

BA URBAN STUDIO

TEMPELHOFER FREIHEIT:

MINISCENARIOS UND SMART SPACES

FACHGEBIET FÜR NACHHALTIGE STADTENTWICKLUNG UND STÄDTEBAU
PROF. RAOUL BUNSCHOTEN

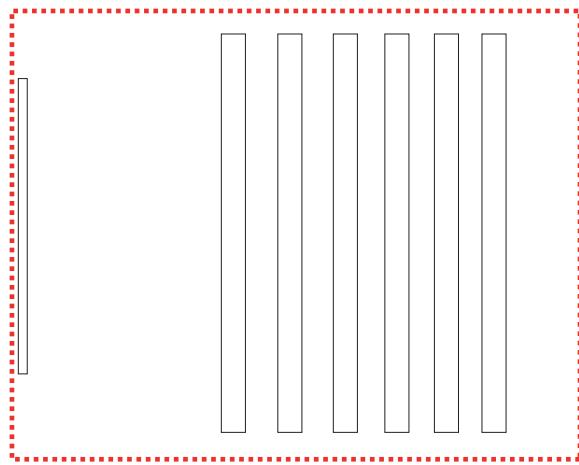
PROF. RAOUL BUNSCHOTEN

JANNA HOHN TOMAZ PIPAN DANIEL WEDLER

DANIEL VEDDER ADRIANO HELLBUSCH

TEAM

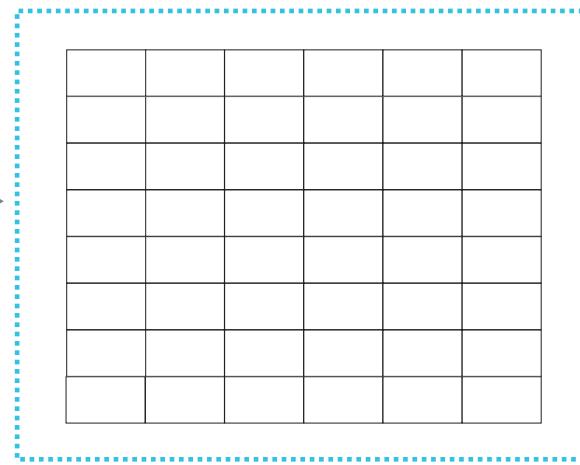
1. PRESENTATION



INTRO - 12.00 - 13.30

- 1. Intro - Institute, CHORA, Prof. Bunschoten, WMs (20min)
- 2. Intro - Workshop, Tempelhof, Programme, Exkursion (20min)
- 3. Intro/ Examples - Mini Scenarios (20min)
- 4. Intro - EOTM (20min)
- 5. Intro - Urban Gallery

2. PERFORMANCE



WHITE PAPER EXERCISE 14.00 - 15.30

- 1. Gather around white paper (5min)
- 2. What do you see? (10min)
- 3. Pick up objects and place them (10min)
- 4. What do you see (10min)
- 5. Winds of change (10min)
- 6. What do you see (10min)
E (10min)
O (10min)

3. ACTION



BEANTHROWING 16.00 - 17.30

- 1. Gather around Tempelhof map (5min)
- 2. Bean throwing (10min)
- 3. Mark bean sites on the map (15min)
- 4. Cut map into A4s (15min)
- 5. Put names into groups + phone numbers (15min)
- 6. Photocopy A4s for each group

BRAINBOX

WOCHE 01 - NARRATIVES AND OBSERVATIONS

	MITTWOCH 19/10	DONNERSTAG 20/10	FREITAG 21/10
10- 12		FIELDTRIP	LECTURE (BRAINBOX, A816) Theo Deutinger
12-14	INTRODUCTION (BRAINBOX, A816) Ausgabe Übung 01	FIELDTRIP	TUTORIAL (BRAINBOX, A816) Uploading Process
14-16	PERFORMANCE (BRAINBOX, A816) White Paper Exercise	FIELDTRIP	STUDIO WORK (A513)
16-18	ACTION (BRAINBOX, A816) Bean Throwing	FIELDTRIP	STUDIO WORK (A513)

PROGRAMM WEEK 01

Week 01 Narratives and observations
Miniscenarios

Week 02 Energetic processes
Operational Fields

Week 03 Amplification
Smart Spaces

Week 04 Bauaufnahme
Kein Workshop

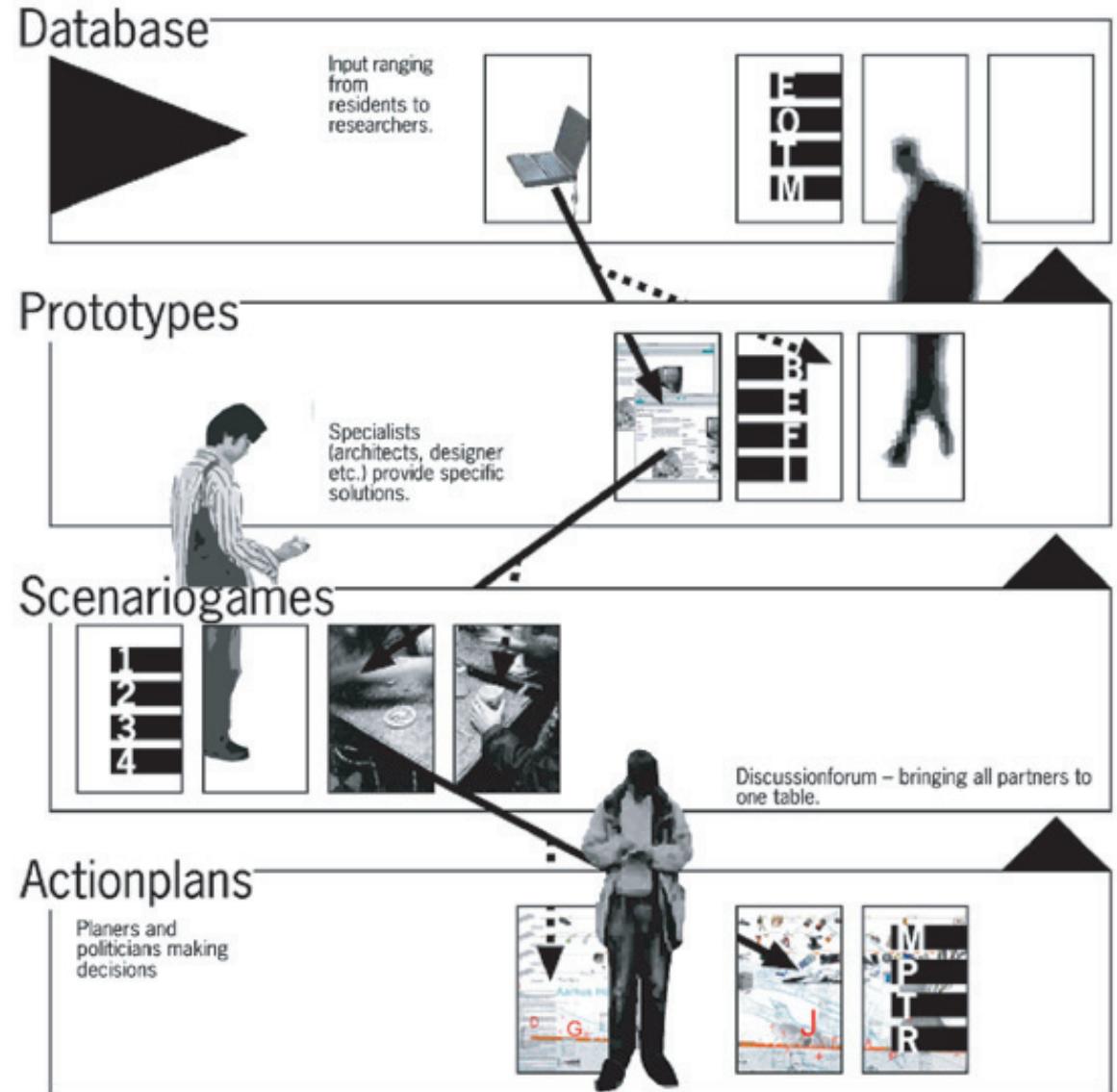
Week 05 Proliferation
Animation and choreography
(workshop with London Met students)

Week 06 Final presentation

AUFBAU DES WORKSHOPS

METHODOLOGY

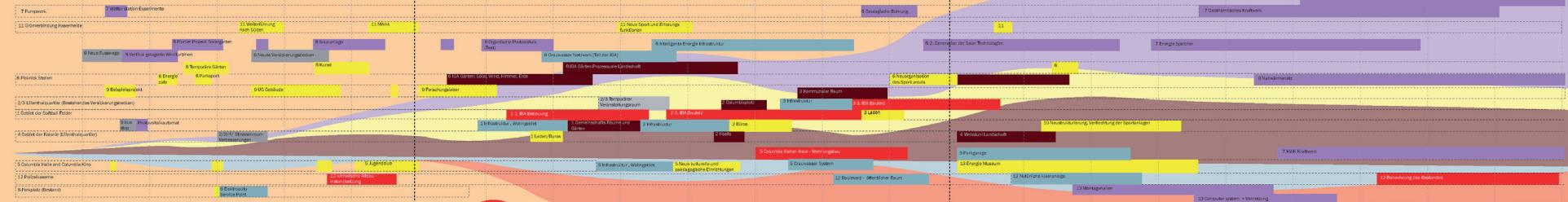
The Urban Gallery is a support system for urban planning. It helps to create choreographies of overall masterplans, and it is a platform for curatorial practices that help existing processes to flower.



URBAN GALLERY

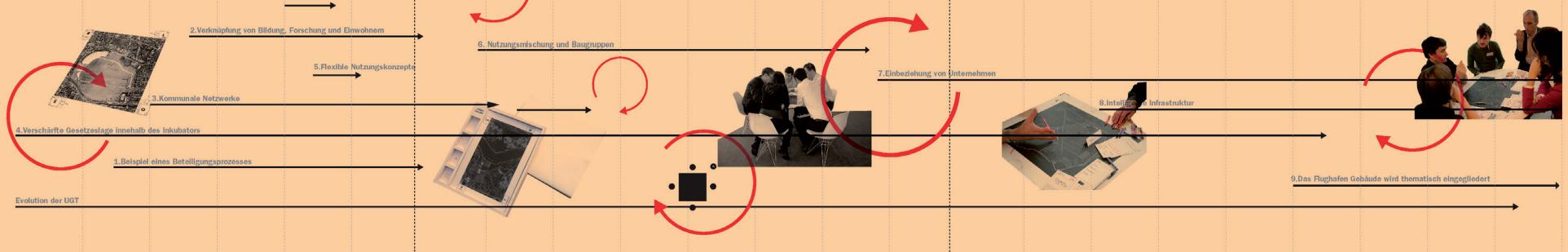
2010
PHASE I

2010
PHASE I



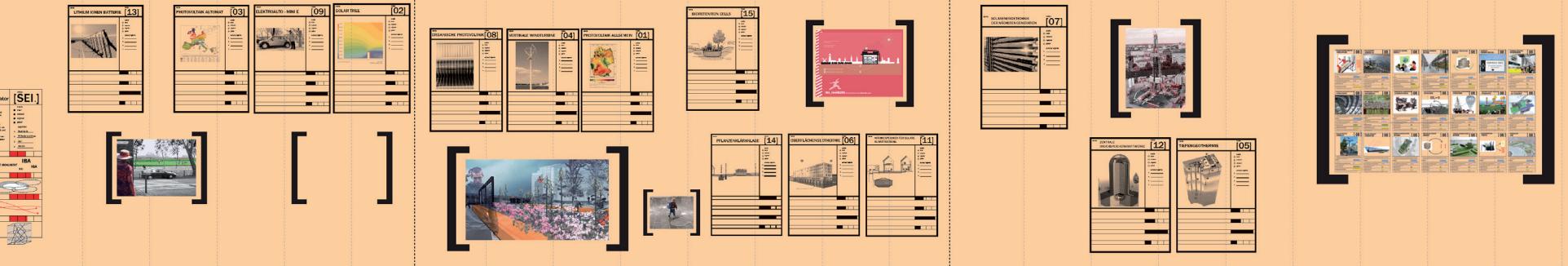
SCENARIO

Das Diagramm zeigt eine Übersicht der beispielhaften Szenarien welche in der jeweiligen Phase beschreiben sind.



PROTOTYPE

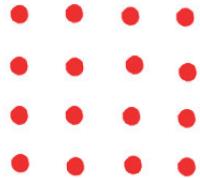
Das Diagramm zeigt eine mögliche Bandbreite von Pilotprojekten sowie Technologien, welche zu bestimmter Zeit eingesetzt werden können.



DATABASE

Das Diagramm zeigt beispielhaft Informationen welche die Database bilden werden.





A description of dynamic processes. The processes are described in mini scenarios that create small narratives of the area, as well as the basic mapping of the dynamic processes that affect the area. The set of four basic processes is a framing device enabling to filter and to articulate complex emergent phenomena.

DATABASE

MS**Rubbish recycling**

Author:Lin Xin

[1507]

KEY: E (erasure) O (origination) T (transformation) M (migration)

ERASURE:

Part of the road; erasure of part of the space of the road because of the dump
一部分路;由于垃圾的堆放占用了部分马路的空间

ORIGINATION:

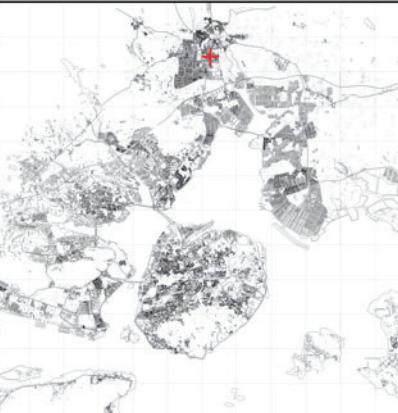
Dump; origination of space for recyclable waste
垃圾场; 产生用于回收利用的空间

TRANSFORMATION:

Recycling; transformation from one product to another
回收利用; 将物品回收利用并进行转换

MIGRATION:

Entrance; provision for space
垃圾场入口; 为垃圾存放提供空间以及入口

**Links:**

[Aa00] [Aa00] [Aa00] [Aa00] [Aa00] [Aa00]
[Aa00] [Aa00] [Aa00] [Aa00] [Aa00] [Aa00]

MS**Temple / Concrete Interaction**

Author: Patrick Fryer

[2504]

KEY: E (erasure) O (origination) T (transformation) M (migration)

ERASURE:

Subtraction in building mass.

ORIGINATION:

Creation of public space

TRANSFORMATION:

Transformation from natural to man-made environment.

MIGRATION:

Motorbikes suggest movement is imminent.

**Links:**

[Aa00] [Aa00] [Aa00] [Aa00] [Aa00] [Aa00]
[Aa00] [Aa00] [Aa00] [Aa00] [Aa00] [Aa00]

DATABASE

MS**bike taxi interchange**

Author:ZhuHang Benjamin Walton

[4202]

KEY: E (erasure) O (origination) T (transformation) M (migration)

ERASURE:

flexibility of bike taxi takes business from the fixed bus routes

**ORIGINATION:**

the combination of interchange, hospital and hotel creates an informal bike taxi rank

TRANSFORMATION:

shaded wasteland acts as a waiting room

MIGRATION:

bike taxi touting for business at the busy interchange

Links:

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MS**Coastline Industry**

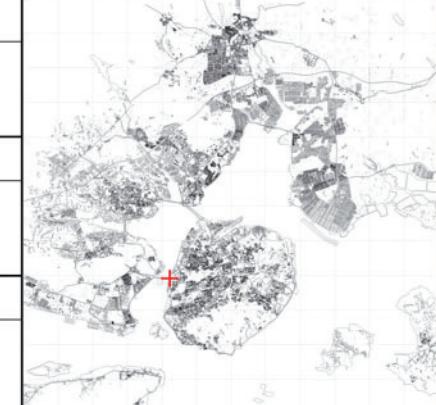
Author: Song Xiao & Olivier Frayssineau

[6319]

KEY: E (erasure) O (origination) T (transformation) M (migration)

ERASURE:

Obstruction of view to the sea and mountains.

**ORIGINATION:**

Creation of industrial activity on the coast line.

TRANSFORMATION:

The industry in the city affects the economy of Xiamen and contributes to China's changes as a whole.

MIGRATION:

Primary resources come in and refined or adjusted products come out.

Links:

[Aa00] [Aa00] [Aa00] [Aa00] [Aa00] [Aa00]
[Aa00] [Aa00] [Aa00] [Aa00] [Aa00] [Aa00]

DATABASE

[53]

New concepts, ideas and innovative projects that enable the reorganisation of existing processes and the initiation of new ones. Prototypes are designs as well as organisational structures that link different processes to create higher levels of efficiency, quality or control.

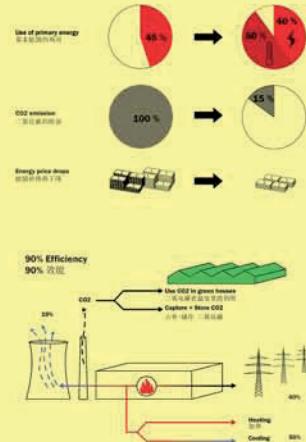
PROTOTYPES

节能装置

ENERGY EFFICIENCY INSTALLATIONS

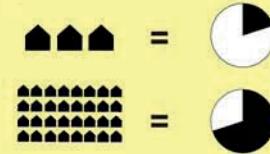


节约90%煤炭火力
90% more efficient coal fire power

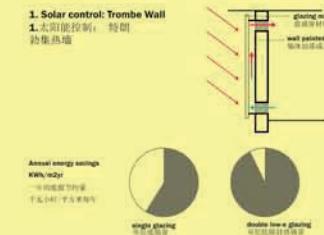


能源节约取决于安装系统的数量

Energy savings depend on the amount of installed systems

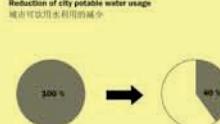
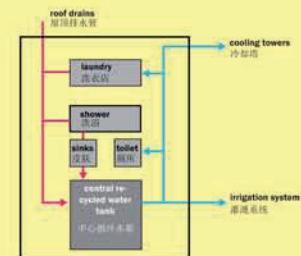


1. Solar control: Trombe Wall



少于60 %的能源用于水处理

60% less energy for water treatment

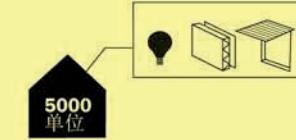


50,000,000节能灯
泡/二分之一电
量/三分之一热量

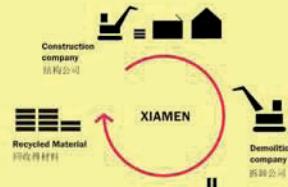
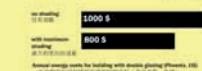
50,000,000 energy efficient bulbs

1/2 electricity

1/3 hea



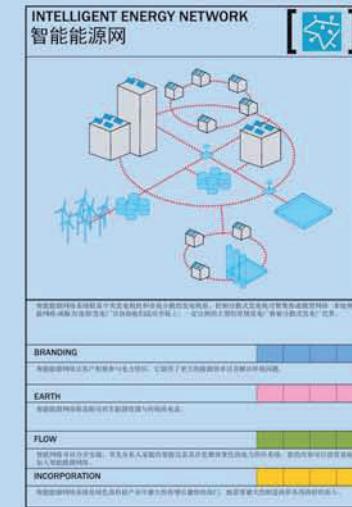
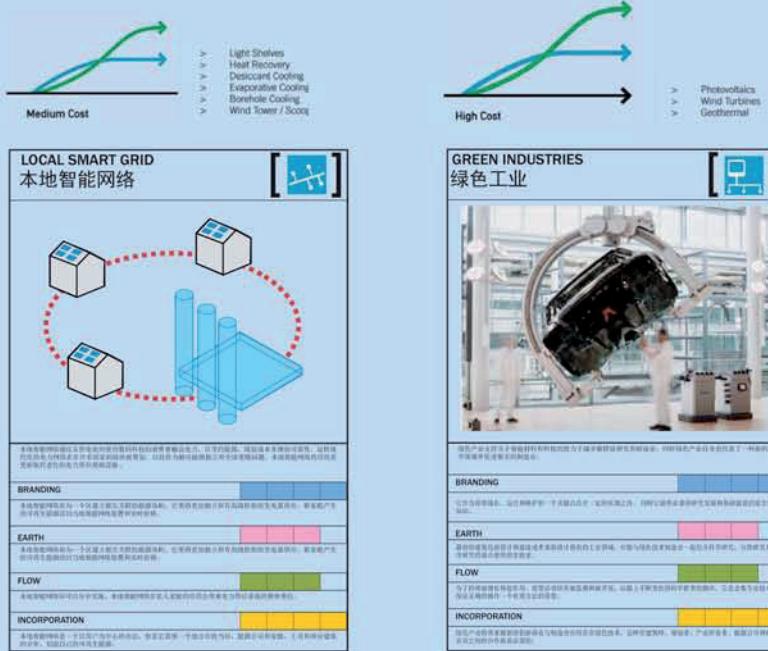
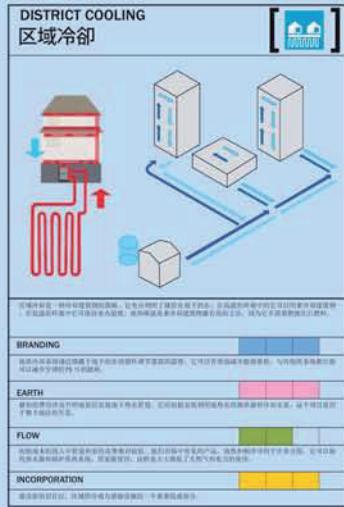
2. Sun sh



PROTOTYPES

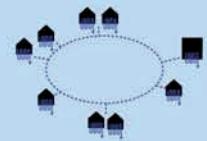
能源网络

ENERGY NETWORKS



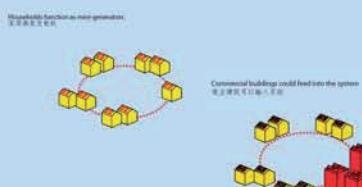
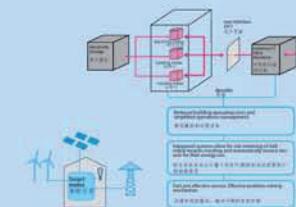
减少 75 % 的冷却
能源消费

75% reduction on cooling energy
consumption



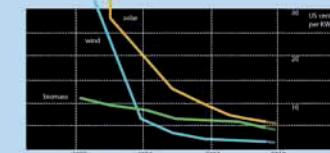
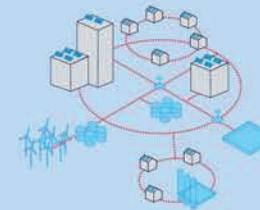
没有电池的需要

No batteries needed



在这个五年计划的全
国广域测量系统

Nation wide WAMS within this five-year-plan



到2012年，丹
麦，澳大利亚，
以色列= 0汽油

Denmark, Australia, Israel = 0 petrol
by 2012



PROTOTYPES

试点项目

PILOT PROJECTS



COMMERCIAL BUILDINGS
商业建筑

该设计在建筑中心设置了一个风塔，利用风塔吸入建筑的热和辐射技术，减少建筑对地热的需求。通过风塔将空气冷却到最低点，从而为电力系统提供冷却。

BRANDING

该设计在建筑外墙上设置了一个风塔，从而降低了建筑的能耗并减少了冷却需求。

EARTH

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FLOW

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INCORPORATION

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ENERGY MUSEUM
能源博物馆

该设计在建筑中心设置了一个风塔，利用风塔吸入建筑的热和辐射技术，减少建筑对地热的需求。通过风塔将空气冷却到最低点，从而为电力系统提供冷却。

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ENERGY GENERATING ROAD
节能道路

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INDUSTRIAL HEADQUARTERS
工业总部

该设计在建筑中心设置了一个风塔，利用风塔吸入建筑的热和辐射技术，减少建筑对地热的需求。通过风塔将空气冷却到最低点，从而为电力系统提供冷却。

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WASTE TREATMENT PLANT
垃圾处理站

该设计在建筑中心设置了一个风塔，利用风塔吸入建筑的热和辐射技术，减少建筑对地热的需求。通过风塔将空气冷却到最低点，从而为电力系统提供冷却。

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EARTH

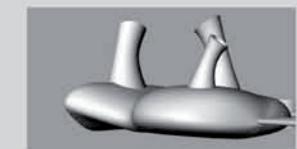
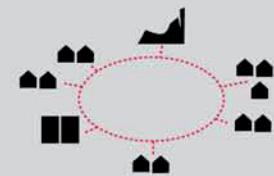
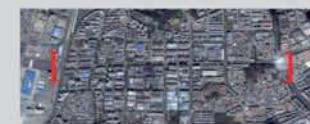
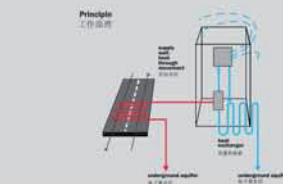
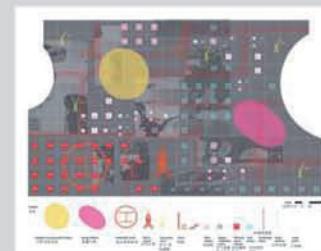
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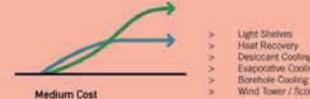
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PROTOTYPES

可再生能源生产

RENEWABLE ENERGY PRODUCTION



SOLAR POWER PLANT 太阳能发电厂

太阳能发电厂是利用太阳光能进行发电的设施。太阳能发电厂的一个主要优点是，它们不需要大量的基础设施或复杂的系统。太阳能发电厂可以为家庭和企业供电。

BRANDING

BRANDING	BRANDING	BRANDING	BRANDING	BRANDING	BRANDING
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通过将太阳能电池板与建筑物结合在一起，可以在不影响美观的前提下产生电力。这不仅有助于减少碳排放，而且还能提高建筑物的能源效率。

EARTH

EARTH	EARTH	EARTH	EARTH	EARTH	EARTH
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太阳能电池板对环境的影响较小，因为它们不会消耗水或释放温室气体。

FLOW

FLOW	FLOW	FLOW	FLOW	FLOW	FLOW
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太阳能电池板产生的电力是直接从太阳获得的，因此没有中间环节。

INCORPORATION

INCORPORATION	INCORPORATION	INCORPORATION	INCORPORATION	INCORPORATION	INCORPORATION
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太阳能电池板可以很容易地集成到现有的建筑中，或者作为新的建筑的一部分。

ENERGY PRODUCING FACADES 能源立面

能源立面技术利用建筑外墙作为太阳能电池板，从而在不影响美观的前提下产生电力。这不仅有助于减少碳排放，而且还能提高建筑物的能源效率。

BRANDING

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FLOW	FLOW	FLOW	FLOW	FLOW	FLOW
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ENERGY ISLANDS 能源岛

能源岛是一种综合性的能源解决方案，它将风能、太阳能、潮汐能等多种能源结合起来，形成一个自给自足的能源生态系统。能源岛不仅可以提供清洁能源，还可以通过海水淡化等方式解决淡水问题。

BRANDING

BRANDING	BRANDING	BRANDING	BRANDING	BRANDING	BRANDING
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通过将不同类型的能源结合起来，能源岛可以提供更稳定的电力供应。同时，能源岛还可以通过海水淡化等方式解决淡水问题。

EARTH

EARTH	EARTH	EARTH	EARTH	EARTH	EARTH
-------	-------	-------	-------	-------	-------

能源岛对环境的影响较小，因为它们不会消耗水或释放温室气体。

FLOW

FLOW	FLOW	FLOW	FLOW	FLOW	FLOW
------	------	------	------	------	------

能源岛通过将不同类型的能源结合起来，从而实现能源的高效利用。

INCORPORATION

INCORPORATION	INCORPORATION	INCORPORATION	INCORPORATION	INCORPORATION	INCORPORATION
---------------	---------------	---------------	---------------	---------------	---------------

能源岛可以作为一个整体被集成到现有的基础设施中，或者作为新的基础设施的一部分。

BIOMASS 生物炭能量

生物炭是一种由植物残骸在缺氧条件下热解而成的黑色固体物质。它具有良好的保水性和保温性，可以作为肥料使用，也可以作为燃料使用。

BRANDING

BRANDING	BRANDING	BRANDING	BRANDING	BRANDING	BRANDING
----------	----------	----------	----------	----------	----------

通过将生物炭与其他材料结合使用，可以使土壤更加肥沃，从而提高农作物的产量。同时，生物炭还可以作为燃料使用。

EARTH

EARTH	EARTH	EARTH	EARTH	EARTH	EARTH
-------	-------	-------	-------	-------	-------

生物炭对环境的影响较小，因为它是由植物残骸制成的，因此不会消耗水或释放温室气体。

FLOW

FLOW	FLOW	FLOW	FLOW	FLOW	FLOW
------	------	------	------	------	------

生物炭通过将植物残骸转化为有价值的物质，从而实现资源的循环利用。

INCORPORATION

INCORPORATION	INCORPORATION	INCORPORATION	INCORPORATION	INCORPORATION	INCORPORATION
---------------	---------------	---------------	---------------	---------------	---------------

生物炭可以很容易地集成到现有的农业系统中，或者作为新的农业系统的部分。

ENERGY TOWER 能源塔

能源塔是一种垂直的、高大的建筑物，其内部装有风力发电机和其他能源转换设备。能源塔可以通过吸收太阳热量来加热空气，然后将热空气向上吹送，从而驱动风力发电机。

BRANDING

BRANDING	BRANDING	BRANDING	BRANDING	BRANDING	BRANDING
----------	----------	----------	----------	----------	----------

通过将风力发电机与其他设备结合使用，可以使能源塔更加高效。同时，能源塔还可以通过吸收太阳热量来加热空气，从而驱动风力发电机。

EARTH

EARTH	EARTH	EARTH	EARTH	EARTH	EARTH
-------	-------	-------	-------	-------	-------

能源塔对环境的影响较小，因为它是由混凝土等建筑材料制成的，因此不会消耗水或释放温室气体。

FLOW

FLOW	FLOW	FLOW	FLOW	FLOW	FLOW
------	------	------	------	------	------

能源塔通过将风力发电机与其他设备结合使用，从而实现能源的高效利用。

INCORPORATION

INCORPORATION	INCORPORATION	INCORPORATION	INCORPORATION	INCORPORATION	INCORPORATION
---------------	---------------	---------------	---------------	---------------	---------------

能源塔可以作为一个整体被集成到现有的基础设施中，或者作为新的基础设施的一部分。

1000平方米光伏
安装，节约了
72.3吨二氧化碳
(环保局)

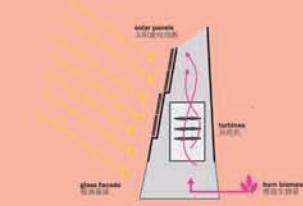
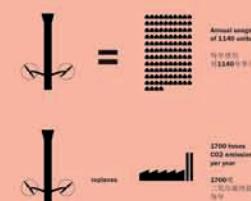
1,000m² photovoltaic installation,
saves 72.3 tCO₂e.p.a.

Generated electricity could feed residential neighbourhoods
发电可以供居民区

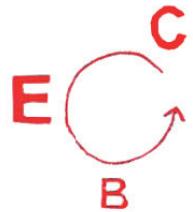


50 % 的干材重
量的碳

50% dry wood weight is carbon



PROTOTYPES



Simulation and testing of the conditions in which prototypes can be initiated and developed. The dynamic processes registered in the database form the raw material of the scenario games and the fuel for the prototypes.

SCENARIOS









Action plans contain both strategies for the development of the conditions in which specific prototypes can be initiated, they also describe the potential interrelationships between different prototypes.

ACTIONPLAN

und Deutscher Architekten **BDA**

BDB Bund Deutscher Baumeister
Architekten und Ingenieure e.V.

BDAI Bund Deutscher
Ingenieure Architekten

bdla Bund Deutscher
Landesarchitekten

A BUNDESARCHITEKTENKAMMER

**EINGENIEUR
KAMMER**

VBI
■ VERBAND
BUNDESWEIT
INSTITUTIONAL

SRL

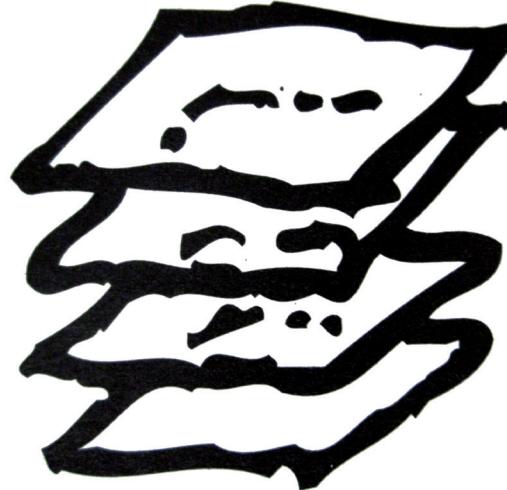
VEREINIGUNG
REGIONAL- UND
LANDESPLANUNG

VEREINIGUNG
FREISCHAFFENDER
ARCHITEKTEN
DEUTSCHLANDS E.V.



Vernunft für die Welt

Manifest der Architekten, Ingenieure und Stadtplaner
für eine zukunftsfähige Architektur und Ingenieurbaukunst



ERASURE

ORIGINATION

TRANSFORMATION

MITIGATION

The four basic processes consist of:

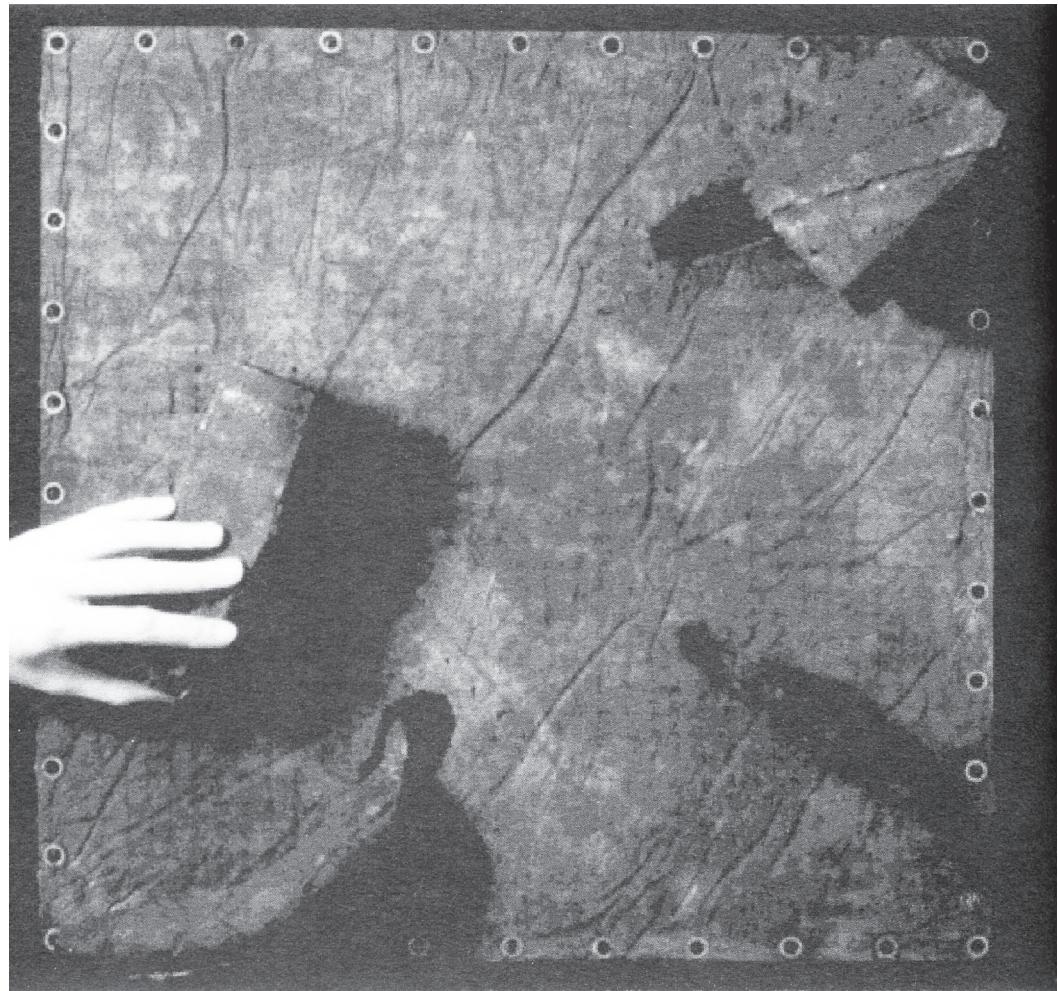
erasure - to take things away, to remove

origination - to create a point in time where something new emerges

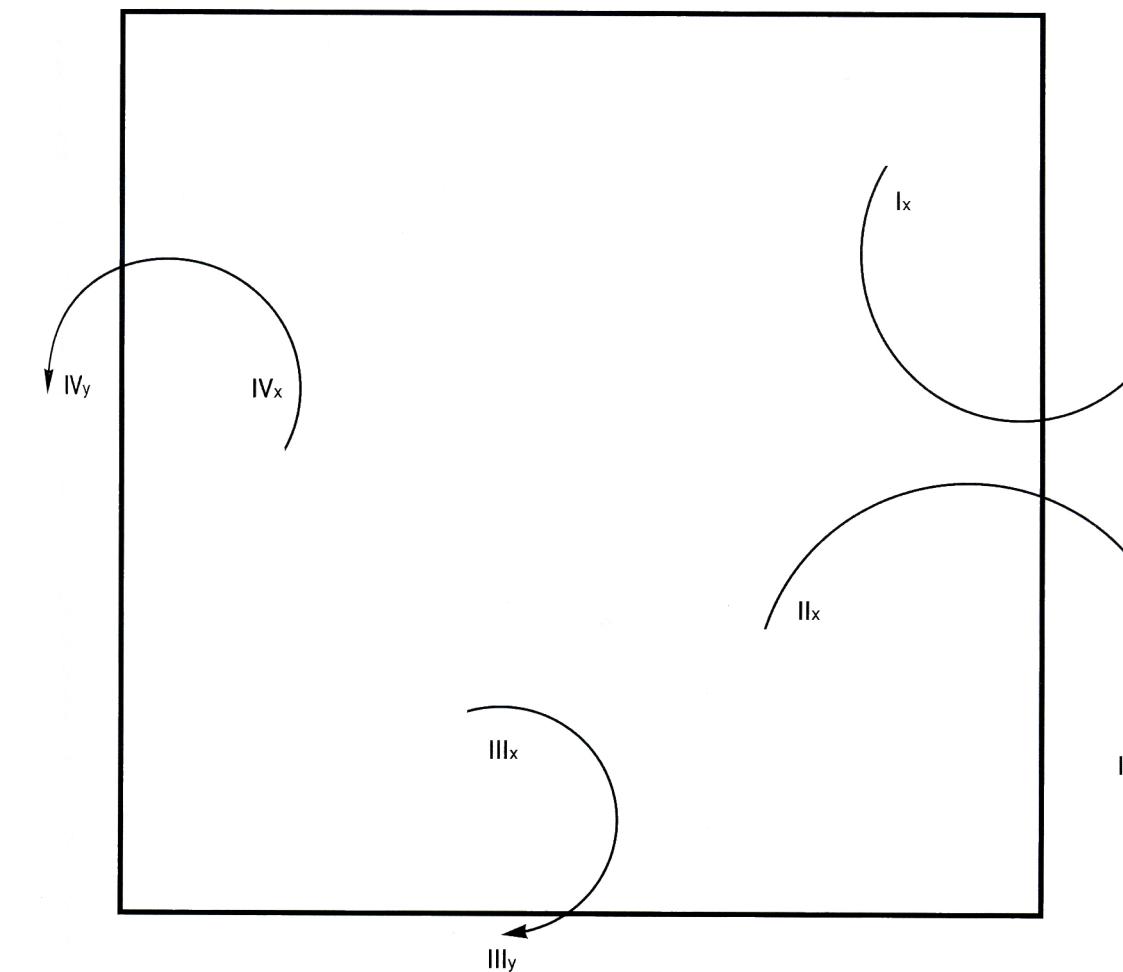
transformation - continuous change from A to B

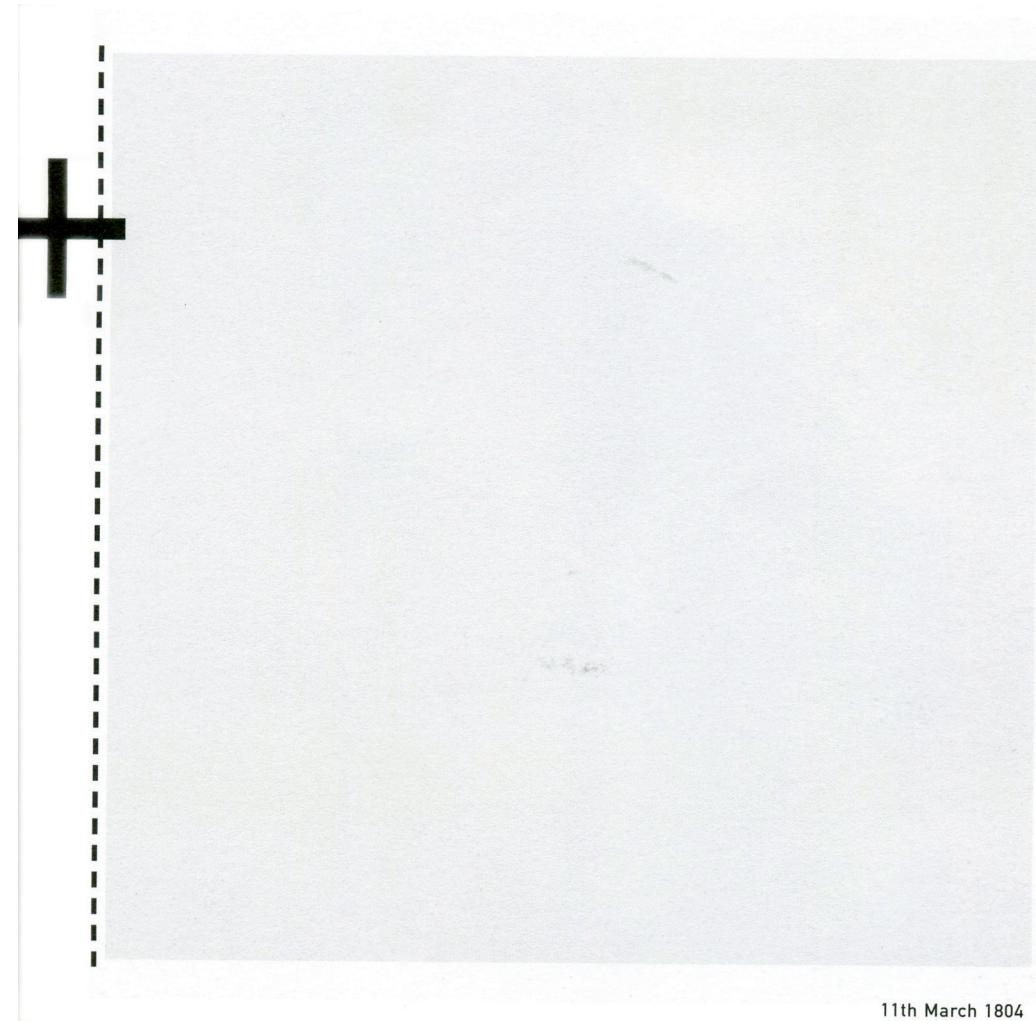
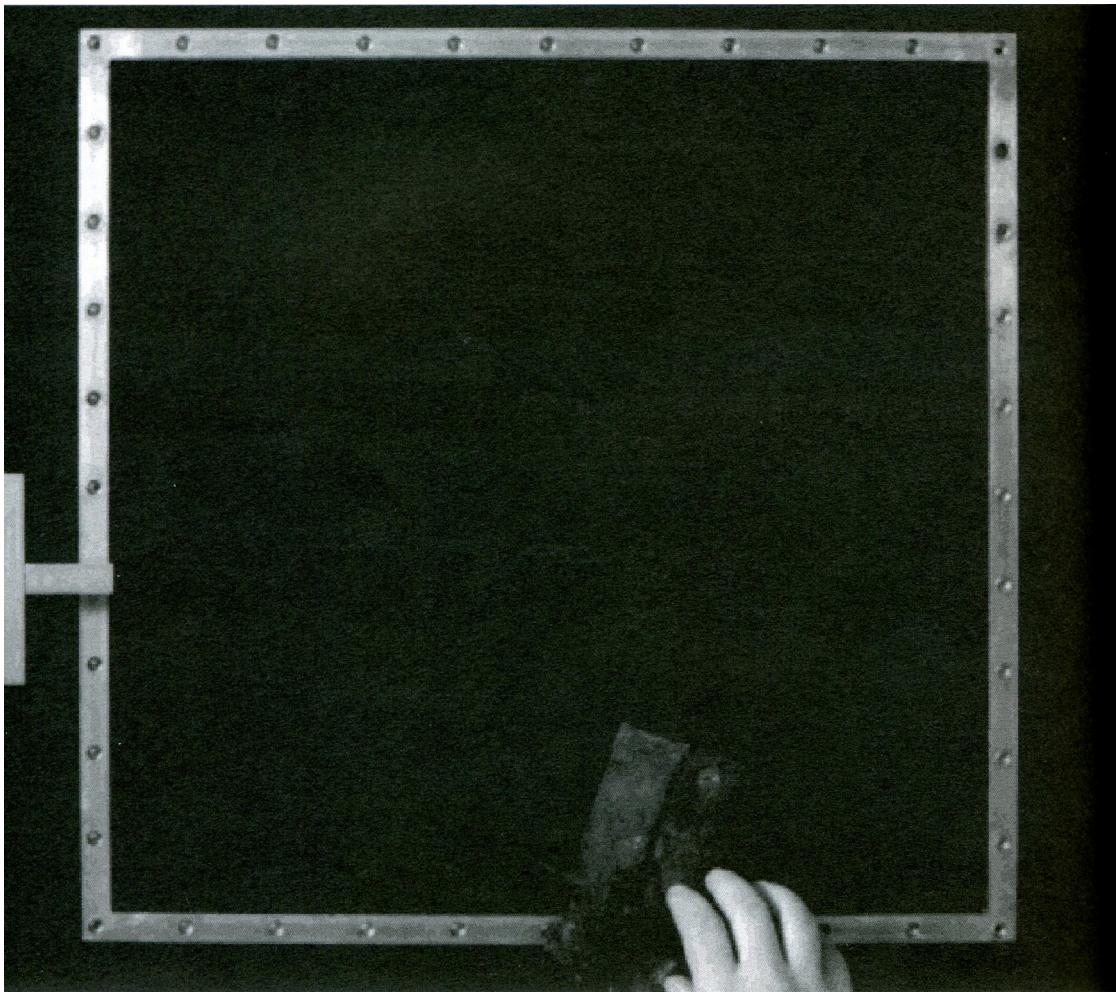
migration - moving through, ephemeral presences

EOTM



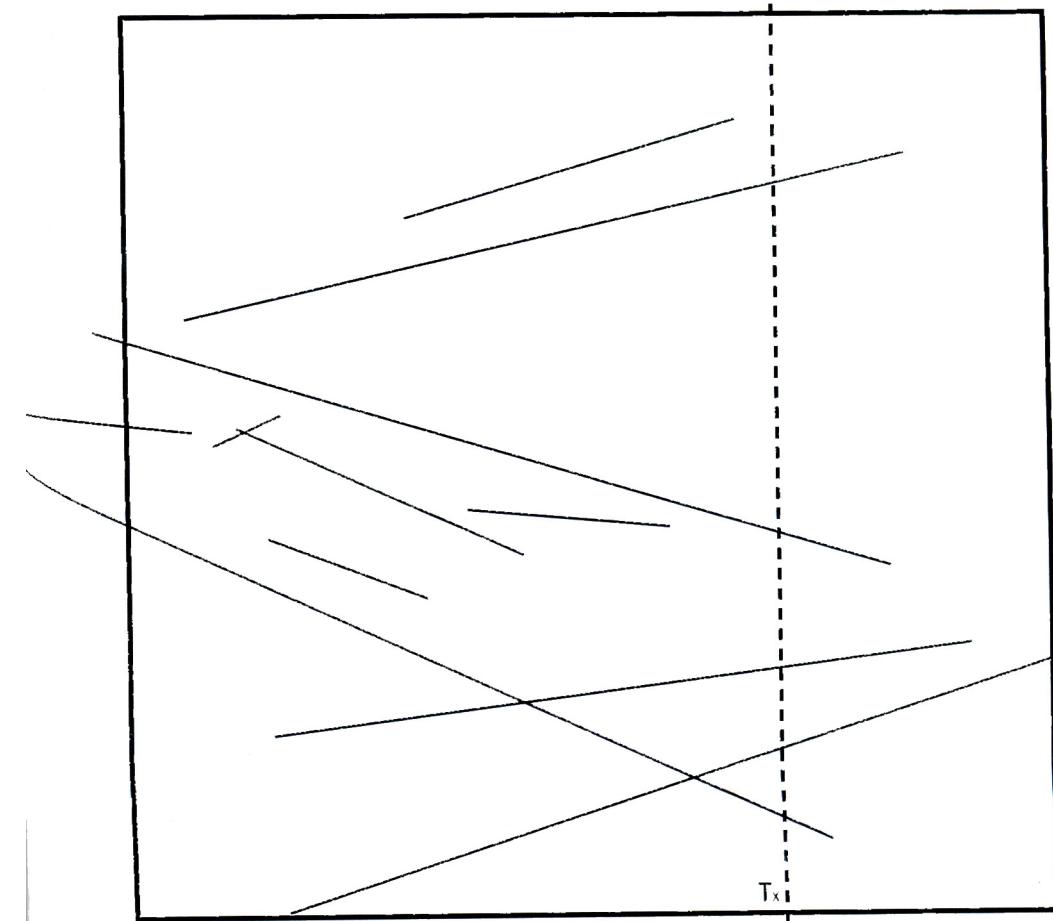
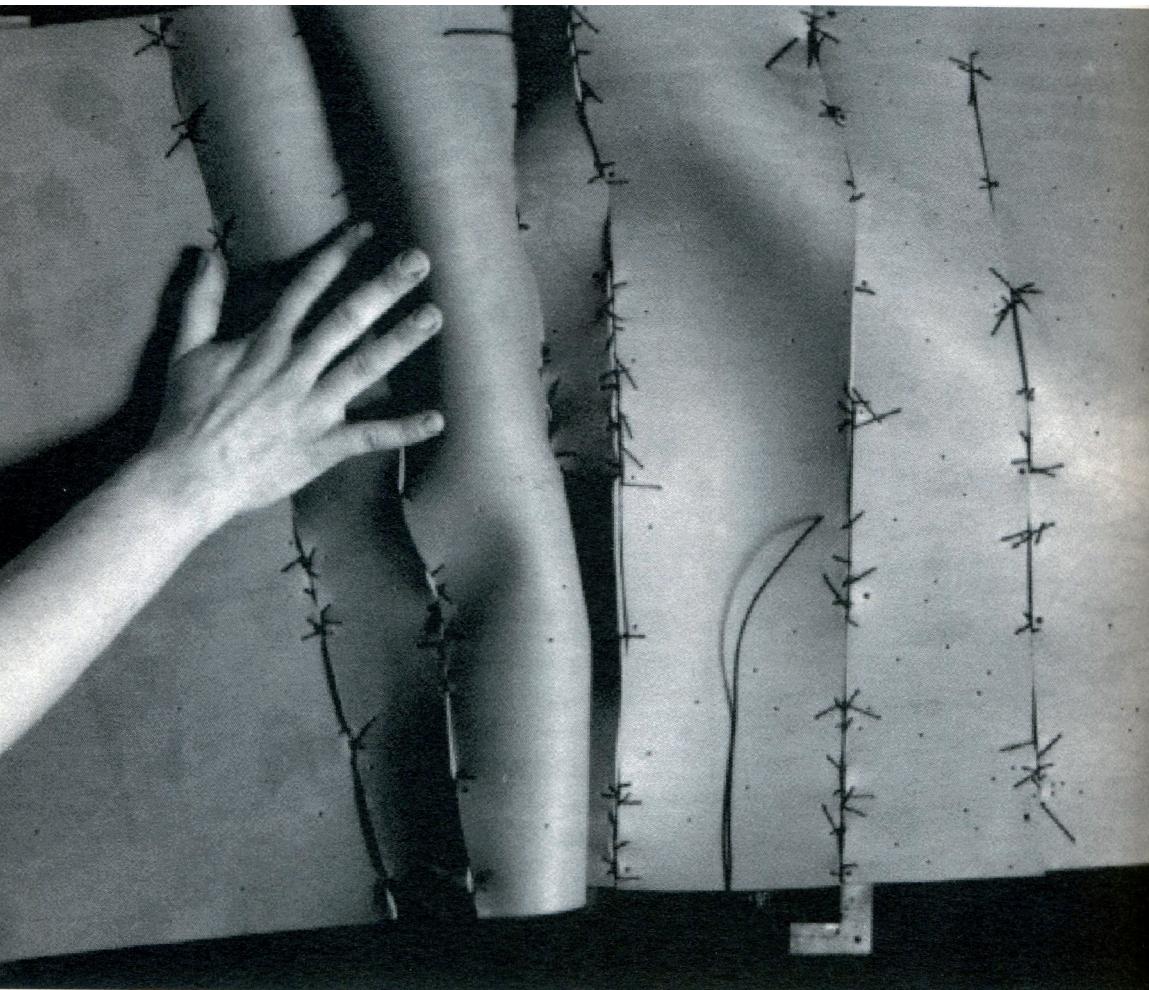
ERASURE



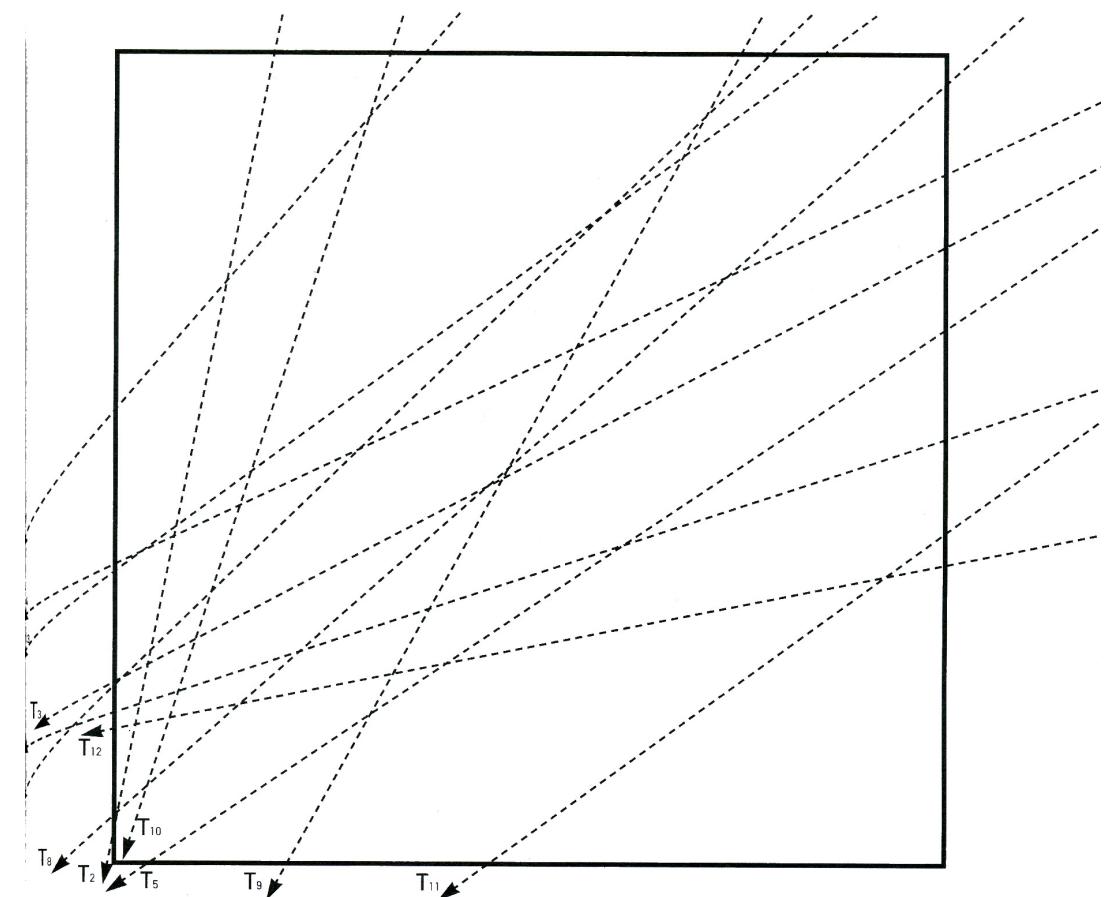
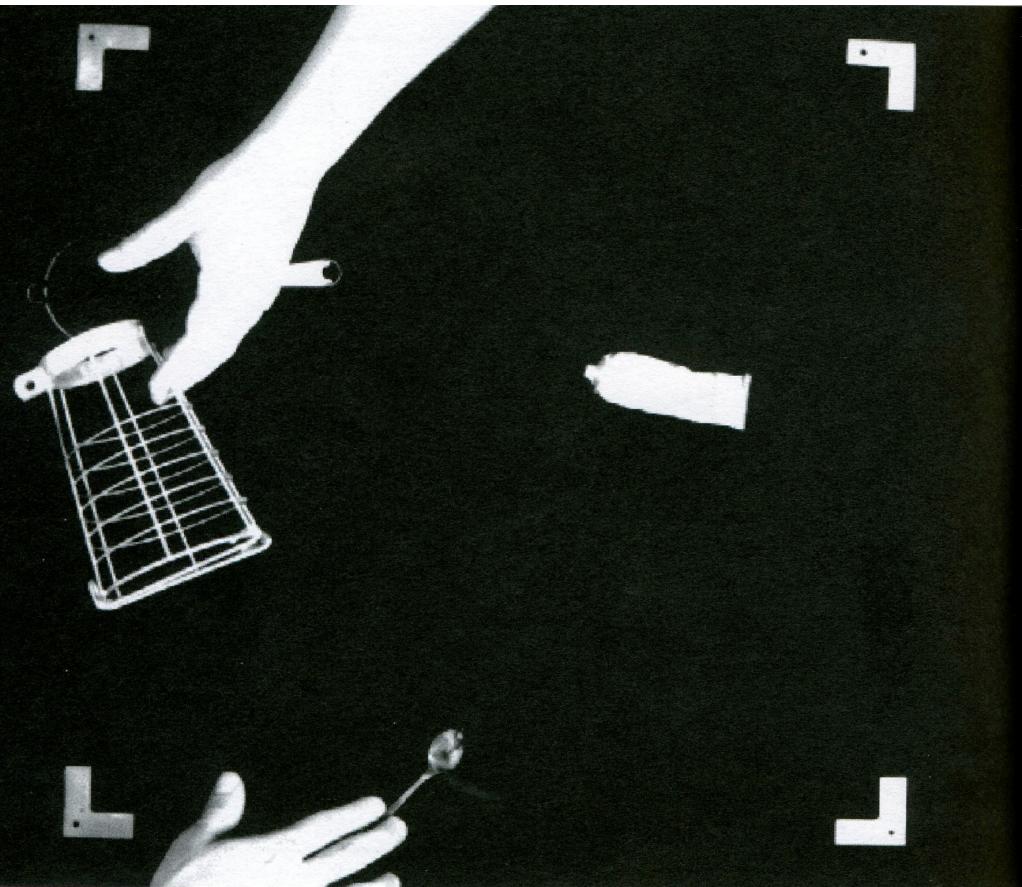


11th March 1804

ORIGINATION



TRANSFORMATION



MITIGATION

1. ÜBUNG

DONNERSTAG, 20. OKTOBER 2011

9.00 - 17.00

Miniscenarios selbständig aufnehmen

14.00 - 17.00

Besprechen der Miniscenarios vor Ort

FIELDTRIP

MS**bike taxi interchange**

Author:ZhuHang Benjamin Walton

[4202]

KEY: E (erasure) O (origination) T (transformation) M (migration)

ERASURE:

flexibility of bike taxi takes business from the fixed bus routes

**ORIGINATION:**

the combination of interchange, hospital and hotel creates an informal bike taxi rank

TRANSFORMATION:

shaded wasteland acts as a waiting room

MIGRATION:

bike taxi touting for business at the busy interchange

Links:

[Aa00] [Aa00] [Aa00] [Aa00] [Aa00] [Aa00]
[Aa00] [Aa00] [Aa00] [Aa00] [Aa00] [Aa00]

MS**Coastline Industry**

Author: Song Xiao & Olivier Frayssineau

[6319]

KEY: E (erasure) O (origination) T (transformation) M (migration)

ERASURE:

Obstruction of view to the sea and mountains.

**ORIGINATION:**

Creation of industrial activity on the coast line.

TRANSFORMATION:

The industry in the city affects the economy of Xiamen and contributes to China's changes as a whole.

MIGRATION:

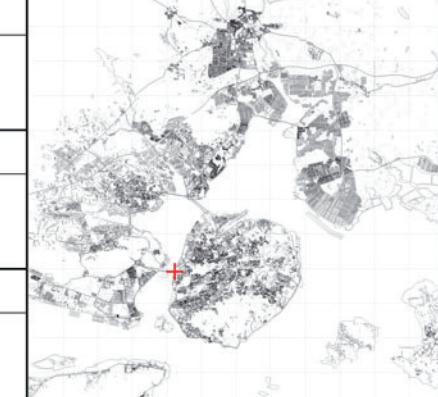
Primary resources come in and refined or adjusted products come out.

Links:

[Aa00] [Aa00] [Aa00] [Aa00] [Aa00] [Aa00]
[Aa00] [Aa00] [Aa00] [Aa00] [Aa00] [Aa00]

Miniscenarios are small narratives organised through four basic processes. The narrative is chronological and loosely based on a garden metaphor, the four basic processes form a taxonomy through which any dynamic condition can be described.

MINISCENARIOS

MS	Coastline Industry Author: Song Xiao & Olivier Frayssineau	[6319]
		
KEY:	E (erasure) O (origination) T (transformation) M (migration)	
ERASURE:		
ORIGINATION:		
TRANSFORMATION:		
MIGRATION:	Links:	[Aa00] [Aa00] [Aa00] [Aa00] [Aa00] [Aa00] [Aa00] [Aa00] [Aa00] [Aa00] [Aa00] [Aa00]

1.ÜBUNG

www.urban-gallery.net/tempelhof



URBAN GALLERY

What is urban gallery?

The Urban Gallery manages the evolution of a planning project; it forms the incubator for prototype projects.

It is an interactive planning tool used in dynamic master plans in which prototype projects play a significant role to either achieve efficient energy management, link operations of very different sectors and stakeholders or create a pattern of sustained growth or evolution.

The Urban Gallery is a tool that enables the stakeholders related to prototype projects to act jointly or collaborate over longer periods of time, and to develop, monitor and evaluate prototypes as pilot projects within an overall plan.

The Urban Gallery is a public arena in which stakeholders meet and cooperate, but it is also a management tool for the knowledge and experience gained.

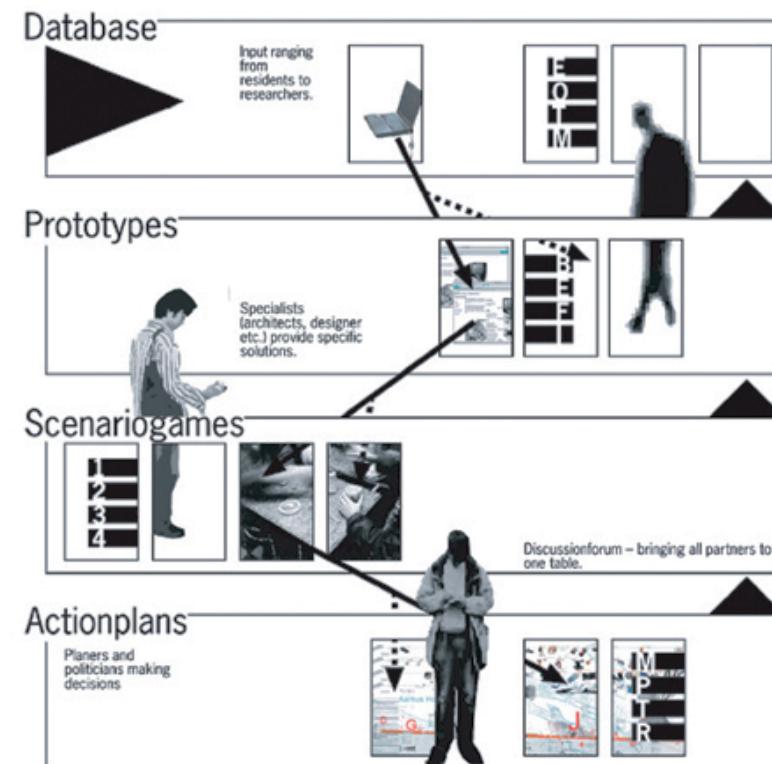
The structure of Urban Gallery consists of four main components: [Database](#), [Prototypes](#), [Scenario Game](#) and [Action Plan](#).

Examples of Urban Galleries

(some of the Urban Galleries are not complete and feature only part of the whole methodology)

Tempelhof, Berlin, Germany (under construction)
Cross River Park, Thames Gateway, London
Xiamen, Fujian, China
Bioceanic Corridor, Chile, South Pacific
Tokyo Story, Tokyo, Japan
Alter Güterbahnhof, Düsseldorf, Germany

| CHORA | t: +44(0)20.7267.1277 | @ |



Tempelhof Urban Gallery

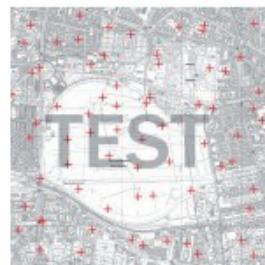
[Mini Scenario](#) || [Operational Field](#) || [Admin Panel](#)



Tempelhof Urban Gallery is a research project initiated by **CHORA** and run at **TU Berlin** and **London Metropolitan University** | @

www.urban-gallery.net/tempelhof

Tempelhof Urban Gallery

[Mini Scenario](#) || [Operational Field](#) || [Admin Panel](#)

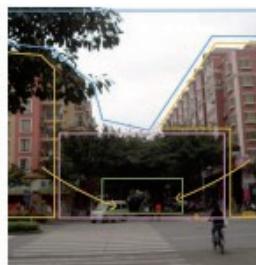
Bean Sites



MS [021501]



MS [070403]



MS [121405]



MS [51525354]



MS [289812]



MS [51525354]

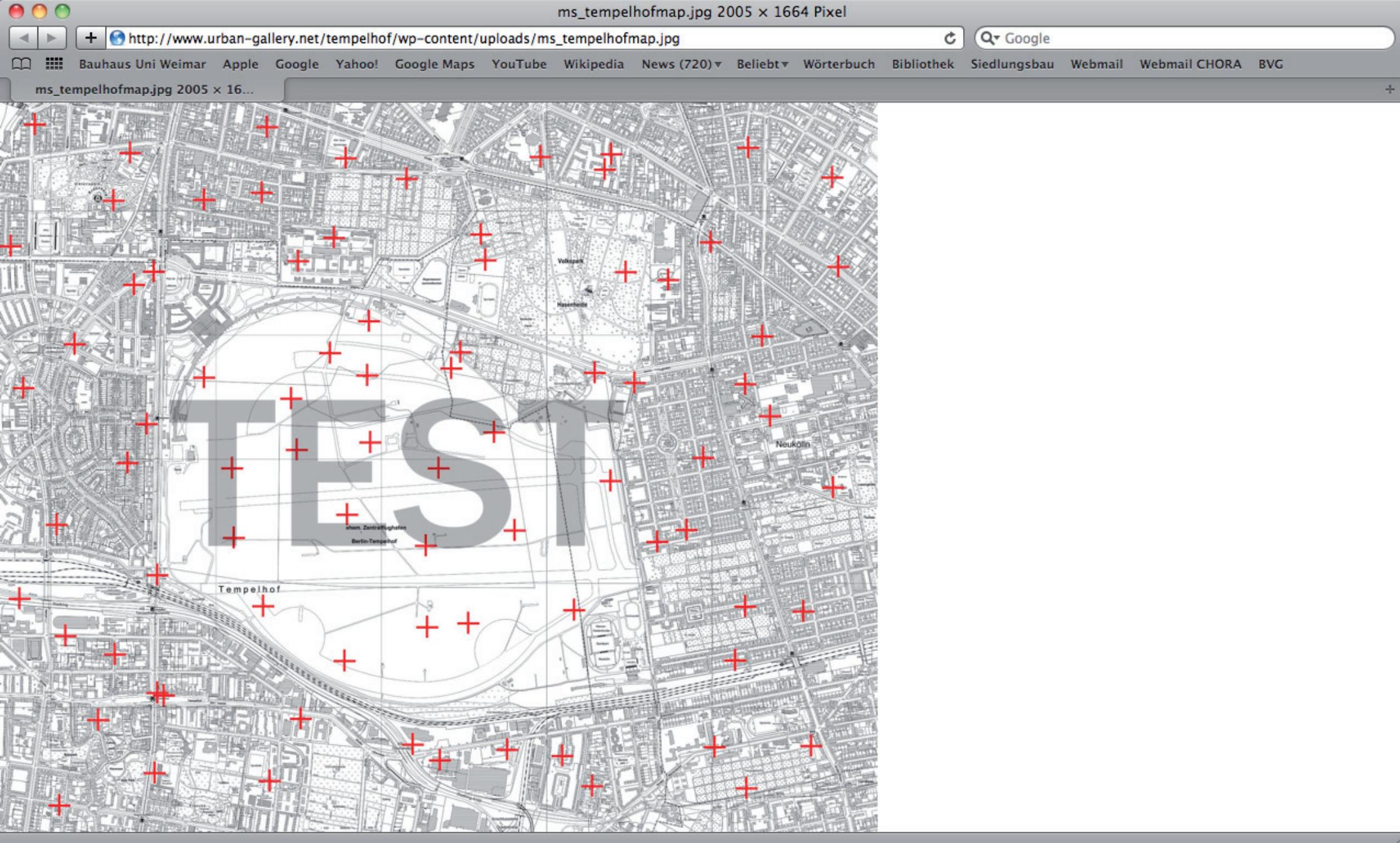


MS [52535455]



MS [54555657]

Tempelhof Urban Gallery is a research project initiated by **CHORA** and run at **TU Berlin** and **London Metropolitan University** | @



www.urban-gallery.net/tempelhof

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	
00	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	00
01	0001	0101	0201	0301	0401	0501	0601	0701	0801	0901	1001	1101	1201	1301	1401	01
02	0002	0102	0202	0302	0402	0502	0602	0702	0802	0902	1002	1102	1202	1302	1401	02
03	0003	0103	0203	0303	0403	0503	0603	0703	0803	0903	1003	1103	1203	1303	1403	03
04	0004	0104	0204	0304	0404	0504	0604	0704	0804	0904	1004	1104	1204	1304	1404	04
05	0005	0105	0205	0305	0405	0505	0605	0705	0805	0905	1005	1105	1205	1305	1405	05
06	0006	0106	0206	0306	0406	0506	0606	0706	0806	0906	1006	1106	1206	1306	1406	06
07	0007	0107	0207	0307	0407	0507	0607	0707	0807	0907	1007	1107	1207	1307	1407	07
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14	0014	0114	0214	0314	0414	0514	0614	0714	0814	0914	1014	1114	1214	1314	1414	14
15	0015	0115	0215	0315	0415	0515	0615	0715	0815	0915	1015	1115	1215	1315	1415	15
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	

00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15

