



>> **PORTFOLIO**
EXPERIMENT.STRATEGY.ARCHITECTURE
process unfolding::

STEFANIE MAERZKE DIPL DIPL ING [FH] MA

städeleschule

masterstudies advanced arch. design

10. 2005 - 09. 2007

aerospace museum

2007 master thesis, prof ben van berkel

study fuzziness

2007 prof ben van berkel

depth of the surface

2006 prof ben van berkel

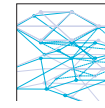
folding study

2005 prof ben van berkel

experiment.strategy



transferring the system into architecture



development of a unit for its capacity to produce controlled fuzziness.



development of a system inheriting spatial and structural qualities



development of a system inheriting selected qualities of two artworks

conceptual

suburban dream, diploma

2005 prof tanja kullack



layered suburbia against shrinking cities

media center

2004 prof tanja kullack



conversion former district heat station

furniture design

2004



flexible furniture

lichtbrücken neuss

2003 prof dirk van den hoevel



light stripes providing atmosphere + information

basic works

studies architecture

09. 1997 - 04. 2003

gladbeck corner, diploma

2003 prof fritschi



urban.living

living at the park

2002 prof fritschi



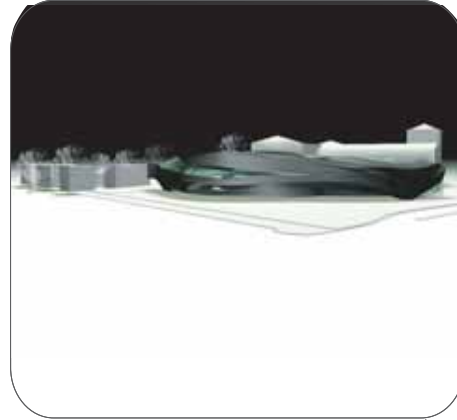
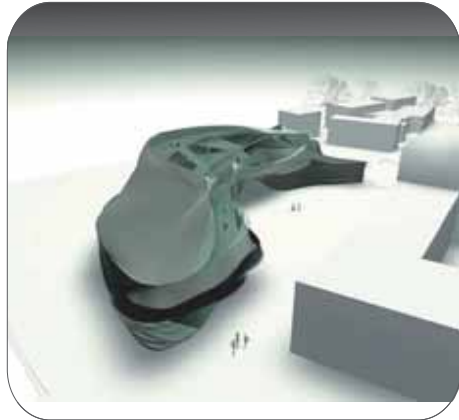
urban design.living.construction design

living at the river rhine

2002 prof degen



urban design



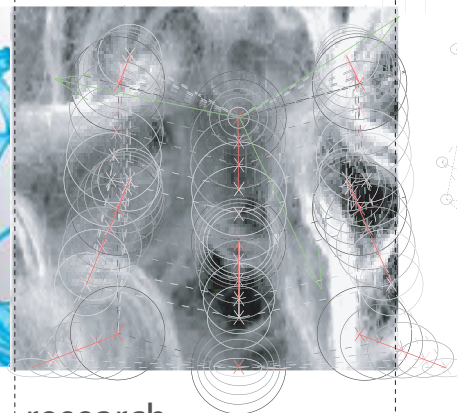
>> THE AEROSPACE MUSEUM IN DARMSTADT

//PRESENTING INTERNATIONAL AND GERMAN AEROSPACE HISTORY AND TECHNOLOGY

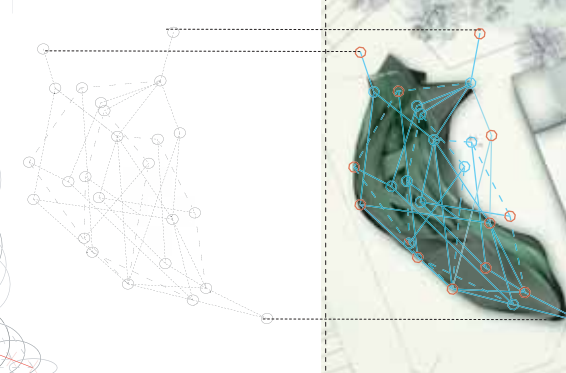
//CELEBRATING THE TENSION BETWEEN THE TERRESTRIAL AND OUTER SPACE THE MUSEUM DRAWS ON THE PUBLIC IMAGINATION WITH RESPECT TO OUTER SPACE TO STAGE AN INFORMATIVE, EDUCATIONAL AND ENTERTAINING EXHIBIT WITH HISTORICAL, TECHNOLOGICAL AND SOCIO-CULTURAL CONTENT.



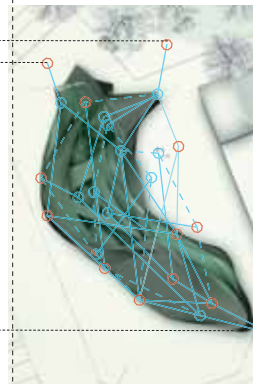
idea



research



underlying system



architecture



OUTER SPACE ARCHITECTURE

masterthesis, 2007
prof. ben van berkel



>> SITE

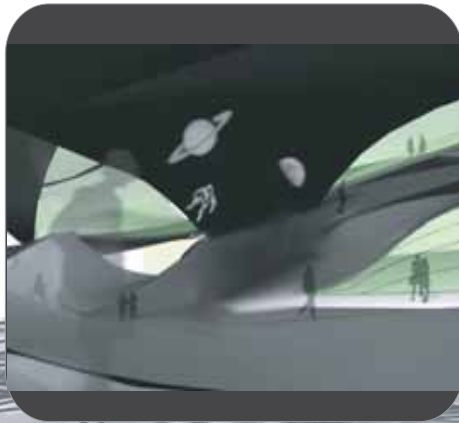
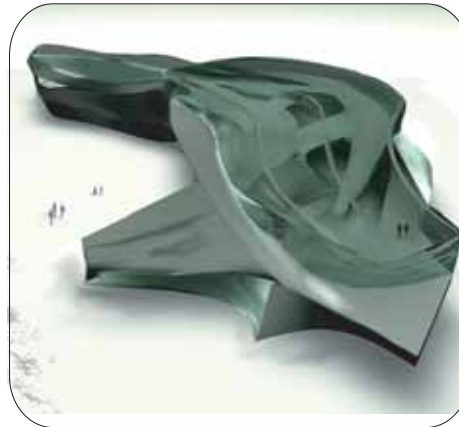
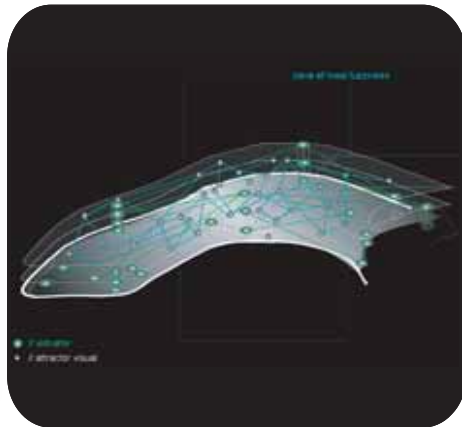
the museum is situated centrally in darmstadt, home to 140.000 people, city of science and host to numerous university and research institutions as well as the seat of the European Space Agency mission control. placed next to the hessische landesmuseum as an extra-terrestrial object, the aerospace museum serves as a programmed, infrastructural space and links the *zeughausstraße* to the *herrngarten*. visitors to the museum can pass through the exhibition spaces and end in the cafe and restaurant that faces the garden to the north.

>> TRANSITIONZONE

reflecting this infrastructural function, the aerospace museum is organized as a continuous passage between different exhibits and thematic zones. the building is an entire transition zone whose basic fuzzy qualities render a hybrid effect of disorientation and vastness.

>> ARCHITECTURE

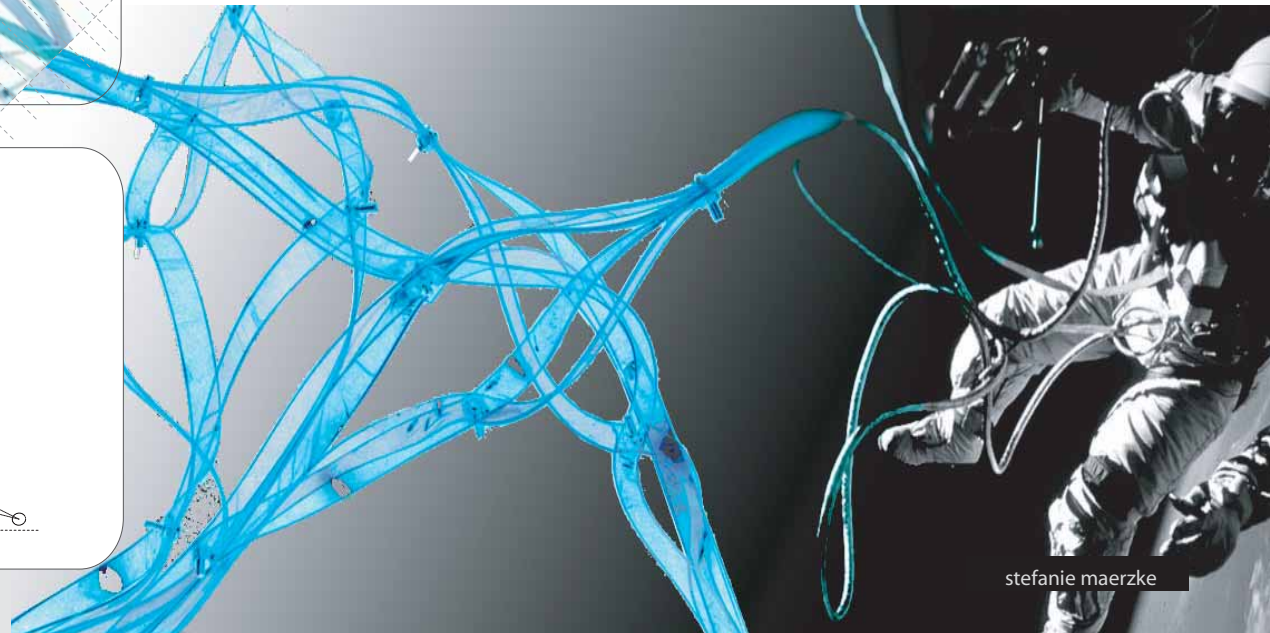
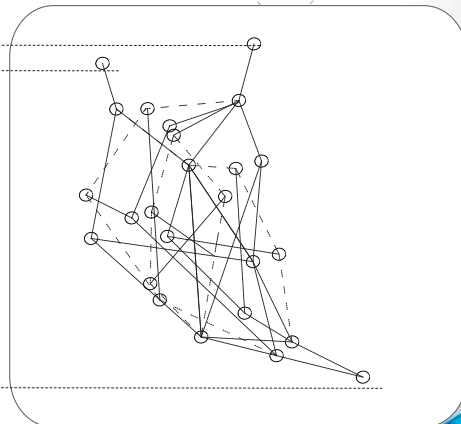
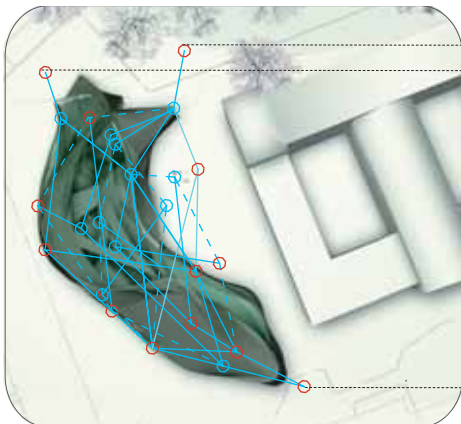
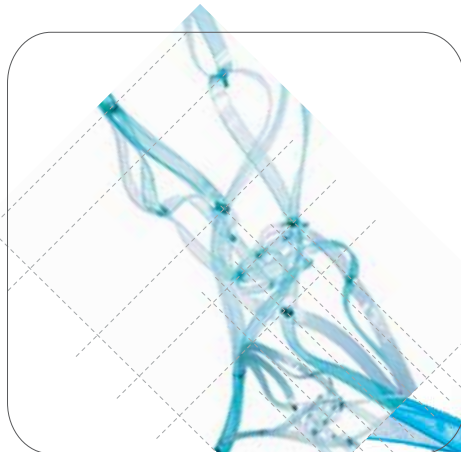
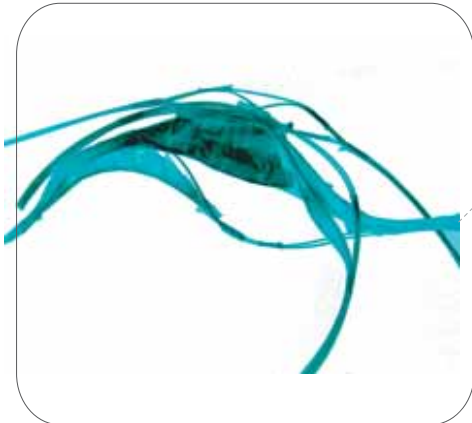
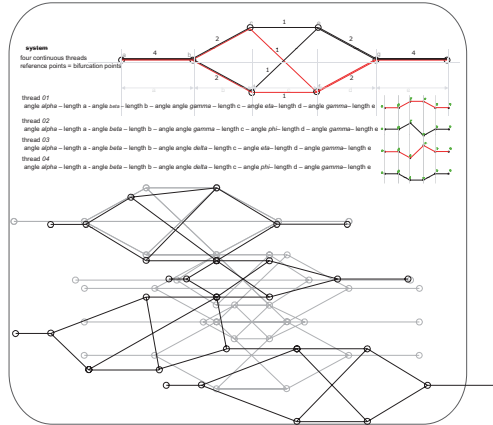
the concrete and glass architecture of the aerospace museum embodies the dual strangeness and familiarity that we have with outer space. the building is a closed object with no direct connection to its adjacent spaces and buildings. but with an enormous glazed roof it opens to the sky and renders a constant image of that extra-terrestrial realm to which its function is dedicated.

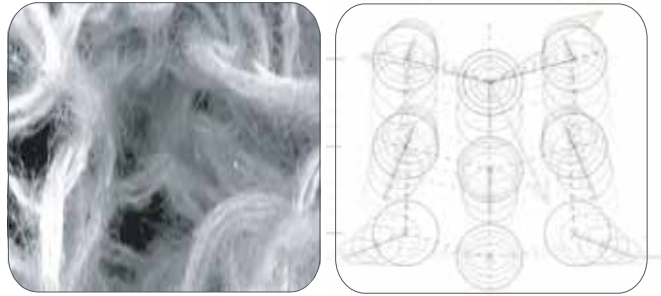


>> **CONCEPT FUZZINESS**

the fuzzy quality of the architecture was derived through an extended analysis of a knitted, wool fabric. this fabric gave the inspiration for the multipath routing system, the global form of the building and the floating organization of the exhibition stations as nodes within a blurred space.

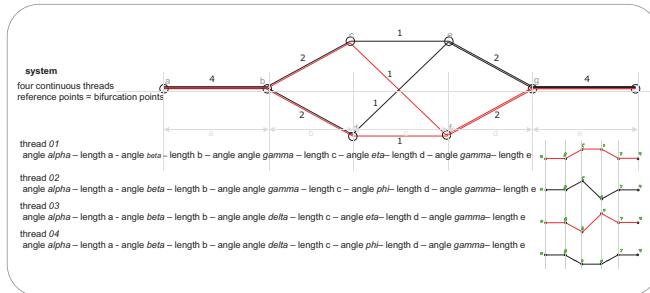
basic fuzzy qualities render a hybrid effect of disorientation and vastness. the fuzzy quality of the architecture blurs the border and distinction between discrete objects and spaces. the interior offers multiple paths between these zones, and the visual connectivity is open and contributes to produce the effect of vastness. In this manner the visitor who passes through the building, experiences relative disorientation on the way. he or she will happen upon exhibits and stations and be part of a continuous journey of discovery.



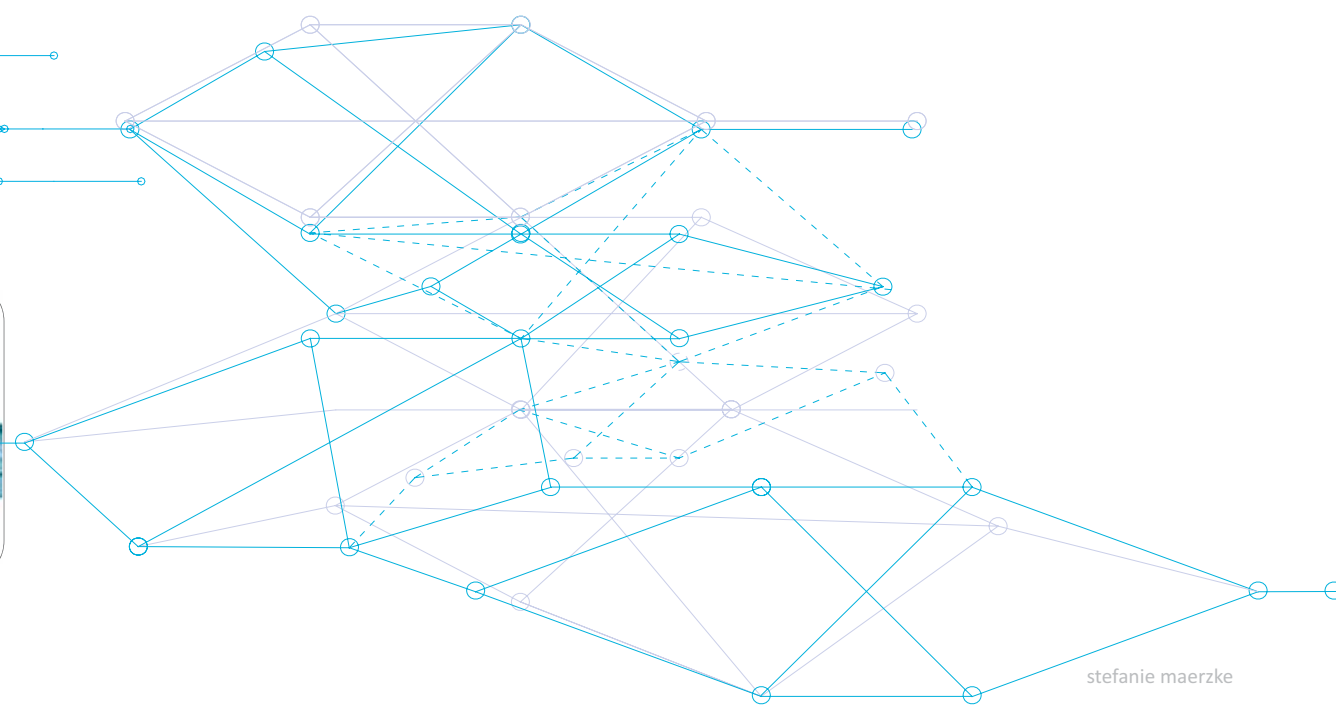
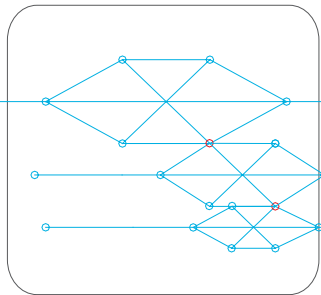
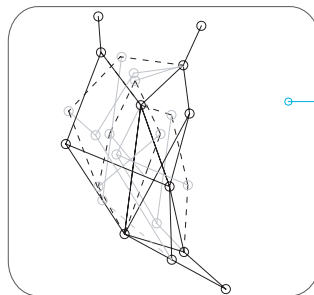


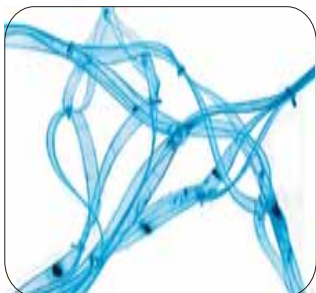
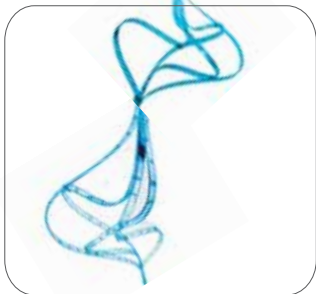
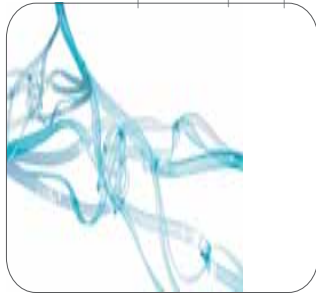
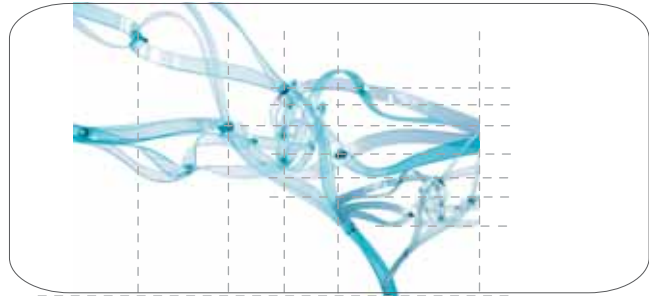
>> TEXTILE STUDY FUZZINESS

the textile study revolves around a loose weft knit, providing a fuzzy atmosphere. the system is based on an analysis of the behavior, matter and properties of the textile according to different scales.



the geometrical result is a continuous system defined by eight bifurcation points and the length in between.



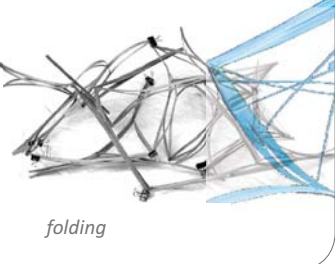
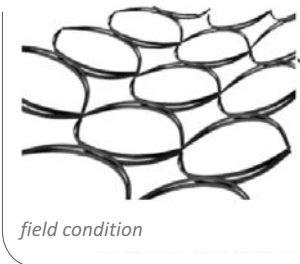
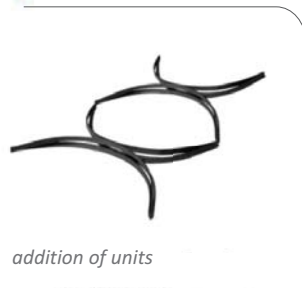
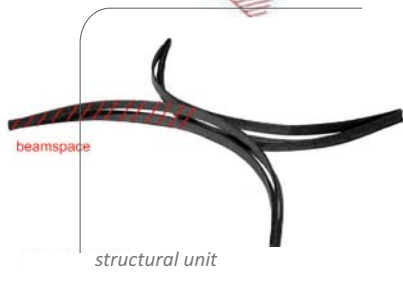
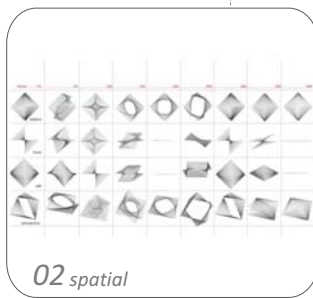
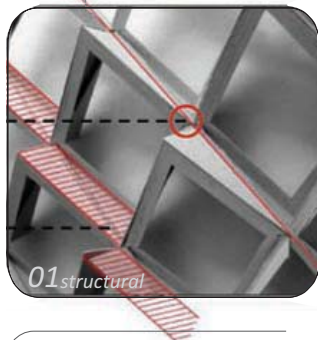
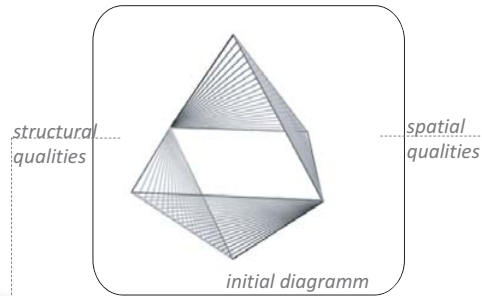


>> MODELS FUZZINESS

the geometrical result of the textile study is a continuous system defined by eight bifurcation points and the length in-between. according to these parameters the system can proliferate and generate spatial differentiation.

in a series of models you see a development of a unit for its capacity to produce controlled fuzziness.



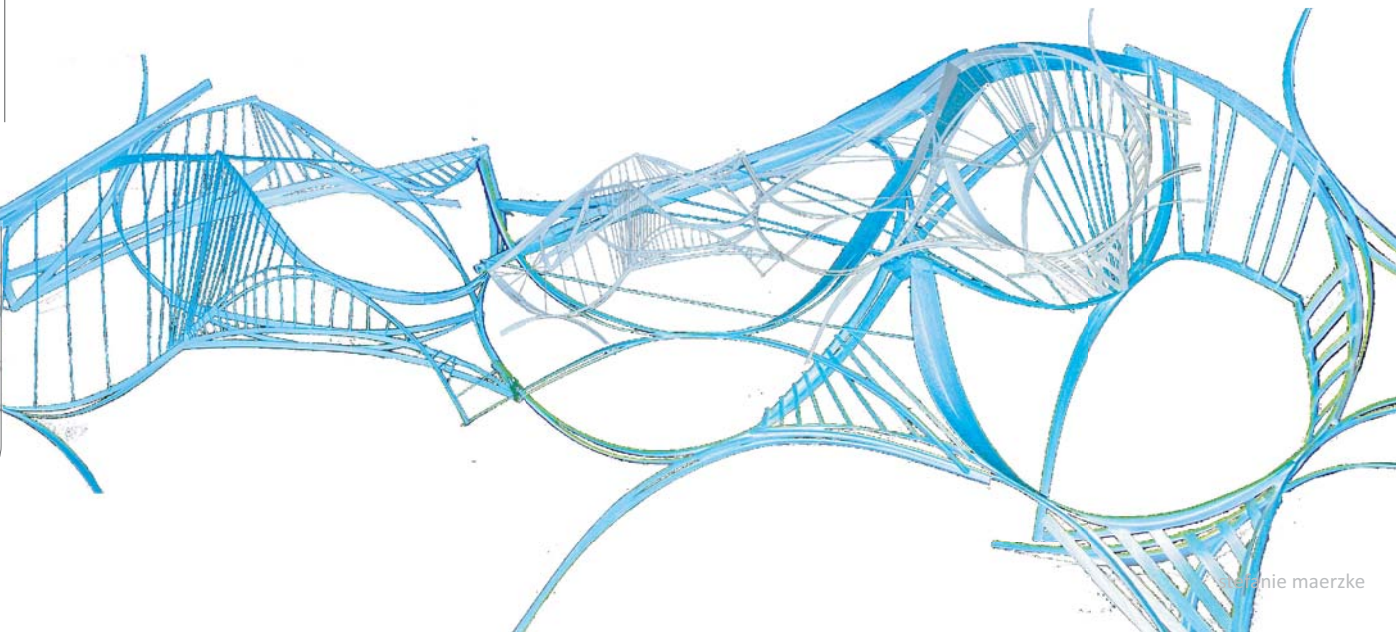


>> HYBRIDIZING STRUCTURAL AND SPATIAL QUALITIES

two analysis show the development of an initial diagram according to structural [01] and to spatial [02] issues.

a hybrid construct is inheriting the spatial and structural qualities. while structural resistant it gives the potential to generate spatial differentiation.

in proliferation the contained opportunities, which are structural stability and spatial differentiation, are observable.

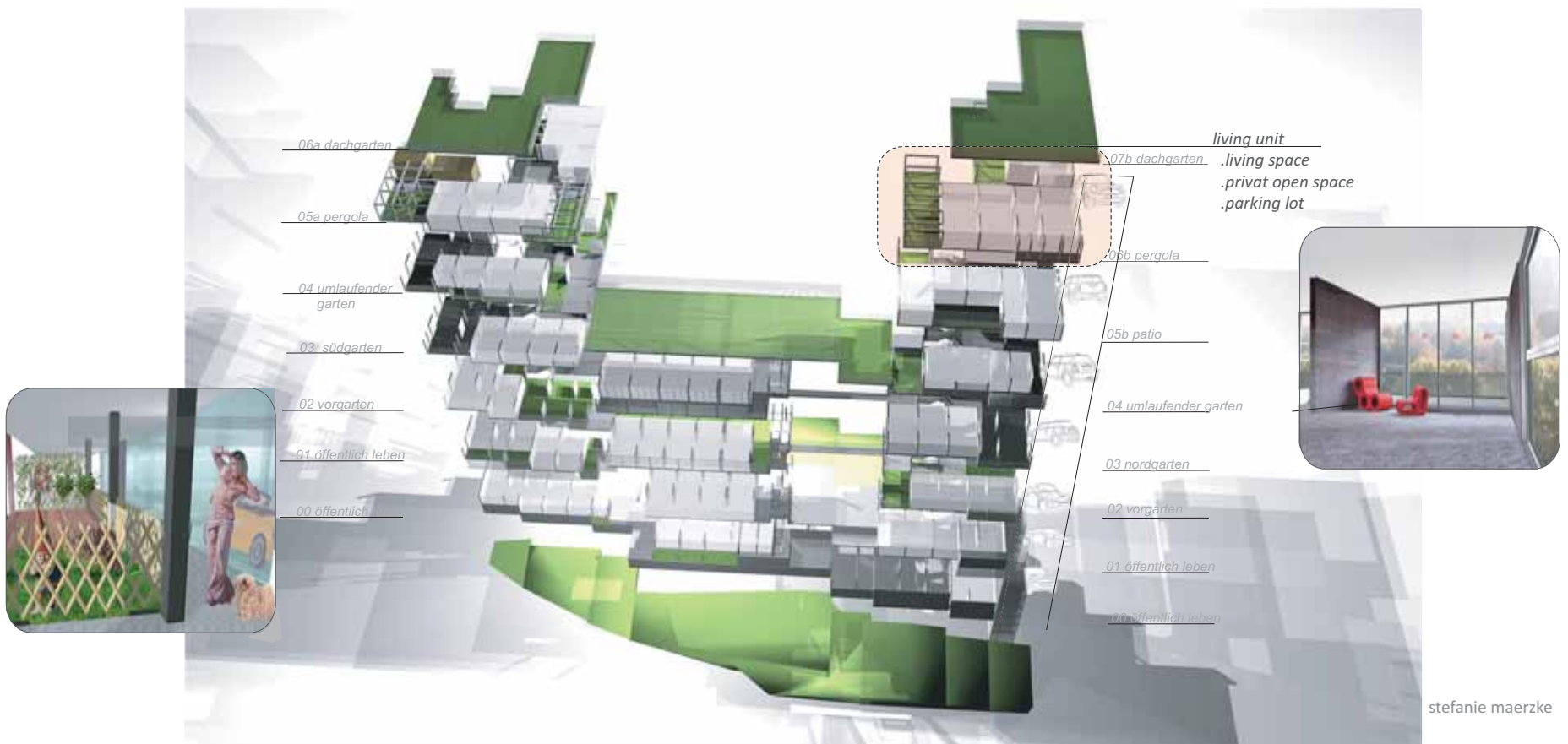


SUBURBAN DREAM 2005

diploma thesis interior architecture
honored, 2005
prof. tanja kullack

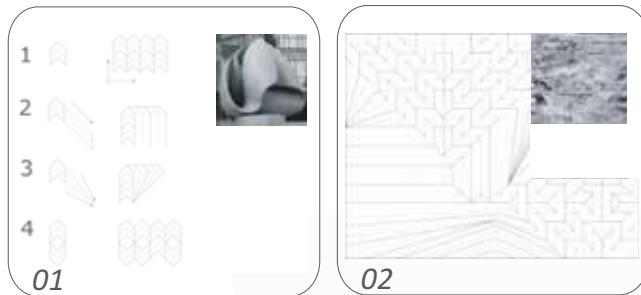
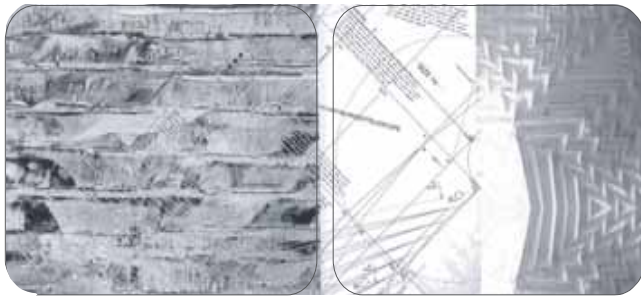
>> CONCEPT SETTLEMENT IN ESSEN

- // concept for a high rise settlement which is vacancy affected
- // basic concept: layering suburbia
- // concept points
 - #1 *myhouse.mygarden.mycar::on the level*
 - #2 *landscape flows through*
 - #3 *vistas from everywhere*
 - #4 *density of suburbia*
 - #5 *variety of types*
 - #6 *variety of materials*



>> MERGING TWO ARTWORKS

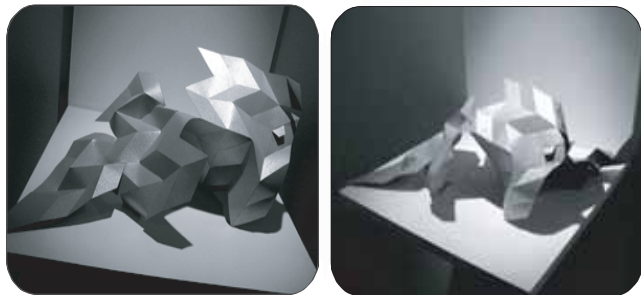
the intention was working out such a complex surface in order to organize and enclose space in a very differential manner, inspired by the qualities of the sculpture *kontinuität* by max bill combined with the attributes of the unnamed painting by heinz moek.



01. the sculpture -a folded endless floating ribbon, creating a series of dramatic spatial and geometrical events- **determines the basic element.**
02. the painting -an interwoven system of three layers, derived from changes in intensity of color and structure- **functions as a pattern** to generate a spatial complexity.

specific areas have been translated and defined through the changes in color and structure.

geometrical events such as interweaving, overlapping, perforation, bifurcation and cross-connection create a three dimensional folded interwoven geometrical and spatial construct.





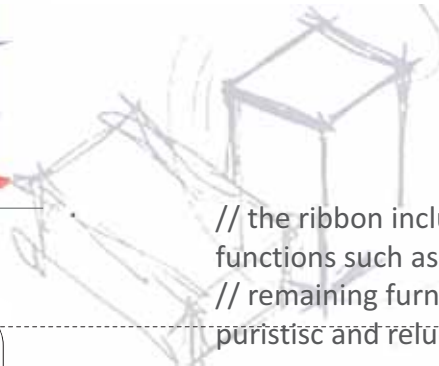
>> CONCEPT FORMER DISTRICT HEAT STATION

// AIM:

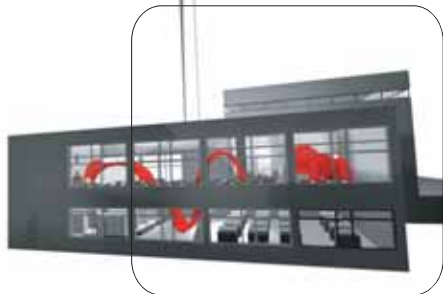
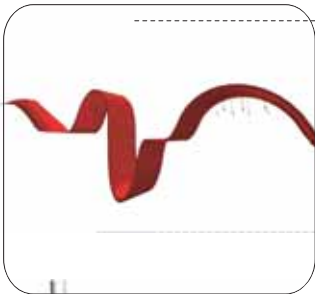
- .to create new spatial experience with less effort
- .to connect both parts of the building



- // the ribbon connects both parts of the building and both levels
- // central-heating boilers are removed, cuts in the ceiling remain



- // the ribbon includes all providing functions such as lending/information/wc...
- // remaining furniture is, as opposed to the ribbon, puristic and reluctant in terms of color





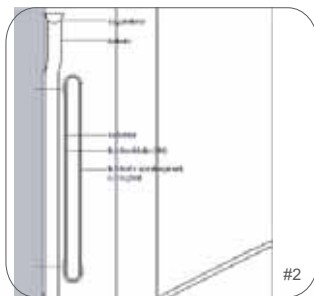
>> URBAN

the neighboring area is historically of great value.
the path of history clarifies citizens and emphasizes
the significance of the inner-city.

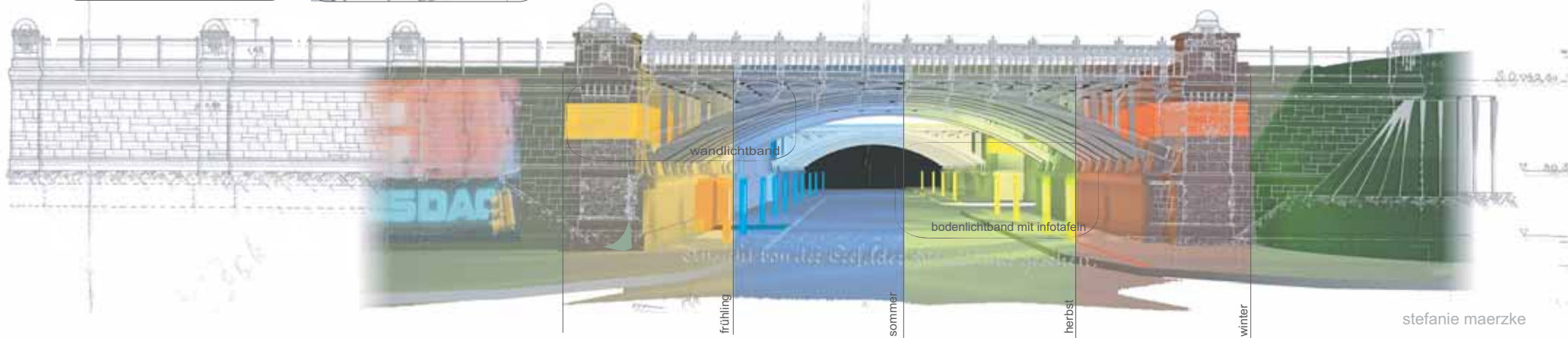


>> LIGHTS

#1 floor light stripe with info boards
.far beyond the complex of bridges
.inform about the historical significance of the area.

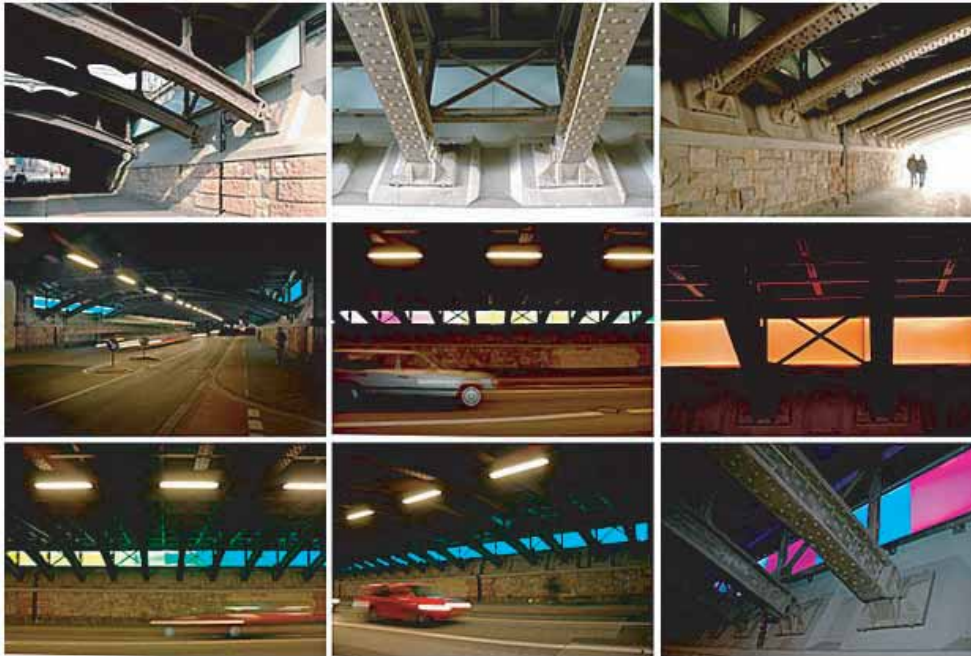


#2 wall light stripe
.at the walls in the area of the bridges
.illumination und atmosphere



BRIDGES OF LIGHT 2003

competition winner
project to realise in two construction stages.



>> REALIZED

complete realization of the initial design
_1,1 Mio Euro

realization of revised design:

//first construction stage

_cleaning and installation of selected light in northern area
_189.000 Euro [plus material -- 15.000 Euro]

//second construction stage

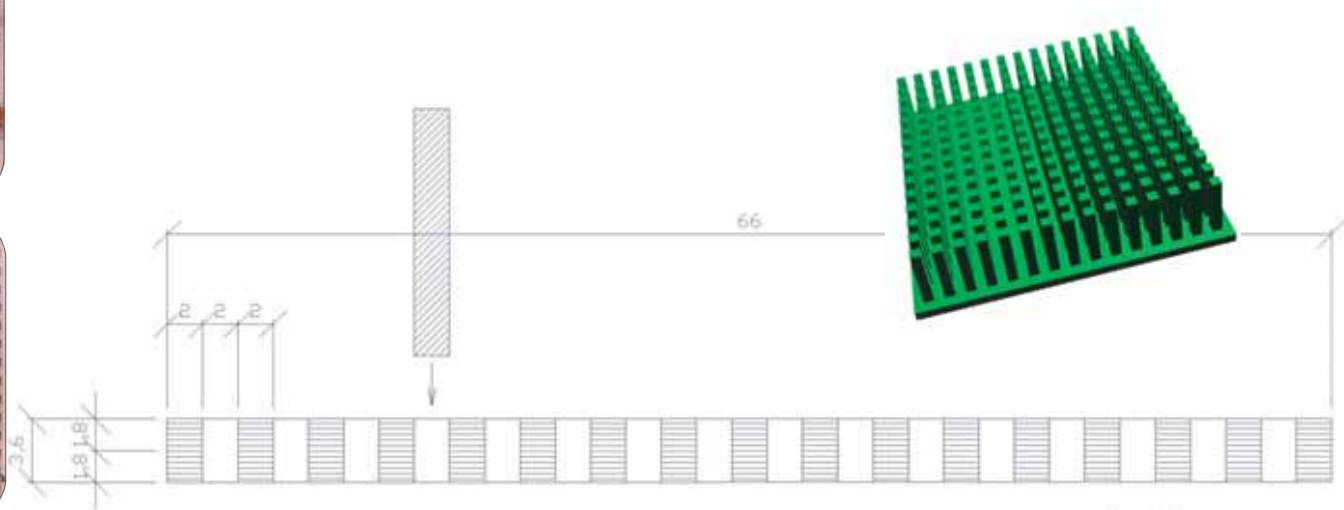
_cleaning and installation of selected light in southern area
_additional: light tube in den fronts of the bridge | light
fibers in the arches | slope lights | bottom fitting spots
_210.000 Euro.

_construction still has to be decided



>> FURNITURE 365+

the plug-in system enables flexible use.
 the furnituer is rack, shoe bin, coatrack, tools keeping
 and a lot more. composed of base plate and plug in
 sticks the furnituer is adjustable to any needs.





>> QUARTERS COMPLETION

the u-shaped building forms the completion of the quarter by means of a plaza, with its links to gastronomy and shops providing public use possibilities. the landmarked villa contributes to form the plaza.

towards the city center the building opens by an elevation, which invites pedestrians and forms a distinctive sign. visitors are led by generous stairs to a spacious plaza.

a further stairway overcomes the height differential and leads down to the plaza belonging to the adjacent settlement. a two-storied wine tavern constitutes the link between the levels and at the same time it serves as a completion of the lower plaza.



ansicht westen



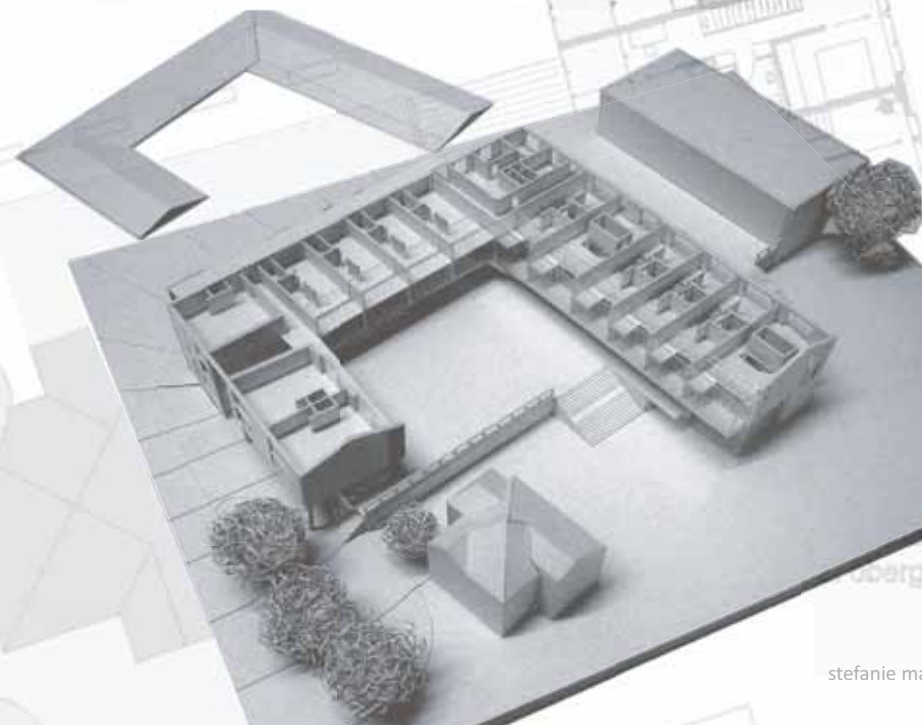
schnitt no-süd



vorgelagerte wintergartenzone



öffentlicher platz



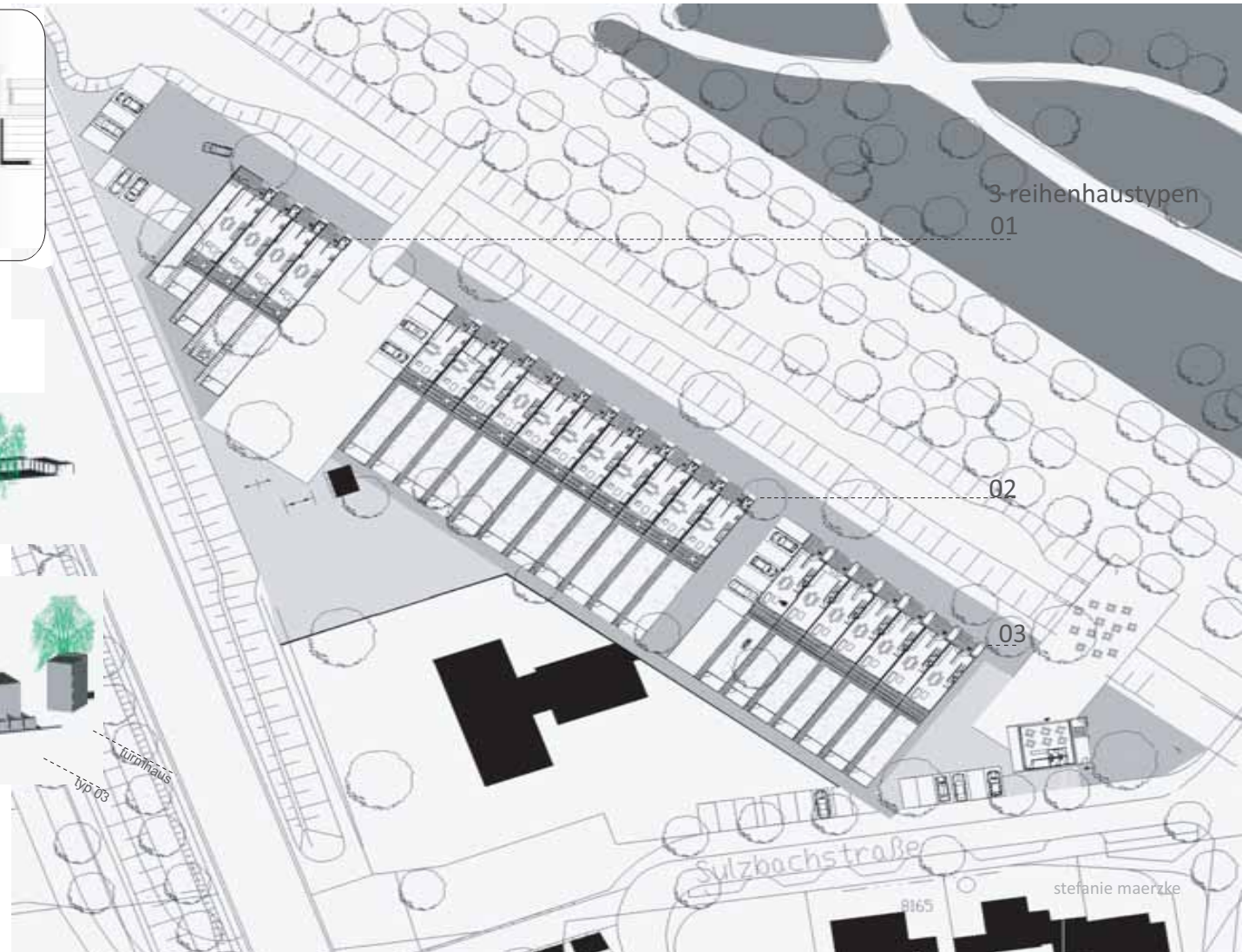
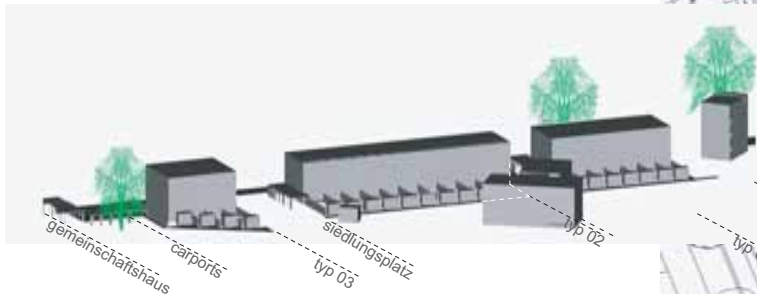
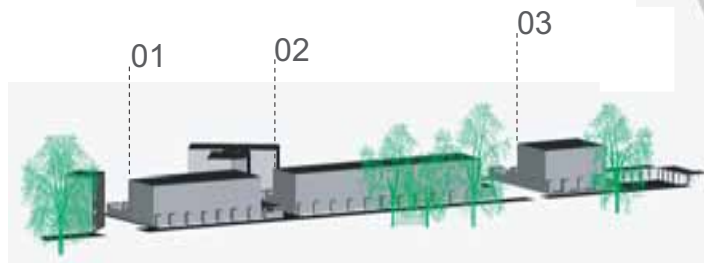
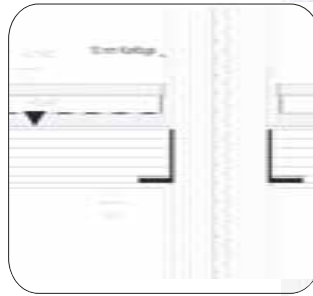
obergeschoß



>> URBAN QUALITY OF LIVING

including the adjacent green areas in the design, the settlement goes into the needs of young families. flexible planning generates an architecture adjustable to different situations in life.

the local context is taken in consideration with details as thermally separated winter gardens, which protect against the noise of passing trains.





>> RHEINFELDEN LIVING AT THE RIVER

the area is bordered by industry eastwards and by the rhine westwards. hence i transmit from industry over diminishing building volumina with accordingly different living topologies to the landscape (rhine). industry - apartment block - row houses - city villas- landscape

