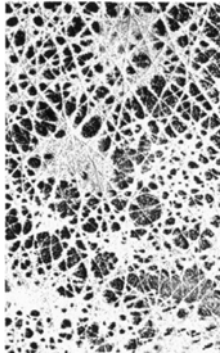


(2001)

Main attributes of Mode 2 (compared to Mode 1):

- carried out in a context of application (instead of a context of a specific academic community)
- transdisciplinary (instead of disciplinary)
- heterogeneity (instead of homogeneity)
- „in comparison with Mode 1, Mode 2 is more socially accountable and reflexive. It includes a wider, more temporary and heterogenous set of practitioners, collaborating on a problem defined in a specific and localised context.“

A new world view emerges...



Triad of Complexity:

from Predictability to **Unpredictability**

from Universality to **Contextuality**

from Timelessness to **Processuality**

2. Complexity of Landscape

Classical Landscape Concept – Landscape Two



Landscape Two sets great score on visibility; that is why we have that seventeenth-century definition of landscape as „a vista or view of scenery of the land“.

Its spaces are clearly and permanently defined and made visible by walls and hedges or zones of open greenery or lawn. (Jackson 1984)

=> predictable, universal, timeless

Complex Landscape Concept – Landscape Three



„Landscape is not scenery, it is not a political unit; it is really no more than a collection, a system of man-made spaces on the surface of the earth. Whatever its shape or size, it is never simply a natural space, a feature of the natural environment; it is always artificial, always synthetic, always subject to sudden or unpredictable change.” (Jackson 1984)

=> unpredictable, contextual, process-orientated

Jacksons „Landscape Three“ – the dynamic system of man-made spaces - is an early concept where landscape is more than green space, more than an idyllic compensation of artificial modernity.

This definition anticipates and covers most ideas of recent conceptual developments like

- scapes
- hybrid morphologies
- landscape urbanism
- zwischenstadt
- total landscape
- ...

Two preliminary conclusions:

- 1. Landscape Architecture´s sphere of attention extends dramatically**
- 2. this new understanding of landscape is essential for new, complex approaches in landscape architecture**

3. Complexity of Landscape Architecture

Charles Jencks: The Architecture of the Jumping Universe



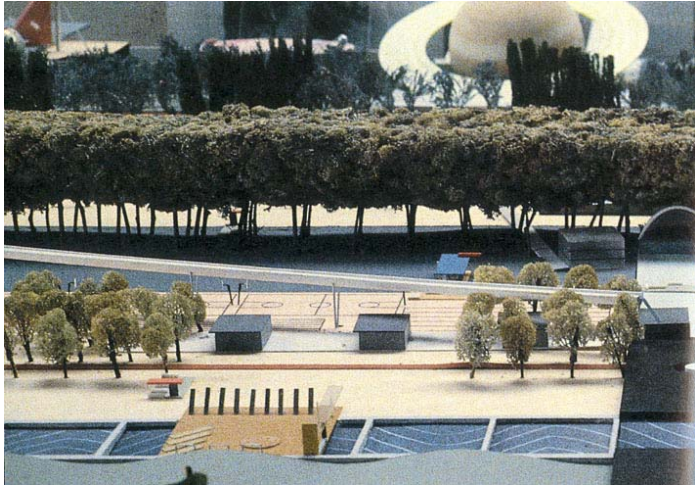
Jencks own garden in
Dumfriesshire/ Scotland
(„Garden of cosmic speculation“)

Problem:

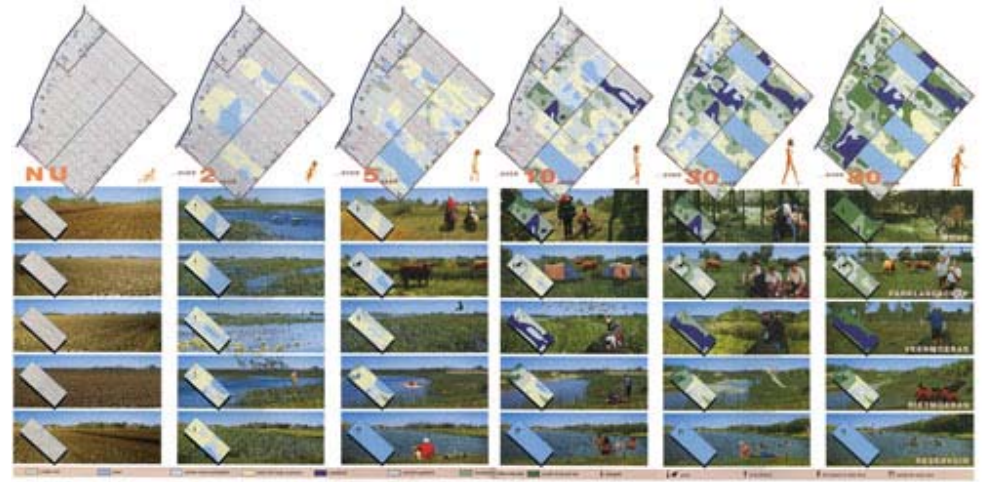
The fallacy of equalizing the formal
representation of a complex
phenomenon with the phenomenon
itself



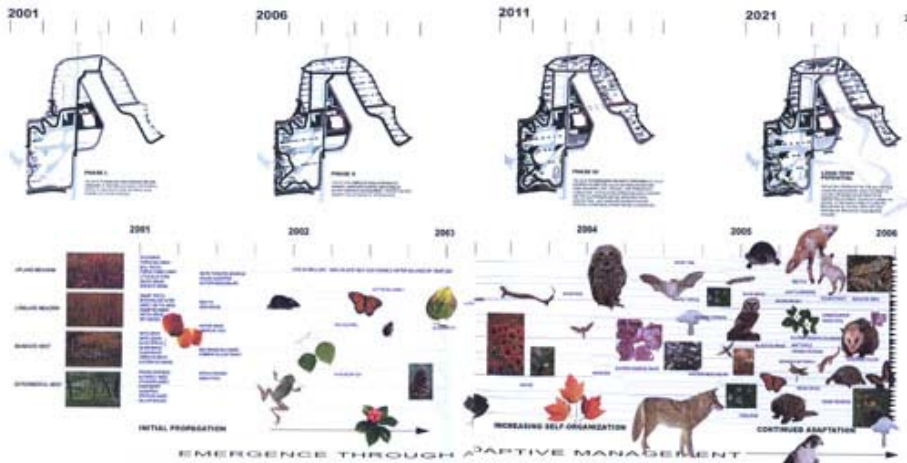
Examples of fundamentally complex Landscape Architecture



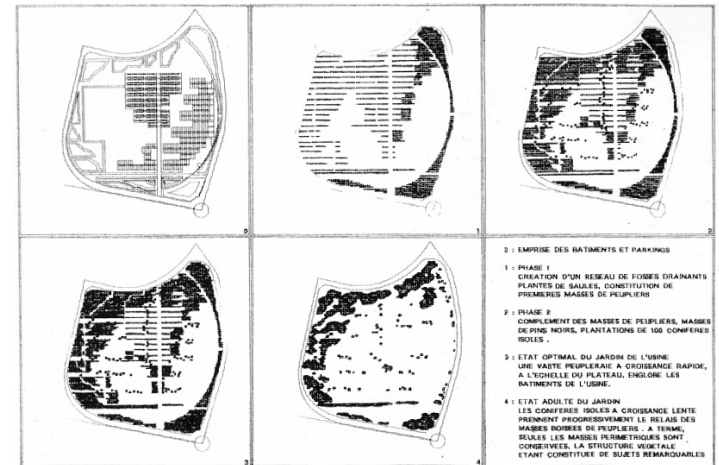
OMA, La Villette



Vista, Drawn from Clay



Field Operations, Downsview Park



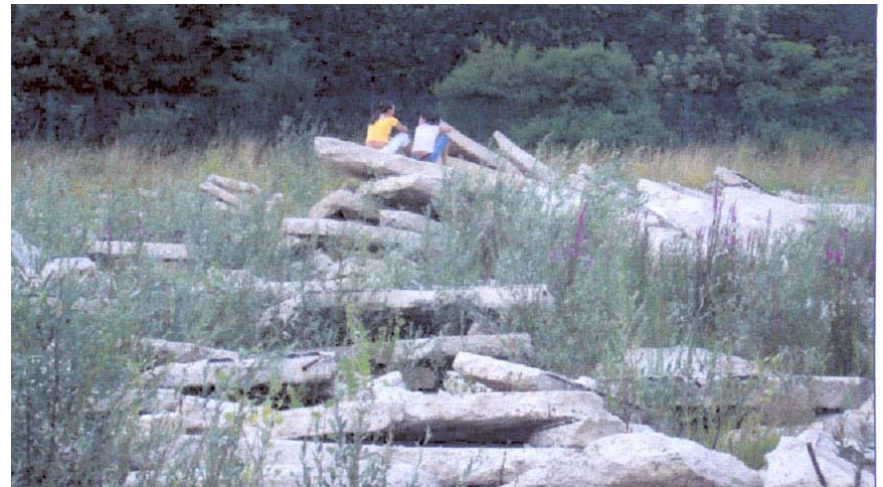
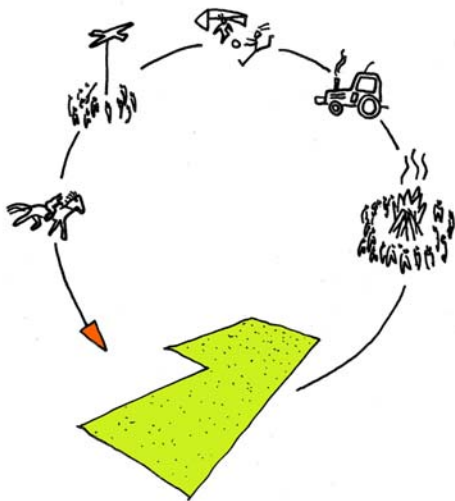
Desvigne/ Dalnoky, Thompson Factory

BDLA-Awards (Federation of German Landscape Architects)

2003: Fischbek, cet-0/ Klaus Overmeyer

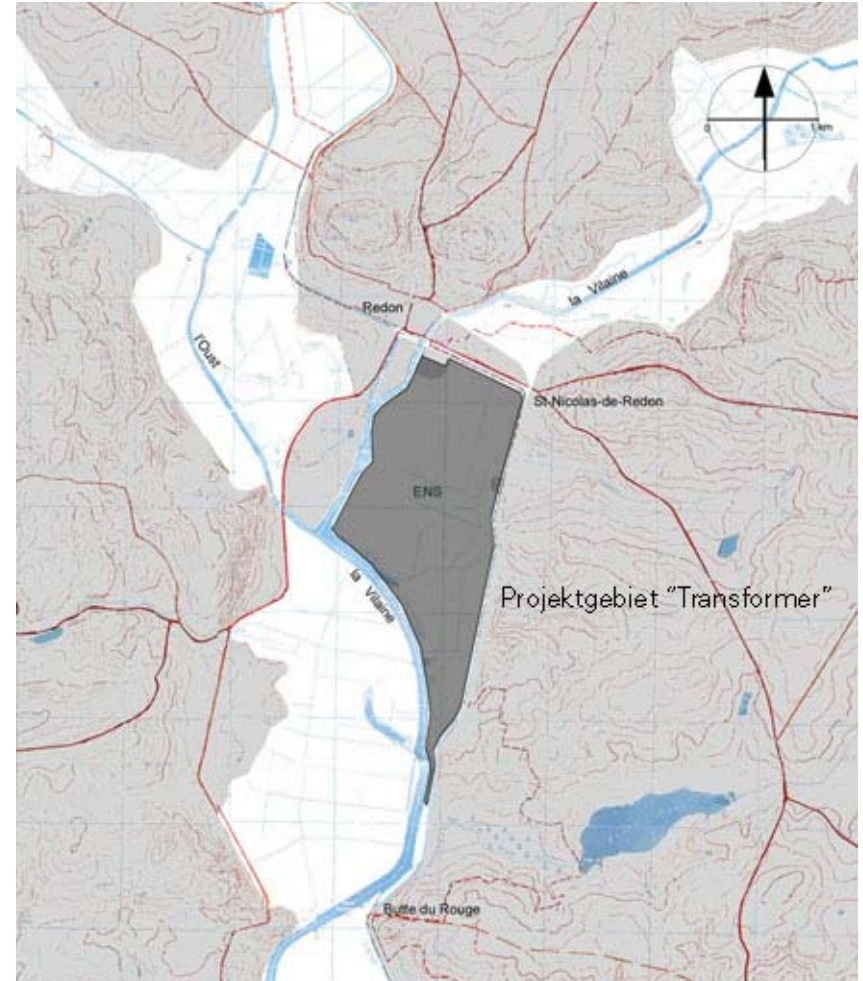


2005: Niddawiesen, Gnüchtel und Triebswetter Landscape Architecture



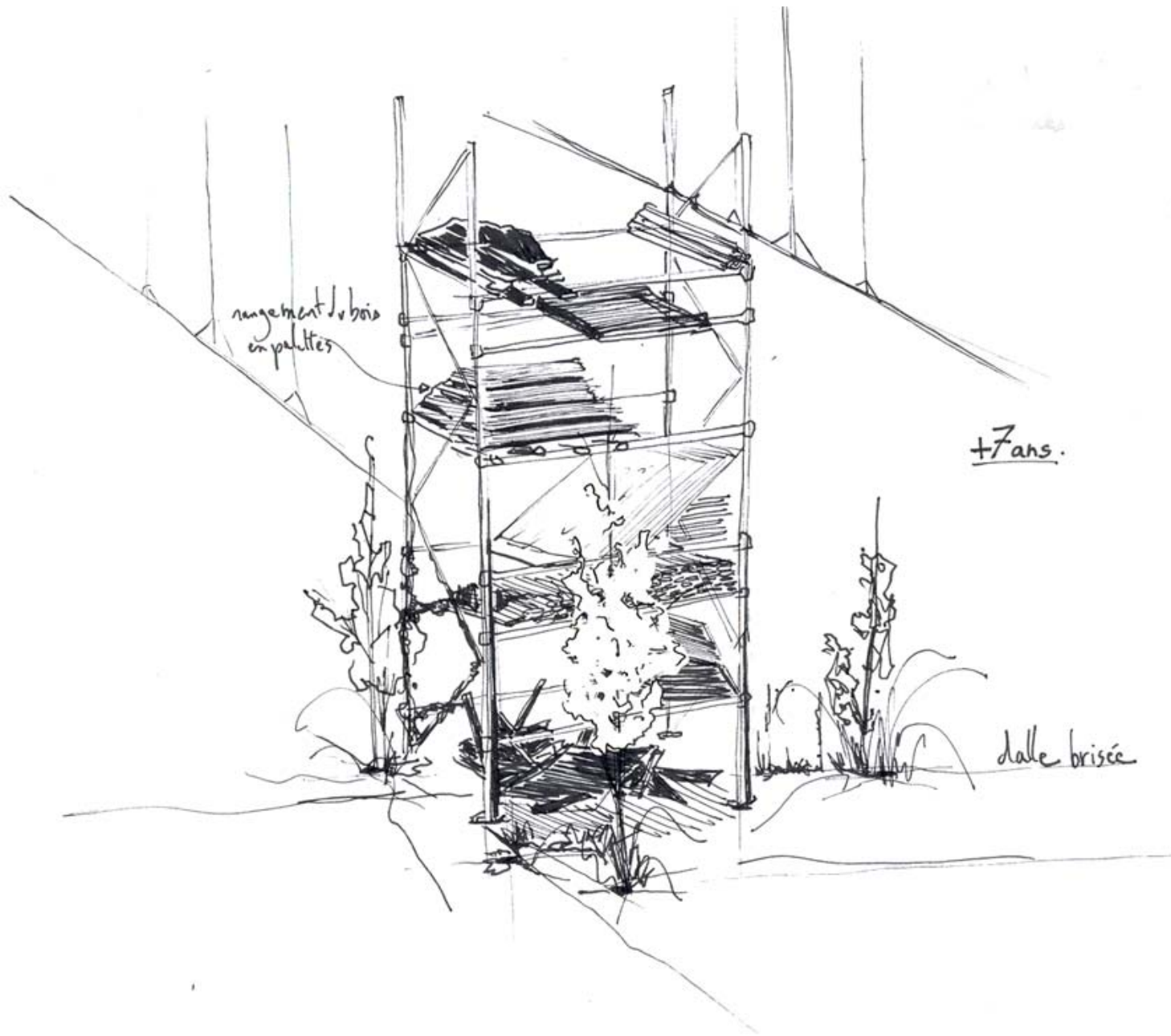
„Transformer“ (2004/05)

Studio/ Workshop at Ecole Nationale Supérieure du Paysage/ Versailles





Fôret métal



rangement / bois
en palettes

+7ans.

dalle brisée











Green Dynamite

International Competition „Topography of Terror“, Berlin

1. phase: 309 entries (cooperation between architects and landscape architects mandatory)

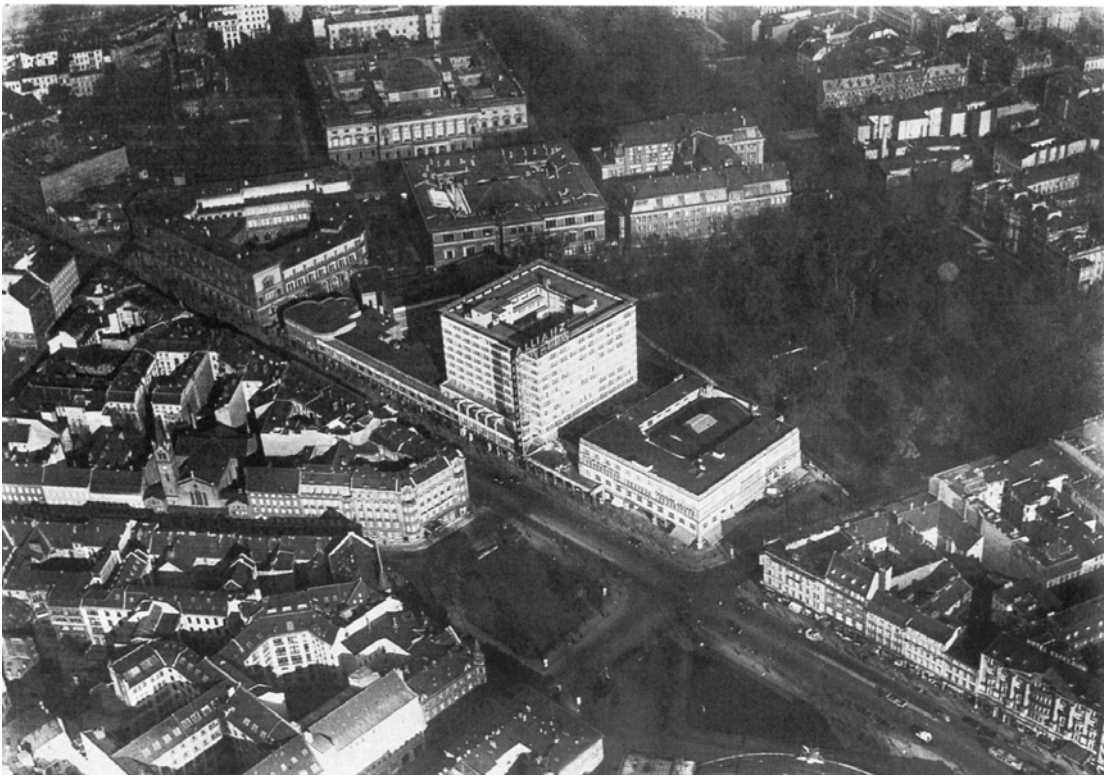
2. phase: 23 selected teams

Jury decision: 24.01.2006





Aerial Photo 2004



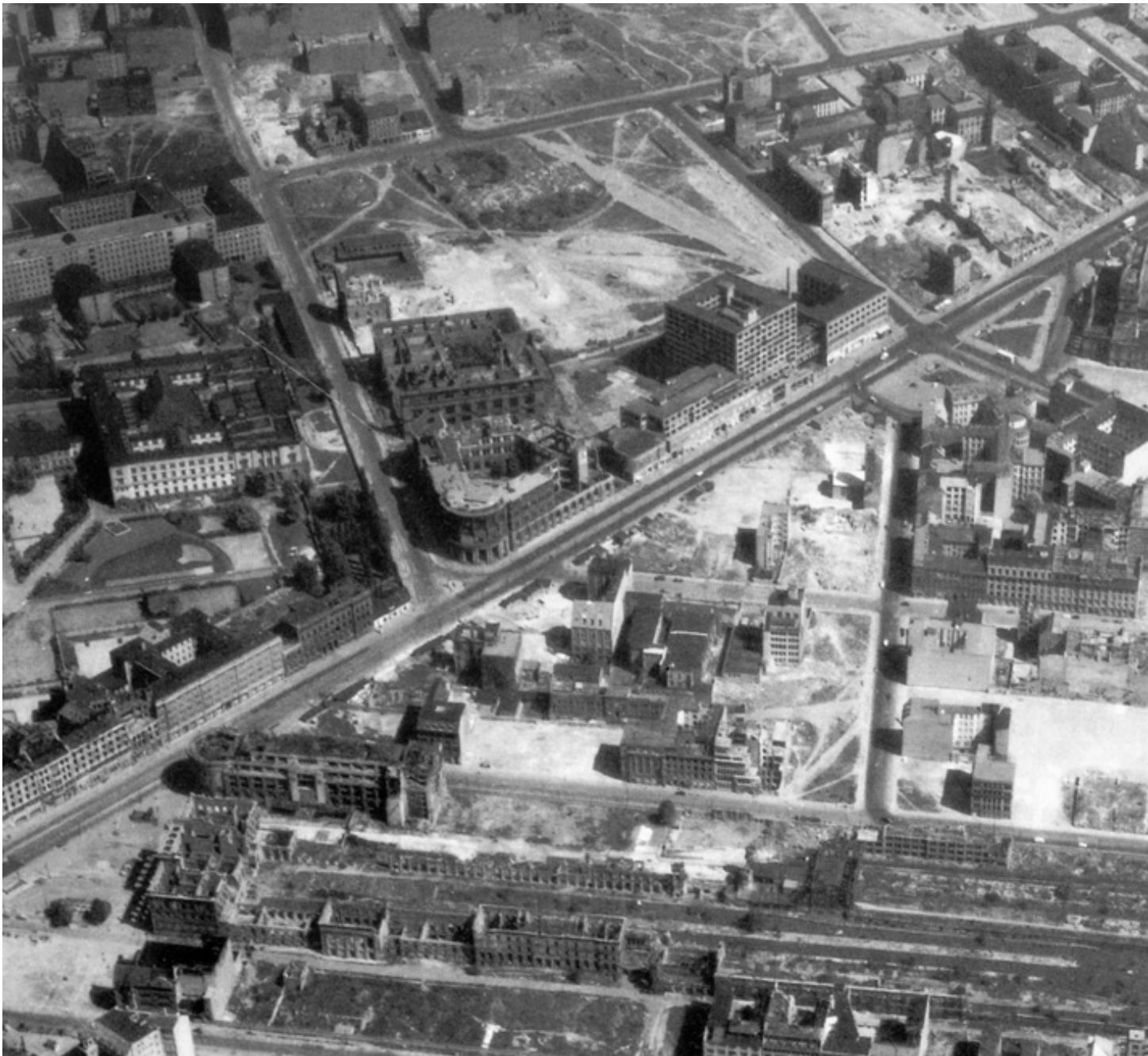
Bird's-Eye View 1934



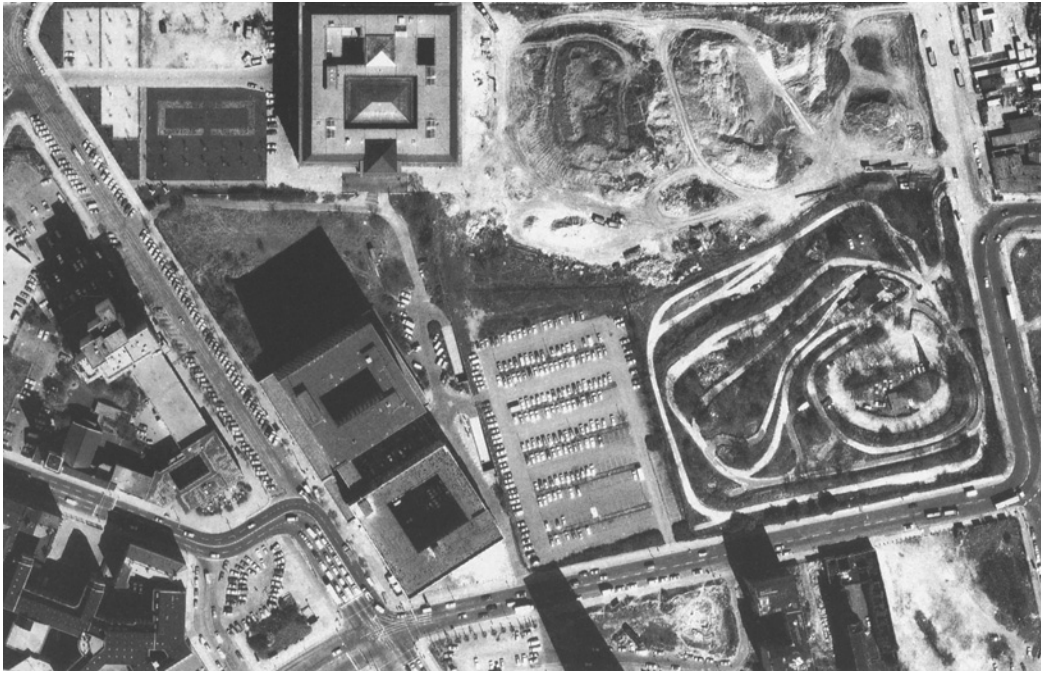
Himmler and Göring 1934



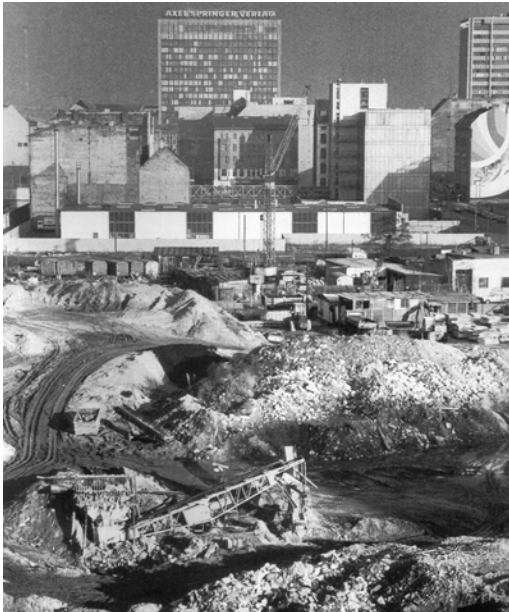
Map 1938



Bird's-Eye
View 1955



Early 1980s with rubbish dump by a Recycling Company and the 'Autodrom'



Late 1980s

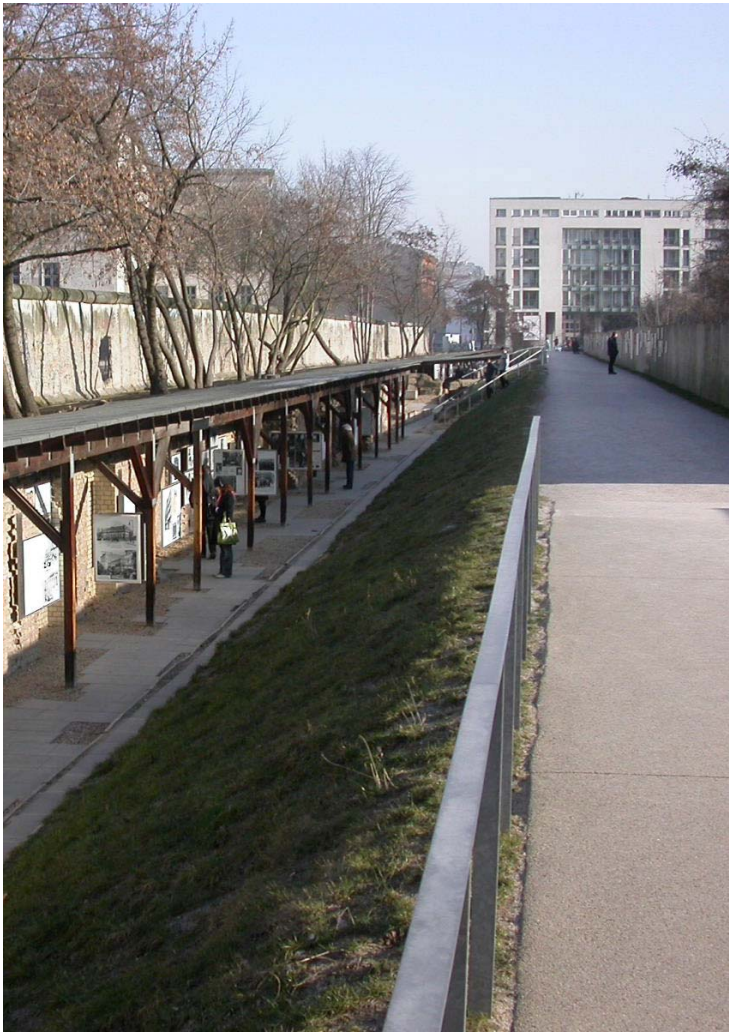




Construction site 1999, with winning entry by Zumthor from the Competition in 1993



2005



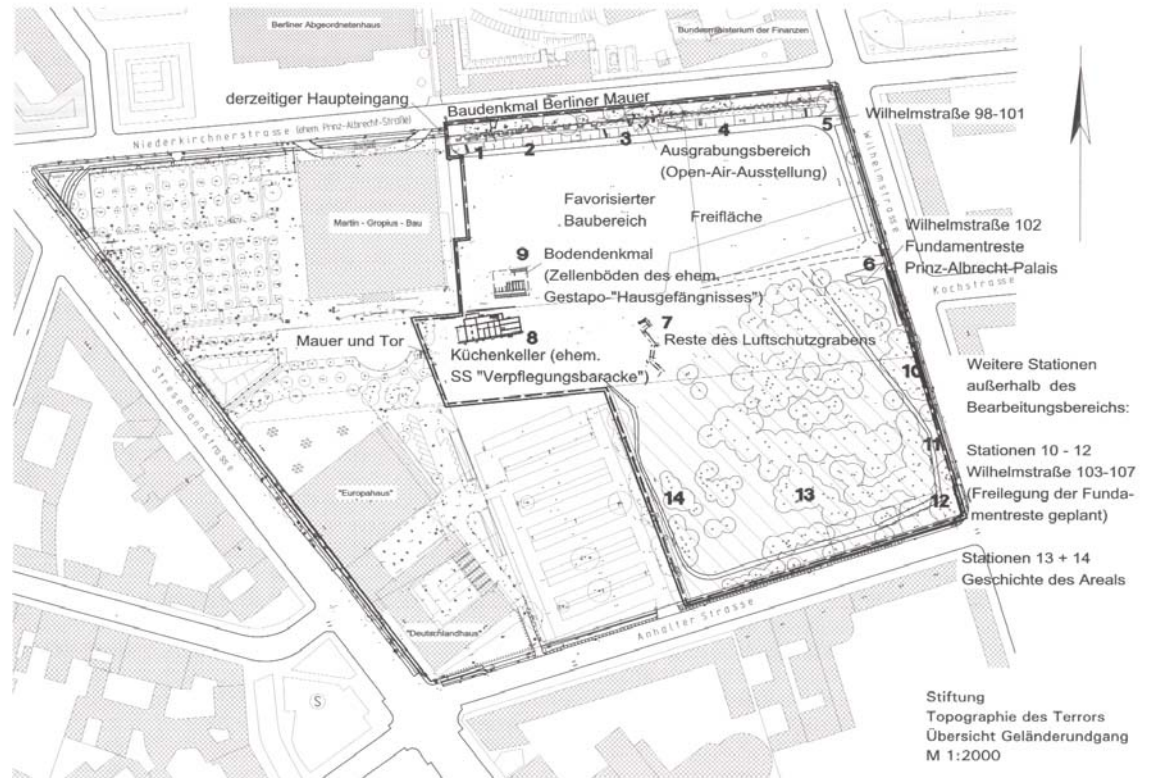
2005



Competition Brief 2005

Design for the site and a new documentation center.
Quotes from the brief:

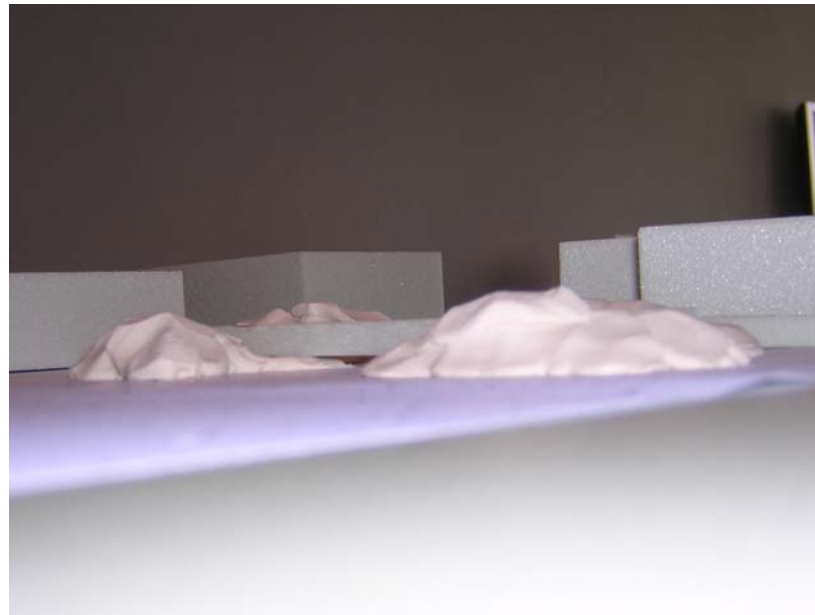
- the site itself is the first exhibition object (a new circuit with 14 stations)
- no „artsy“ overall design – the sober, down to earth character should be kept
- documentation center close to main entrance
- the new building should be experienced as a part of the site, no dominance
- no urbanistic gesture
- no symbolisms
- site should be assumed as flat

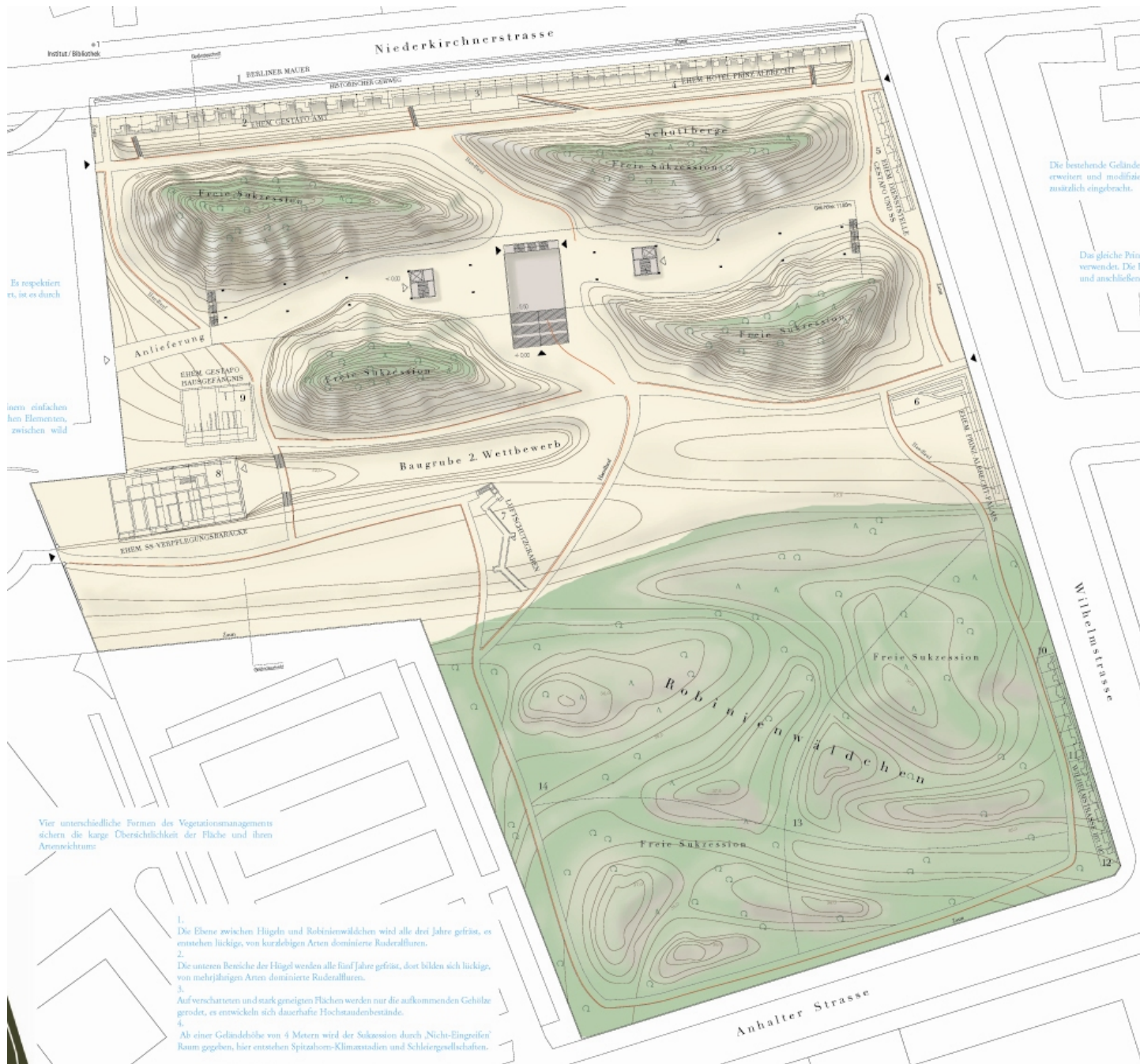


imke woelk & partner/ prominski landschaftsarchitektur

Main Principles:

- the site should keep its disturbed character, including the hills
- soil, rubbish and plants should be neither removed nor newly introduced to site
- the building is subordinated to the site





Es respektiert, ist es durch

innen einfachen Elementen, zwischen wild

Die bestehende Geländeform erweitert und modifiziert, zusätzlich eingebuchtet.

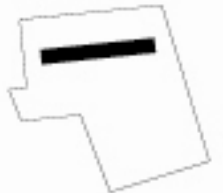
Das gleiche Prinzip verwendet. Die Bestandteile anschließend



-1
Gebäudespuren / Ausrichtung u. Verzahnung

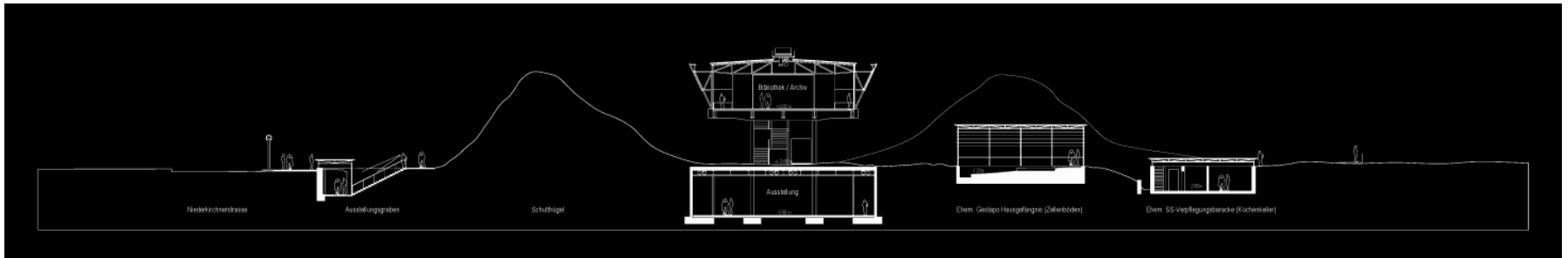
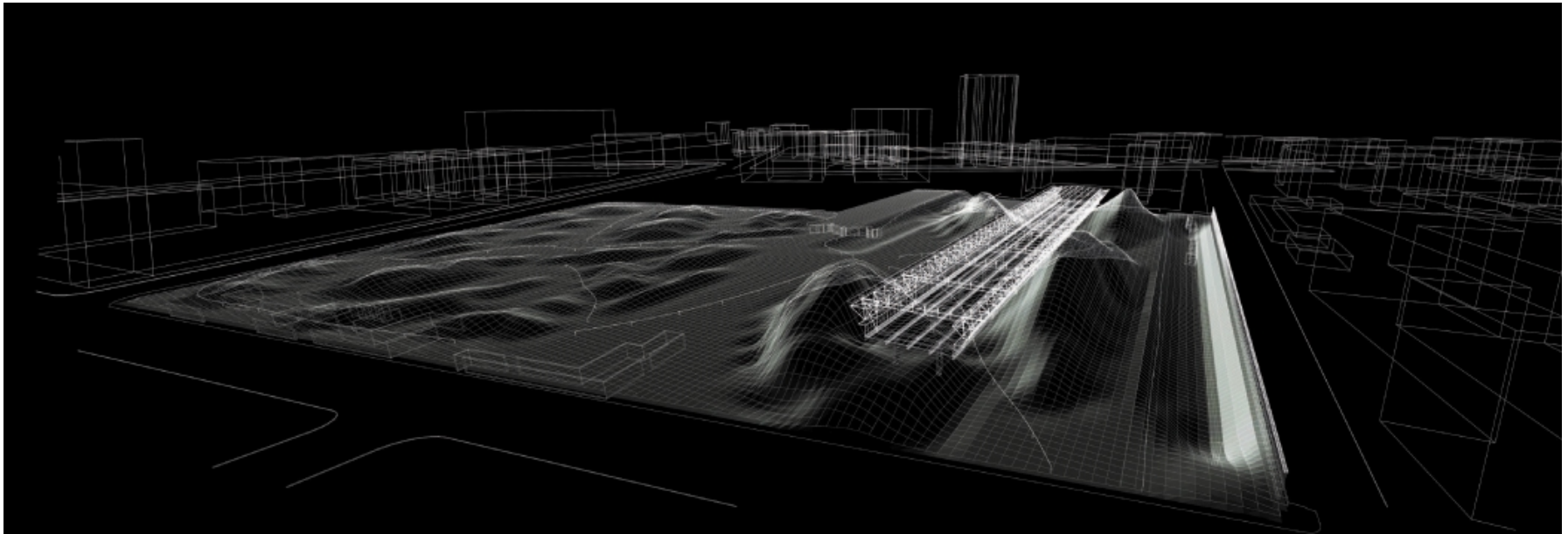


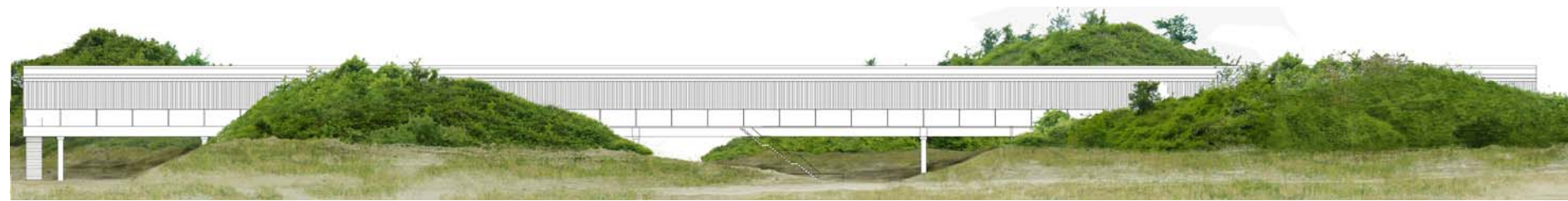
+/- 0
Gelände



+1
Institut / Bibliothek







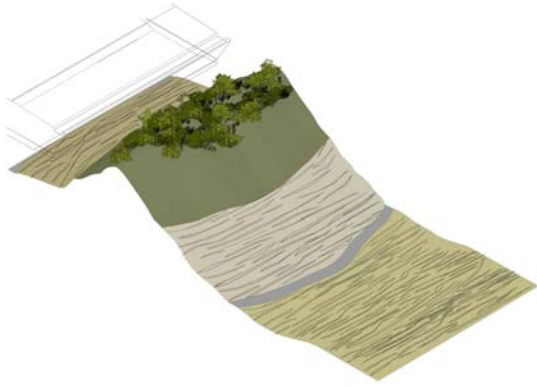
Vegetationsmanagement



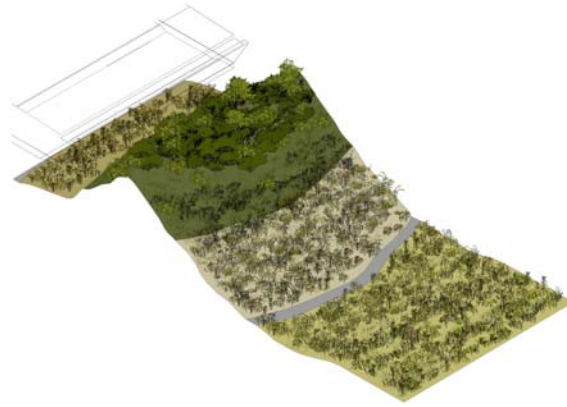
Species in areas with morticing every three years:

Erysimum cheiranthoides
Tripleurospermum inodorum
Oenothera pycnocarpa
Conyza canadensis
Amaranthus albus
Chenopodium botrys
Sisymbrium loeselii
Setaria viridis
Atriplex sagittata
Berteroa incana
Medicago lupulina
Melilotus albus et officinalis
Potentilla supina
Cirsium vulgare
Poa compressa
Sonchus oleraceus
Reseda lutea
Chelidonium majus
Verbascum phlomoides

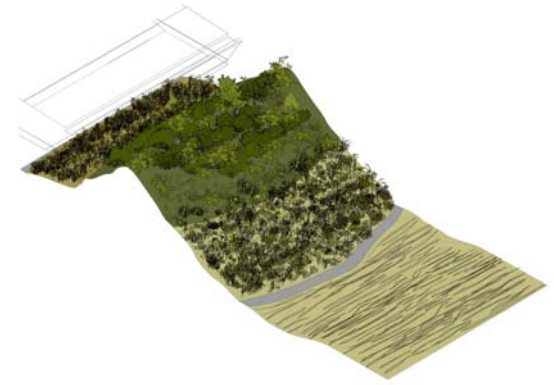




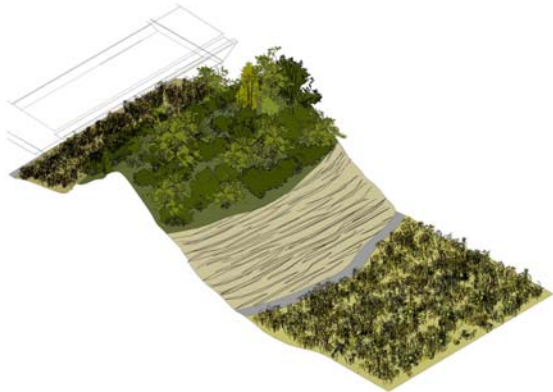
Year 0



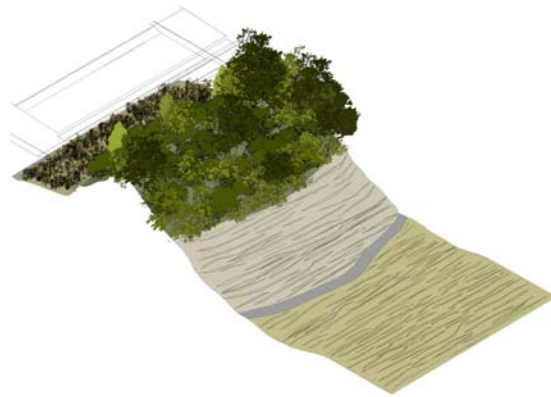
Year 2



Year 3



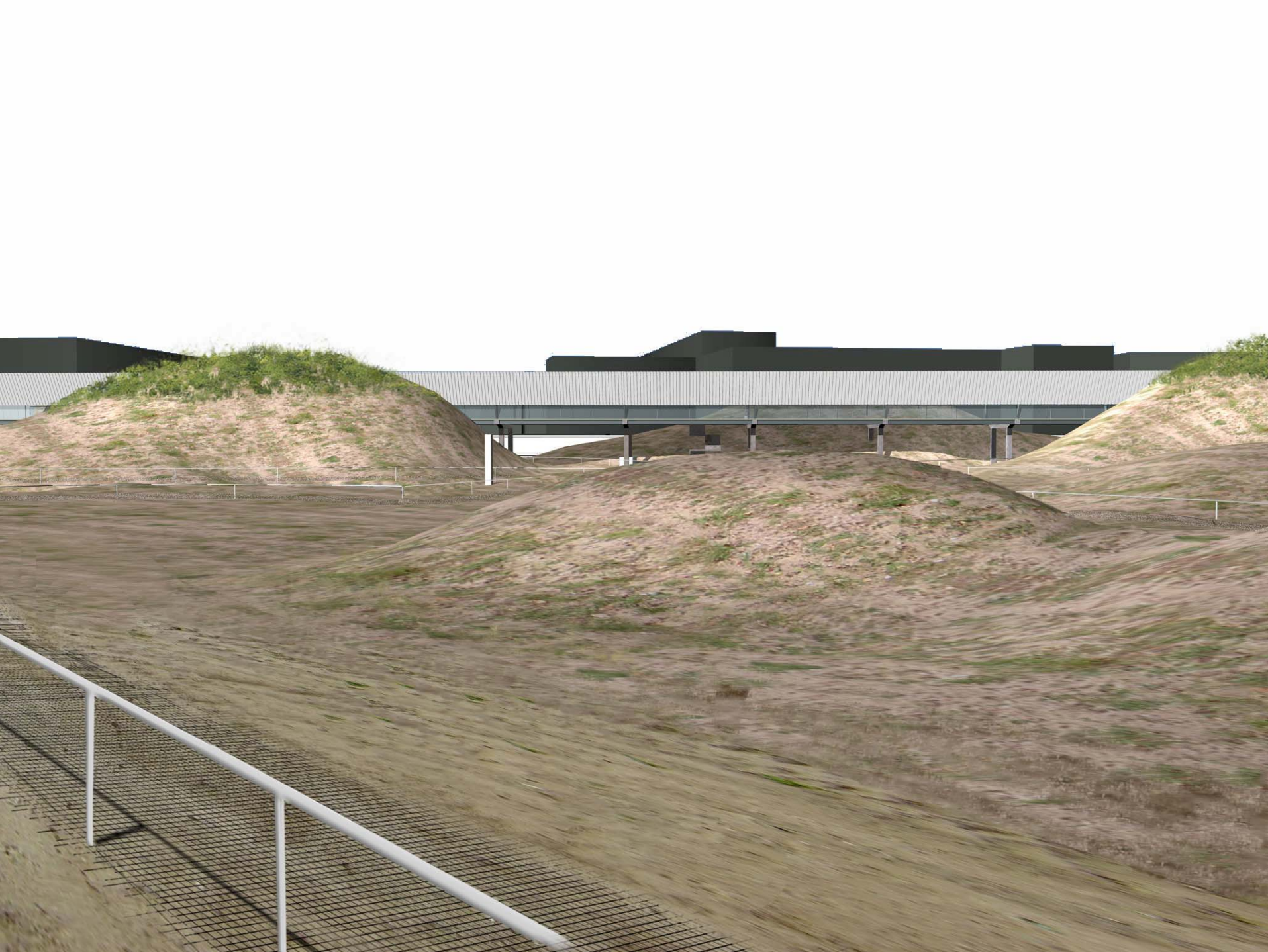
Year 5



Year 15



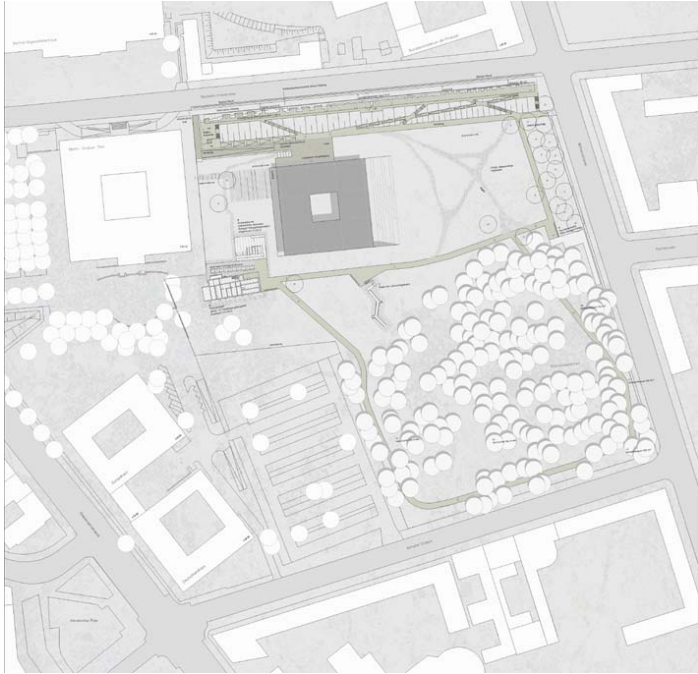
Year 55







1st Prize: Heinle Wischer and Partner/ H.W. Hallmann



4. Conclusion

- a shift towards a new, complex worldview is happening, highlighting unpredictability, contextuality and processes
- simultaneously, the concept of landscape experiences a shift, with the result of an enormously extended sphere of attention
- Landscape Architecture as the design profession with the broadest, most complex scope has a lot of potential to give productive and provocative cultural expressions of these shifts

„Landscape Architecture will soon become the most consequential of the design arts.“ John Beardsley