

Datenkarten

1. Kartierung (Verortung) von Daten und Mengen

2. Stadt aus Daten und Mengen

3. Architektur aus Daten und Mengen

4. Kunst aus Daten und Mengen

5. Anleitung

6. Referenzen - Links

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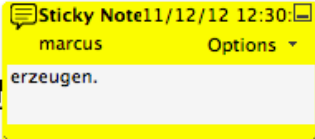
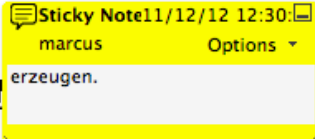
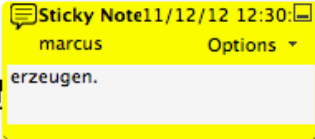
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1. Kartierung (Verortung) von Daten und Mengen

The Agency of Mapping: Speculation, Critique and Invention

JAMES CORNER

  stic cultural project, creating and building the world as much as measuring and describing it. Long affiliated with the planning and design of cities, landscapes and buildings, mapping is particularly instrumental in the construing and constructing of lived space. In this ac  sense, the function of mapping is less to mirror reality than to engender the re-shaping of the worlds in which people live. While there are countless examples of authoritarian, simplistic, erroneous and coercive acts of mapping, with reductive effects upon both individuals and environments, I focus in this essay upon more optimistic revisions of

unseen or unimagined, even across seemingly exhausted grounds. Thus, mapping *unfolds* potential; it re-makes territory over and over again, each time with new and diverse consequences. Not all maps accomplish this, however; some simply reproduce what is already known. These are more 'tracings' than maps, delineating patterns but revealing nothing new. In describing and advocating more open-ended forms of creativity, philosophers Gilles Deleuze and Félix Guattari declare: 'Make a map not a tracing!' They continue:

unfolding agency of mapping is most effective when its capacity for description also sets the conditions for new eidetic and physical worlds to emerge. Unlike tracings, which propagate redundancies, mappings discover new worlds within past and present ones; they inaugurate new grounds upon the hidden traces of a living context. The capacity to reformulate what already exists is the important step. And what already exists is more than just the physical attributes of terrain (topography, rivers, roads, buildings) but includes also the various hidden forces that shape the workings of a given place. These include natural processes, wind and sun; historical events and local stories; economic and legal conditions; even political interests, regulatory mechanisms and program-

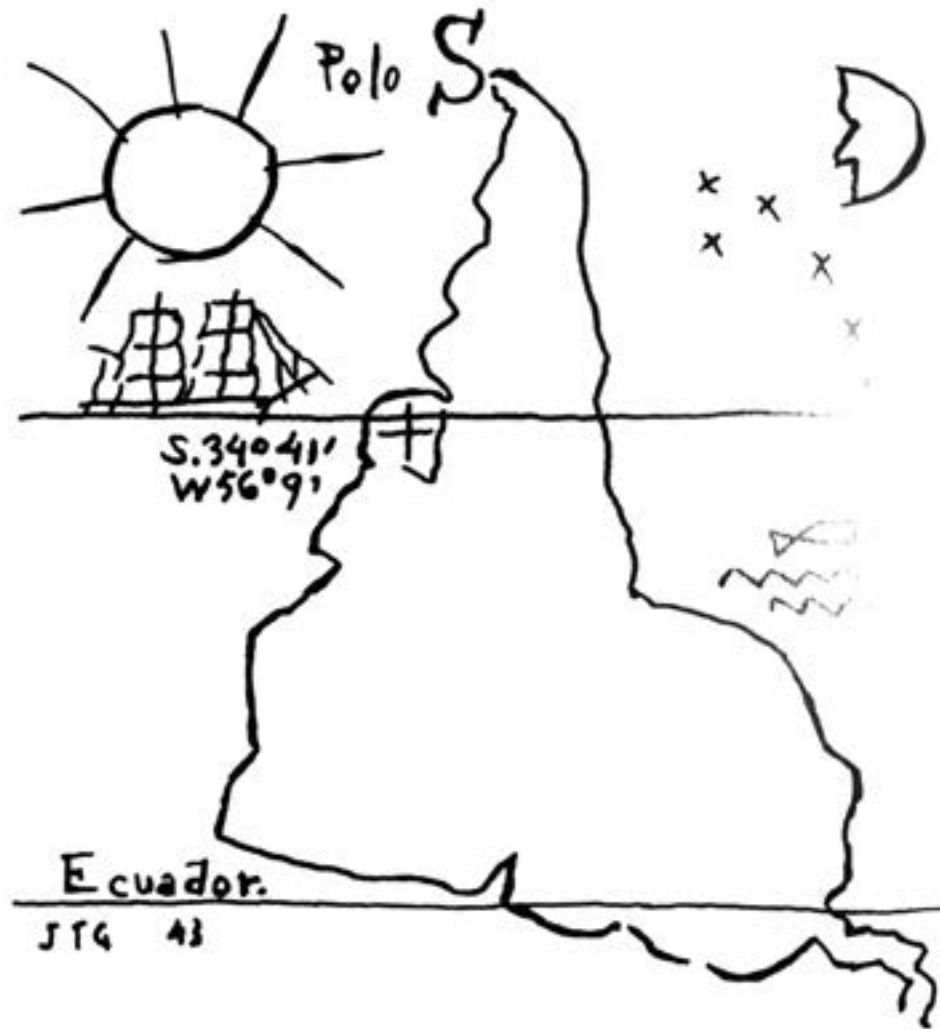
Sticky Not11/12/12 11:1
marcus
Options
to inaugurate = einführen
relative

What distinguishes the map from the tracing is that it is entirely oriented toward an experimentation in contact with the real. The map does not reproduce an unconscious closed in upon itself; it constructs the unconscious. It fosters connections between fields, the removal of blockages on bodies without organs, the maximum opening of bodies without organs onto a plane of consistency ... The map has to do with performance, whereas the tracing always involves an 'alleged competence'.³

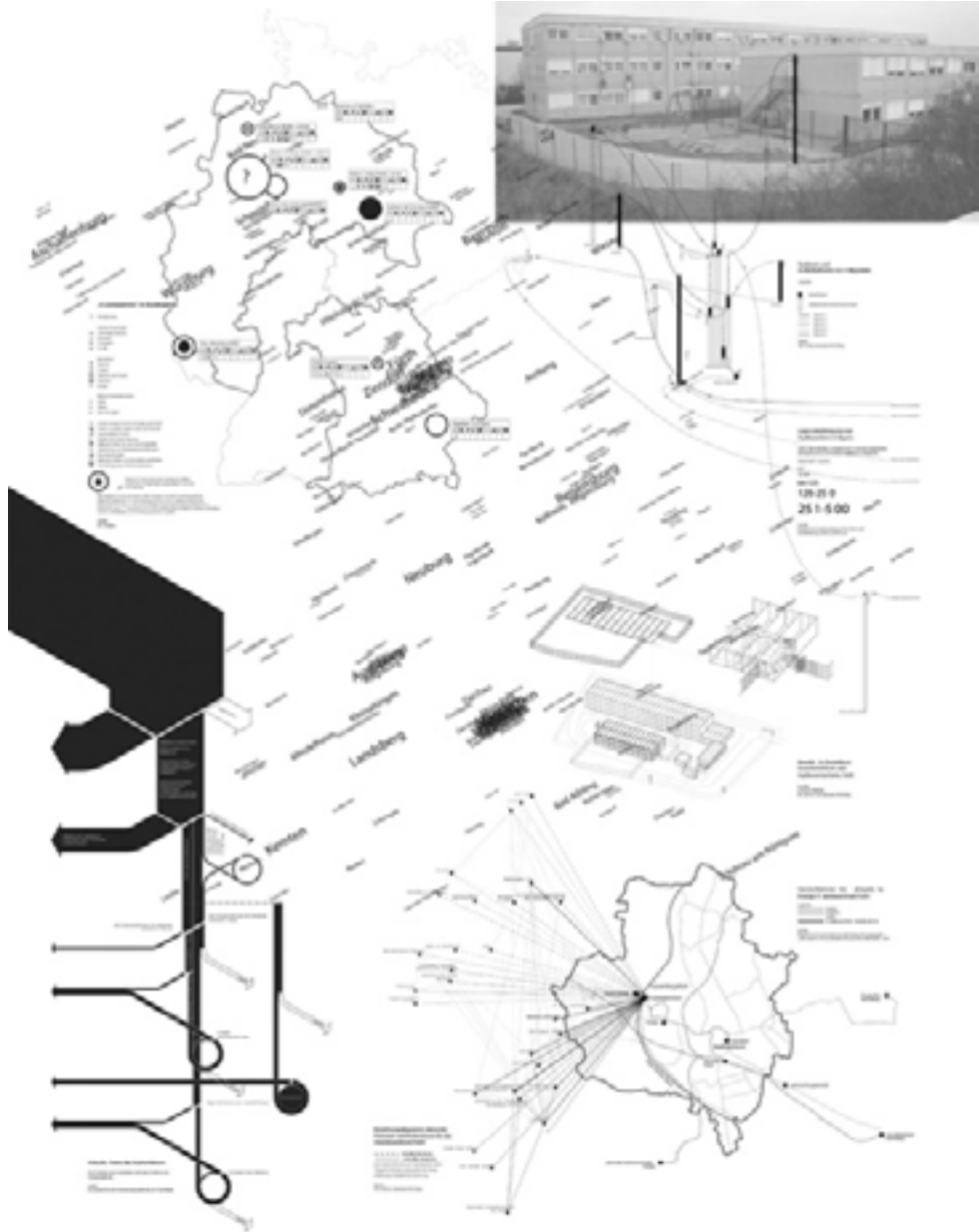
The distinction here is between mapping as equal to what is *and* to what is not yet unfolded agency of mapping is most effective when its description also sets the conditions for new eidetic and physical worlds to







“Our north is the south. There must not be north for us, except in opposition to our south. Therefore we now turn the map upside down, and then we have a true idea of our position, and not as the rest of the world wishes. The point of America, from now on, forever, insistently points to the South, our north!” Torres-Garcia



An-Architektur, "Die Geographie des Ausreisezentrums Fürth" (2004)

Behördliches Standardschreiben der Ausländerbehörde zur Einweisung in ein Ausreisezentrum:

„Sie haben zum (Datum) Ihren Wohnsitz in folgender Gemeinschaftsunterkunft zu nehmen. Sie sind nicht im Besitz von Passpapieren und daher kann der zu ihrer Aufnahme verpflichtete Staat nicht festgestellt werden. (...) Die nunmehr in der o.g. Einrichtung durchgeführten Maßnahmen zur Passersatzbeschaffung dulden keinen Aufschub, da Sie kein Recht mehr haben, sich in Deutschland aufzuhalten und Sie darüber hinaus Ihren Lebensunterhalt aus öffentlichen Mitteln bestreiten und dadurch über Ihren unrechtmäßigen Aufenthalt hinaus eine besondere Belastung für das Land darstellen. Es besteht daher ein öffentliches Interesse, unverzügliche Maßnahmen zur Beendigung Ihres Aufenthaltes durchzuführen.“

Carte Figurative des pertes successives en hommes de l'Armée Française dans la campagne de Russie 1812-1813.

Devisé par M. MARSCHÉD, Inspecteur Général des Ponts et Chaussées en retraite. Paris, le 20 Novembre 1869.

Les arabes d'hommes présents sont, spécialement que les longues des jours colorés à savoir d'un millionnaire pour six mille hommes, ils sont de plus écrits en traces des jours. Le rouge désigne les hommes qui entrent en Russie, le noir ceux qui en sortent. — Les arrangements qui ont servi à tracer la carte ont été prisés dans les ouvrages de M. M. CHICOT, de CHIFFRE, de FÉLIX, de CHAMBREY et le journal inédit de JACOB, pharmacien de l'Armée depuis le 23 Octobre. Pour mieux faire juger à l'œil la diminution de l'armée, j'ai supposé que les corps de LÉON, NÉLUM et de MARCEL DAVOUM qui avaient été détachés sur KIEV et NIBEL et ont rejoint nos Cotes en WITKOW, avaient toujours marché avec l'armée.

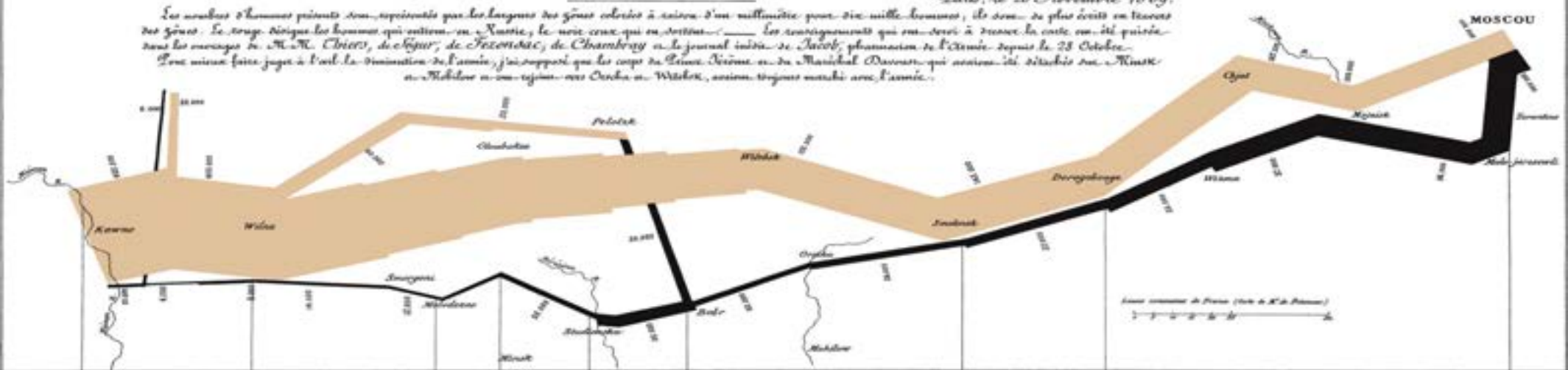
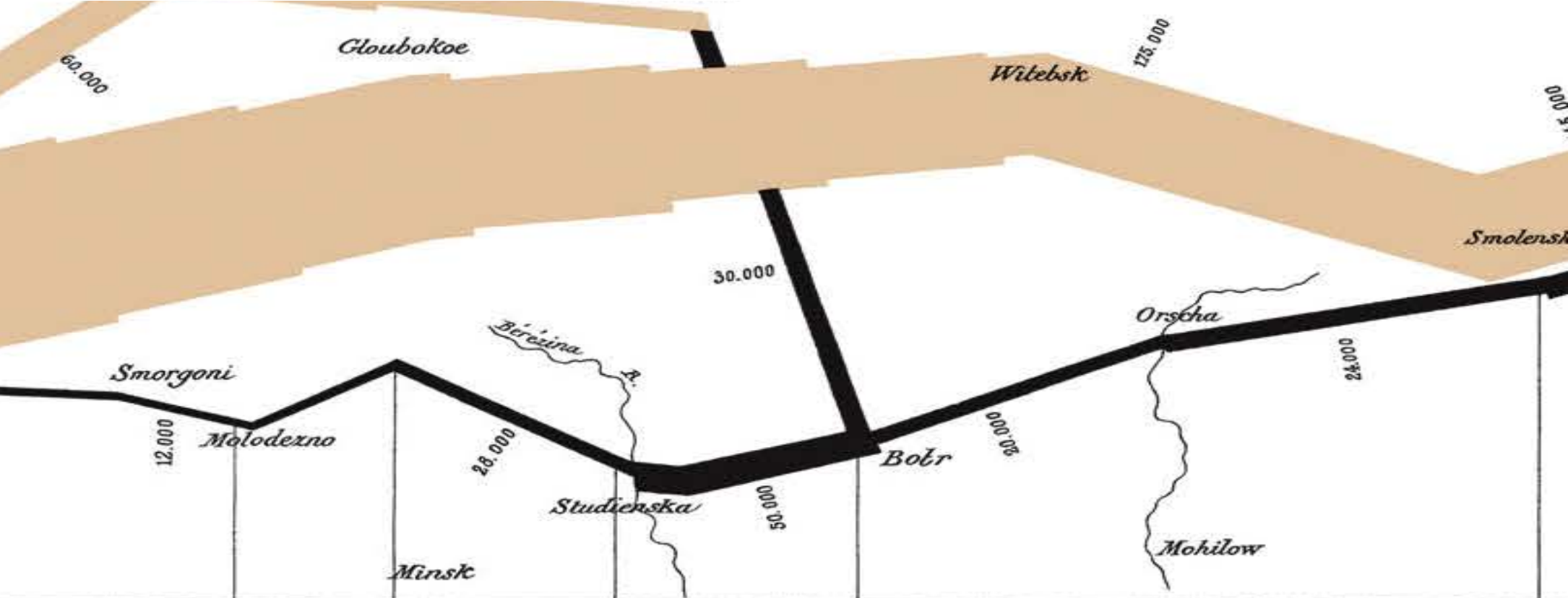


TABLEAU GRAPHIQUE de la température en degrés du thermomètre de Réaumur au dessous de zéro.

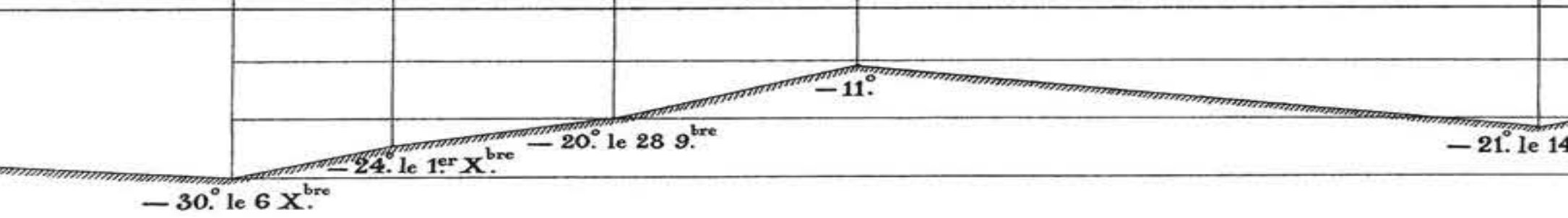


Tracé par BIGNON, à Paris 27 Mars 1812 à Paris.

Imp. J. B. Baillière et Cie.



LAU GRAPHIQUE de la température en degrés du thermomètre de Réaumur au dessous de

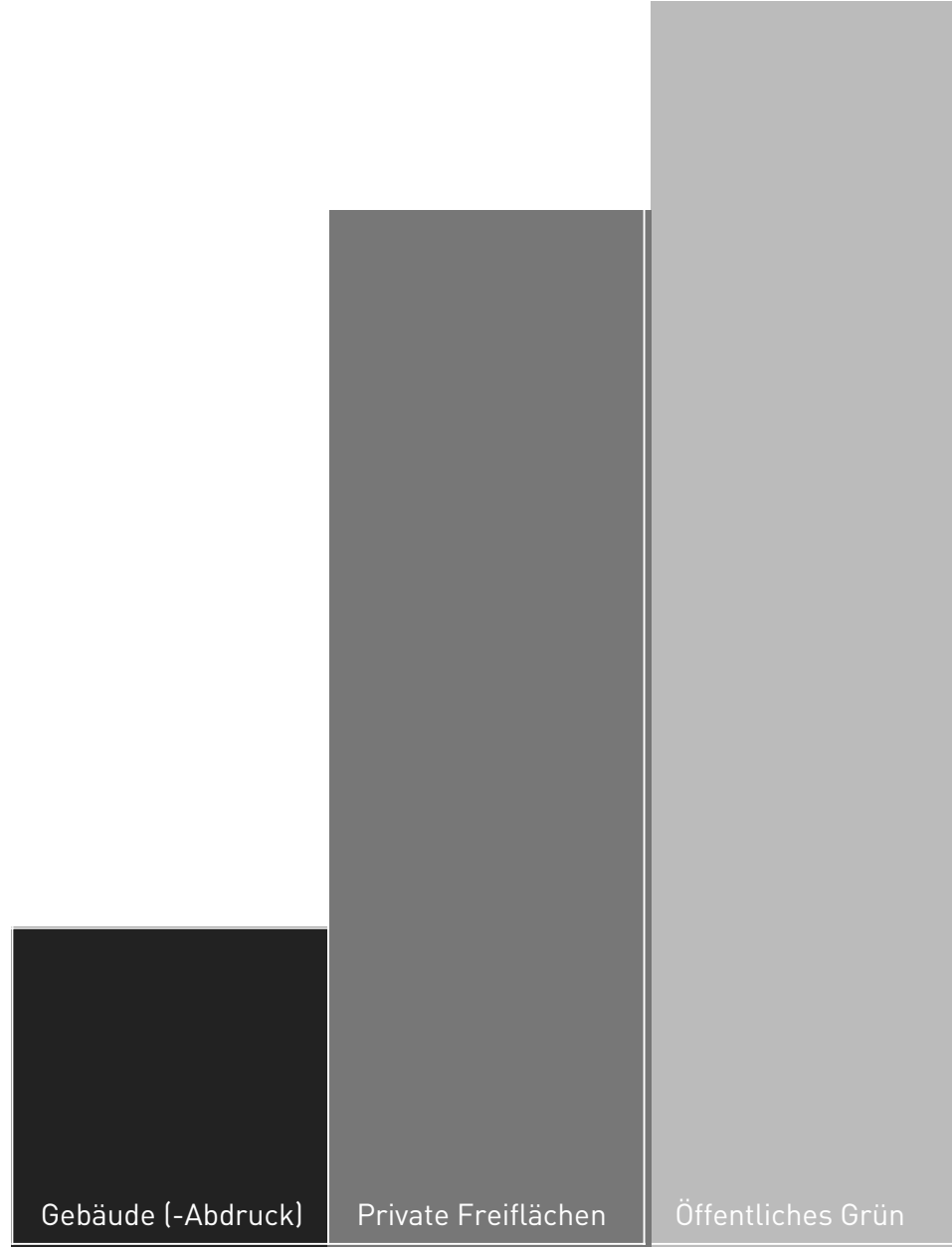


2. Stadt aus Daten (und Mengen)









Datascapes ist eine Methode, welche die Stadt als eine Art Datenlandschaft versteht.

Durch diese rationale Datenverarbeitung werden ästhetische und subjektive Diskurse zurückgewiesen. Objektive Quantifizierungen wie Wohndichte oder Verkehrsflüsse generieren automatisch Formen. Dieser automatische Prozess fordert dabei auf, ästhetische Vorurteile zu suspendieren.

„A Spatial visualization of otherwise invisible flows and forces“, James Corner

01. OMA
Punktstad-Zuidstad
1995

„It is crucial that the tradition of reinvention, which may be the most fertile, progressive Dutch tradition, is itself reinvented.“



Existing Dutch population
15 million



Dutch density
8,000 persons/km²



Manhattan density
25,000 persons/km²



Los Angeles density
2,500 persons/km²

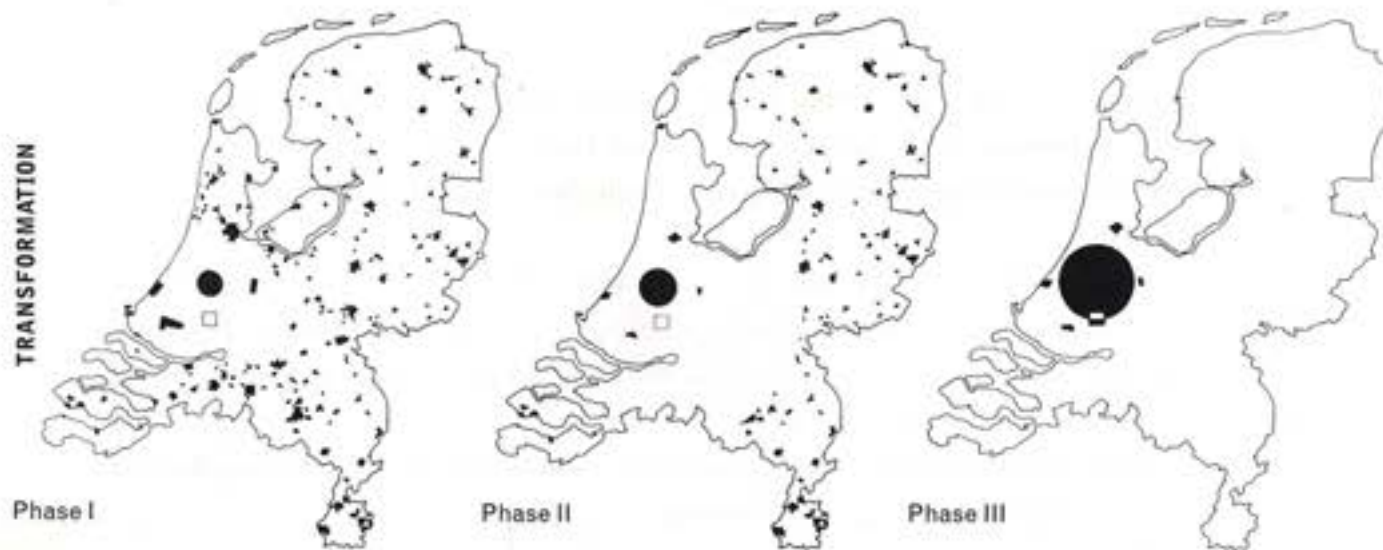


Point City in Europe



South City in Europe

For this investigation of different manipulations of density, we propose two radically different models for Holland – models that have as their cardinal virtues the abandonment of the repeated denial of reality that gives official thinking such a problematic and ineffective aura and the reintroduction of explicit ideological choices. In the first, the present compromised vision of the Green Heart is turned into the systematic creation of a center in the middle of the country; we call it *Puntstad* (Point City), or “the full heart.” Such a center would have all the advantages of concentration: optimum, efficient infra-structural networks; dense, truly urban conditions (finally); highly developed planning; ... of decentralization that



Point City

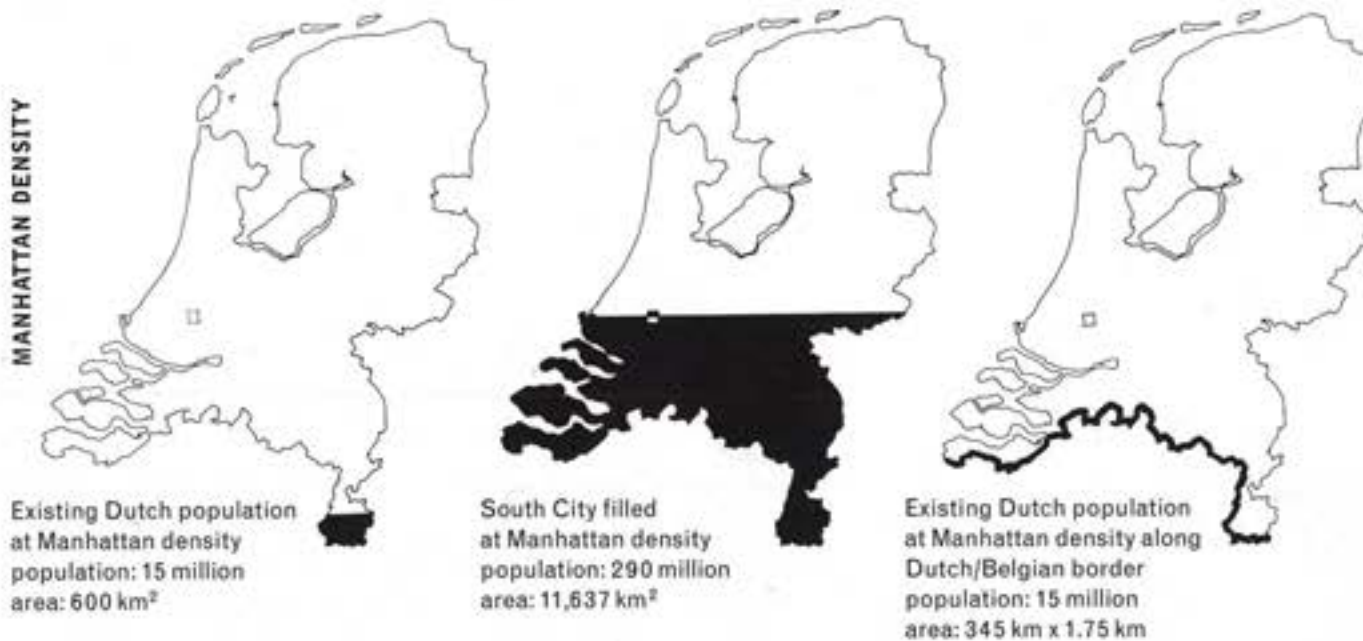


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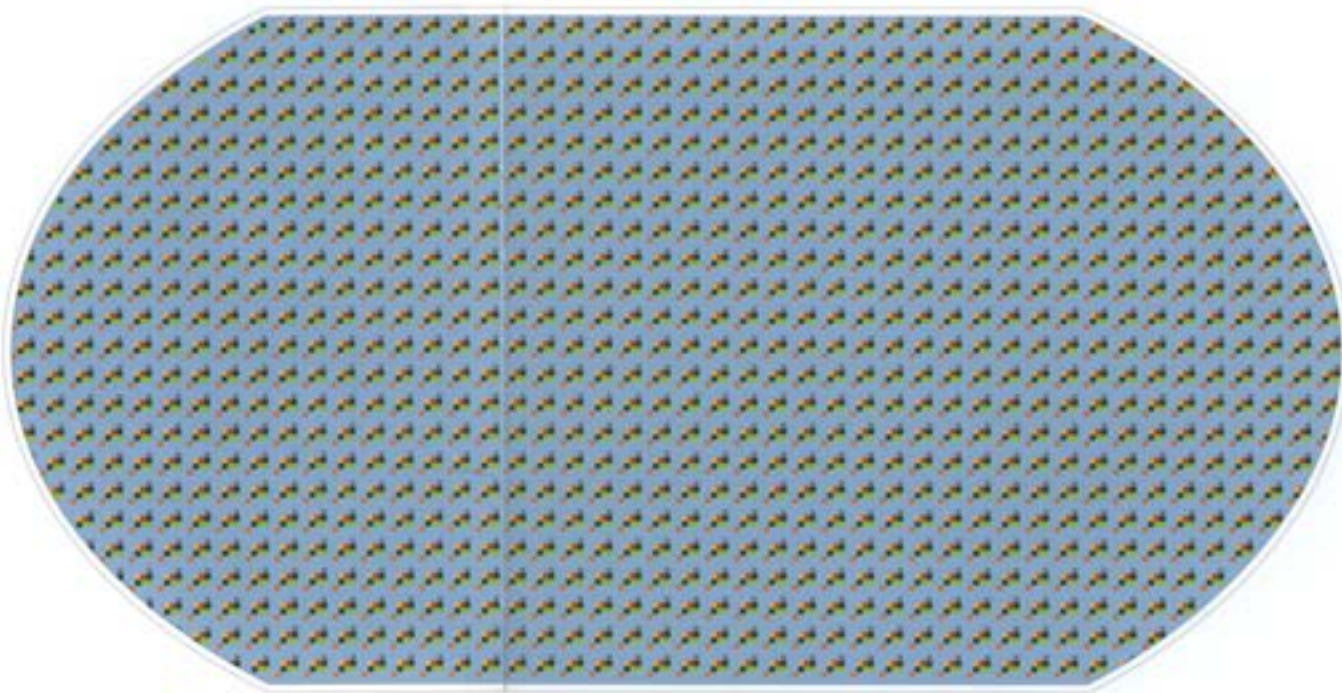
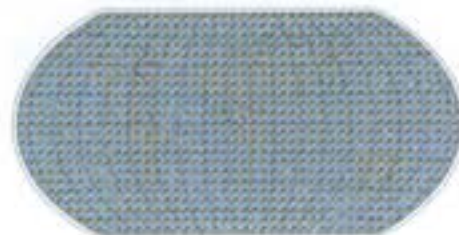


South City

02. Manuela Pfrunder
Neotopia – Entstehungsprozess

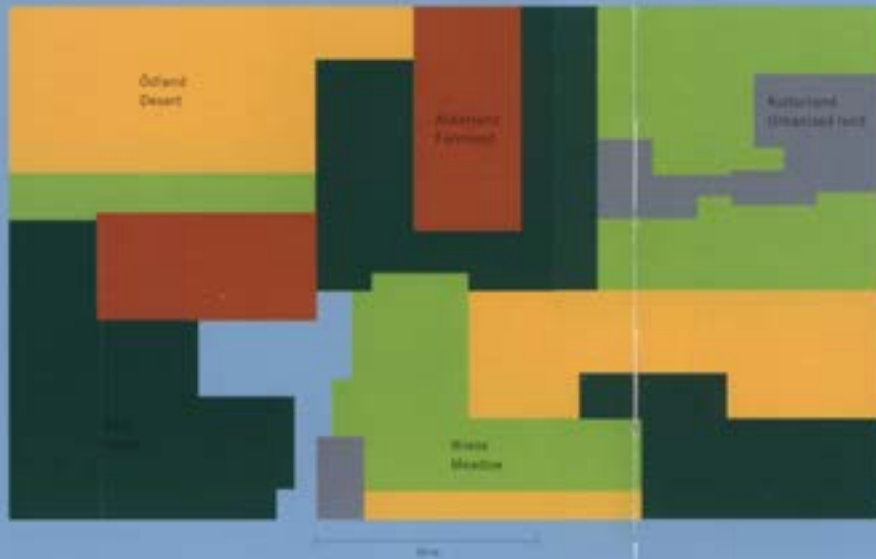
Was wäre wenn ... die Welt in 6.442.450.944
Inseln geteilt wäre.

Wie würde eine Einheiten für jeden Menschen
aussehen?



Yellow: Oceanic Desert Black: Boreal Forest Green: Mixed Meadow Red: Agricultural Farmland Blue: Agricultural/Urbanized land Orange: Inland Tundra Light Blue: Water/Water

Arktis
Arctic ice



Ansicht einer Insel und ihrer Anteile von

Arktis
Antarktis
Ödland
Wald
Wiese
Ackerland
Kulturland
Insel

Antarktis
Antarctic ice

**03. mvr
Metacity / Datatown
1999**

Städte von Daten.
Kein Entwurf, sondern eine Auswahl von
Daten nach hypothetischen Vorschriften.

**04. mvr
Monuments Act 2
FAR MAX, 1999**

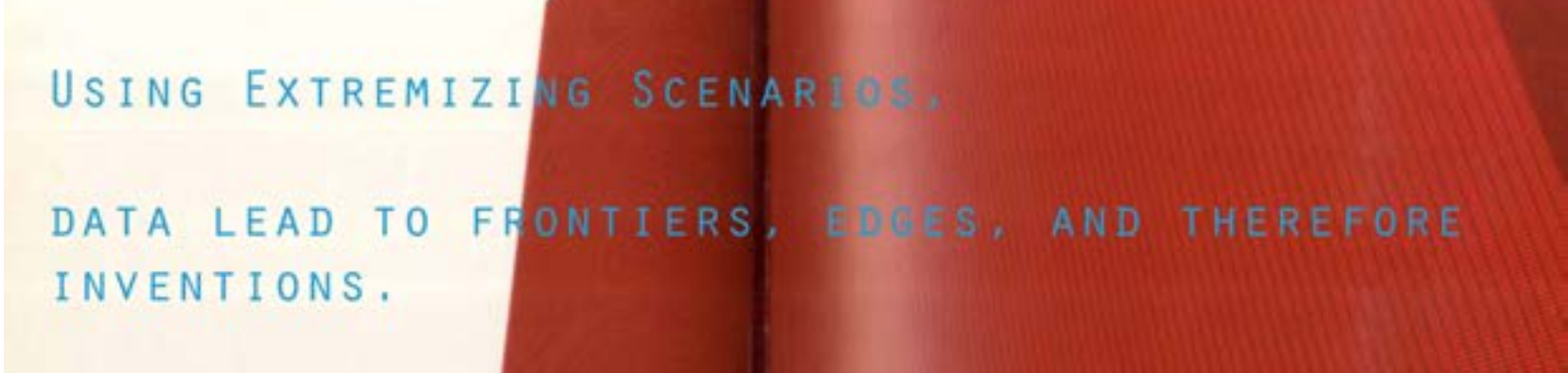
Die Formfindung basiert auf der maximalen
Gebäudehülle / Bruttogrundfläche
Das Beispiel: New York Zoning Law von 1916;
heutige Regelungen der Stadt Amsterdam

**05. mvr
Costa Iberica
1999**

„Würde Spanien sein Bruttosozialprodukt nur
aus dem Tourismus ziehen, könnte das Land
wieder „Landschaft“ werden.“

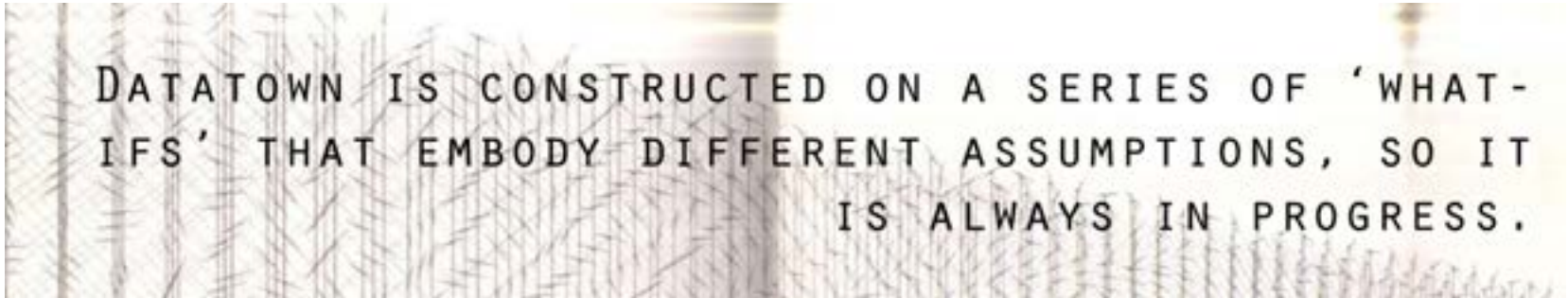
**Architecture is a device (a tool)
to test extreme scenarios (what if's)**

**Architecture can spatial-ize!
... can show how the world will look in spacial
terms**



USING EXTREMIZING SCENARIOS,

DATA LEAD TO FRONTIERS, EDGES, AND THEREFORE
INVENTIONS.



DATATOWN IS CONSTRUCTED ON A SERIES OF 'WHAT-
IFS' THAT EMBODY DIFFERENT ASSUMPTIONS, SO IT
IS ALWAYS IN PROGRESS.

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30		Metacities Compared
33		Mexico City
41		São Paulo
49		The Netherlands
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95		Sector Agriculture
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141		Sector Energy
151		Sector Waste
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220		Installation

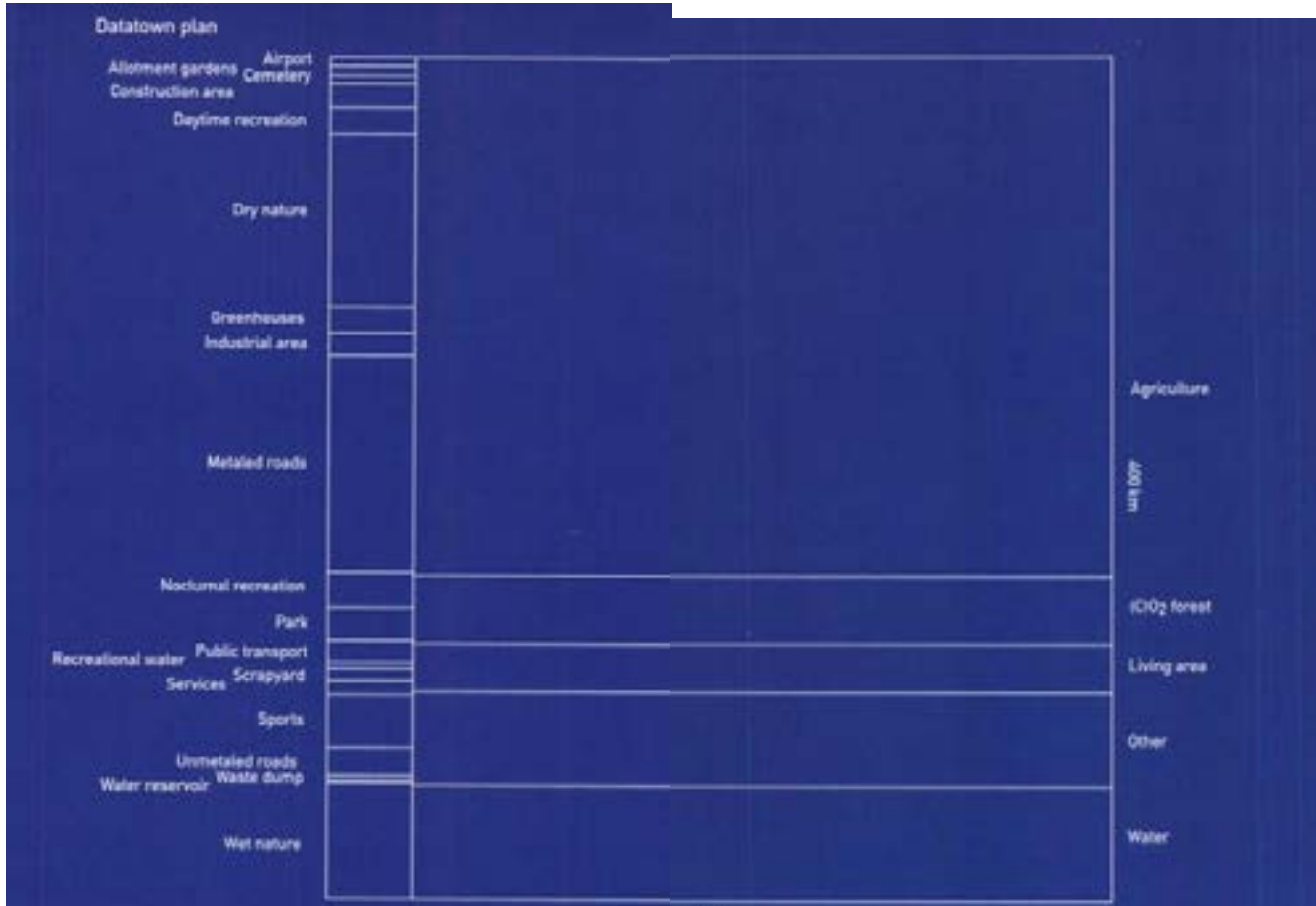
Datatown

Datatown is based only upon data. It is a city that wants to be described by information; a city that knows no given topography, no prescribed ideology, no representation, no context. Only huge, pure data. What are the implications of this city? What assumptions can be identified? What agenda would result from this numerical approach? Datatown is based on an extrapolation of Dutch statistics. Though the Netherlands today seems a dreamland for economics, culture, and production, it remains suspicious to follow its doctrine. But the accessibility of statistical information makes it a useful instrument for extrapolation. Datatown follows a classical (didn't the Dutch architect Carel Weeber repeat that recently?) approach of defining the boundaries of a city, namely that the urban size is equivalent to one hour of traveling. In the Middle Ages it was 4 km of walking. In the 1920s the development of garden-city extensions was based on a bicycle-distance of 20 km. The mass use of the car led in the 1980s to cities of about 80 km like the Randstad or Los Angeles. And now, with the bullet-train, the city can equal 400 km. Datatown can therefore be defined as a city of 400 by 400 km: 160,000,000,000 m². Datatown is dense – let us say 4 times as dense as the Netherlands, one of the densest populations in the world.

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Sector Living

You are entering Sector Living.
The reserved area is 8.206.89 km³

Following Dutch standards, the 241.074.556 inhabitants of Datatown live with an average of 2.43 persons in one unit.
This yields a zone composed of 99.197.560 houses.

The average unit has 126 m² indoor space of 2.8 meters height and 126 m² outdoor space of approximately 5.6 meters.

This equals respectively 354 m³ and 708 m³.
It totals to 1.064 m³ per unit or 438 m³ per person.

The total volume of the living zone is 43.448.531.280 m³.

To what perspectives does this lead?

Sector Agriculture

You are entering Sector Agriculture.
The reserved area is 88.241 km².

Since Datatown is autarkic, it has to produce its own food. How much does the average inhabitant consume per year? How much must we add for pets and other animals? How can this consumption be translated into ground-use?

Sector Waste

You are entering Sector Waste.
The reserved area for this sector is 328 km².

Sector iCO₂

You are entering Sector iCO₂, the forest of Datatown. The reserved area equals 11.717 km².

Plants convert carbon dioxide into oxygen and carbon through photosynthesis. This chemical reaction could be used to absorb the CO₂ that is released by the burning of fossil fuels, by cars, by factories. Can we imagine one forest that absorbs all CO₂ that is produced in Datatown? How big does this forest have to be? The total CO₂ output of Datatown is 2.351.871.200 tons per year.

In a Dutch climate the poplar is the most efficient tree for absorbing CO₂. It absorbs 800 tons per year per adult tree.

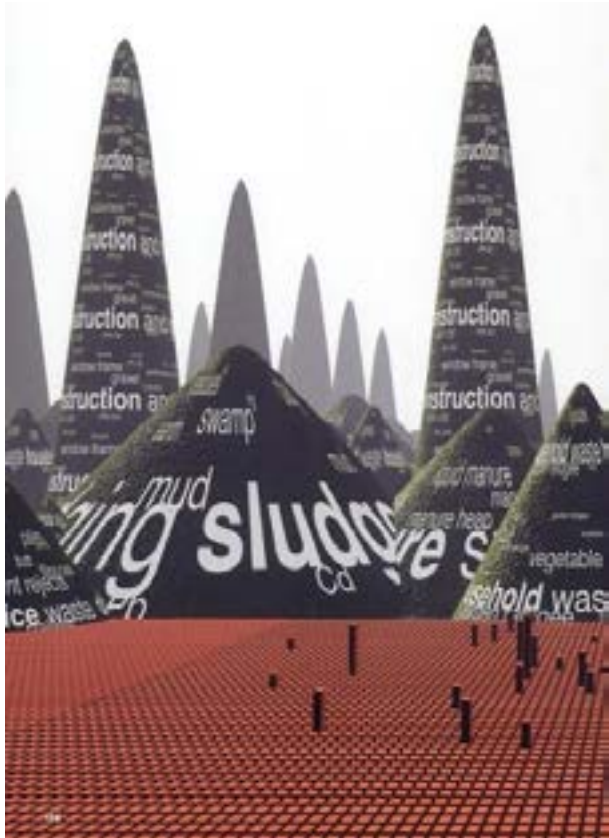
To absorb all CO₂, 2.939.839 km² of poplar forest is needed. This equals 0.7 times the Amazon, 294 times the Black Forest, or 1.212.055 times New York's Central Park. This is an area 18 times the total surface of Datatown, a space too large to accommodate on a single plane.

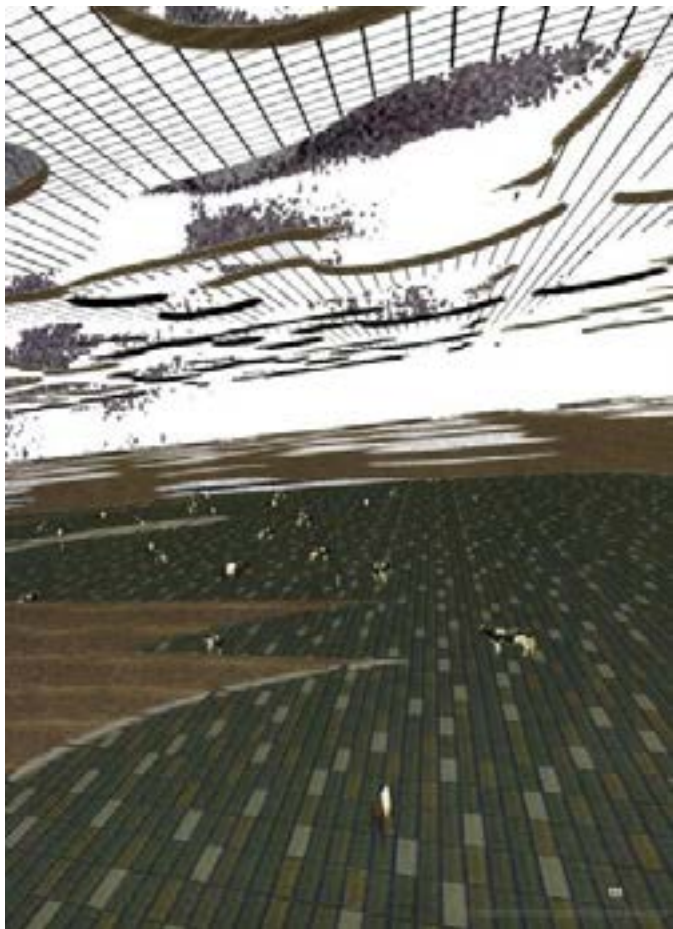
Sector Water

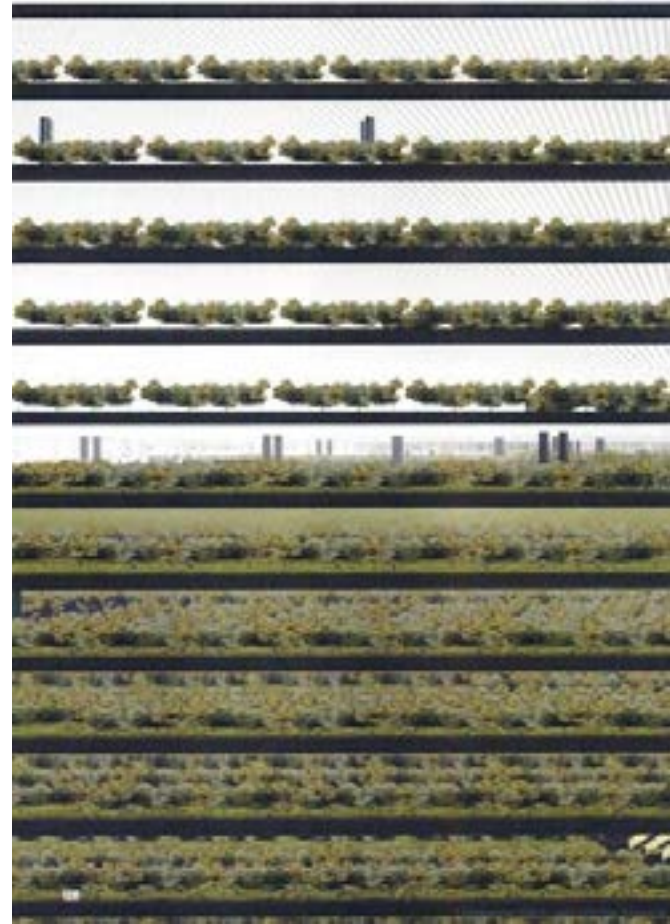
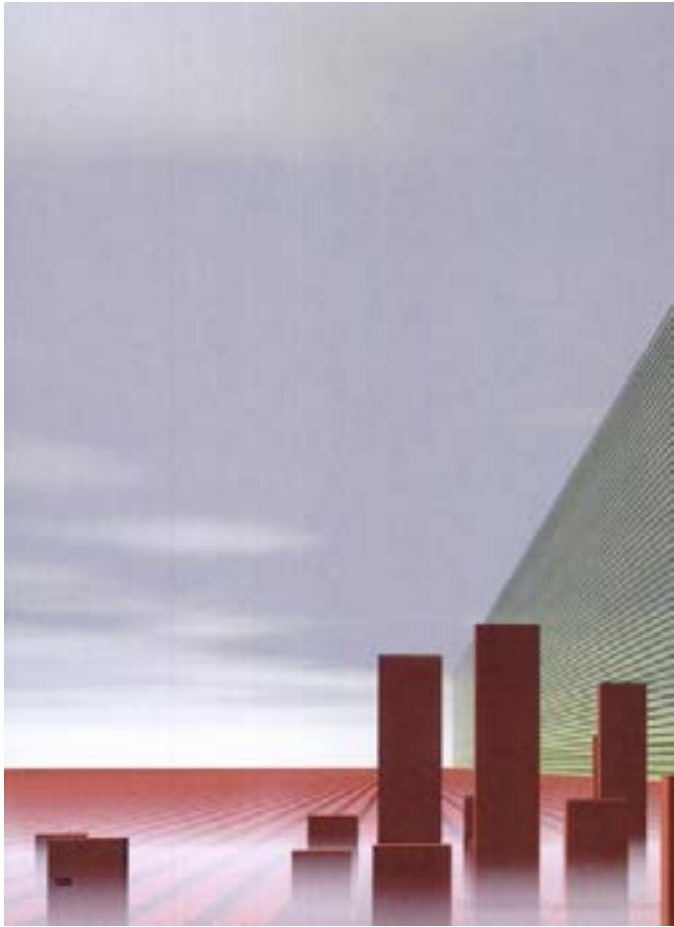
You are entering Sector Water.
The reserved area for this sector is 18.990 km².
46.2 km² is dedicated to the production and storage of drinking water, 18.943.8 km² to non-treated water.
Each year Datatown consumes 227.000.000.000.000 liters or 227.92 km³ of water.

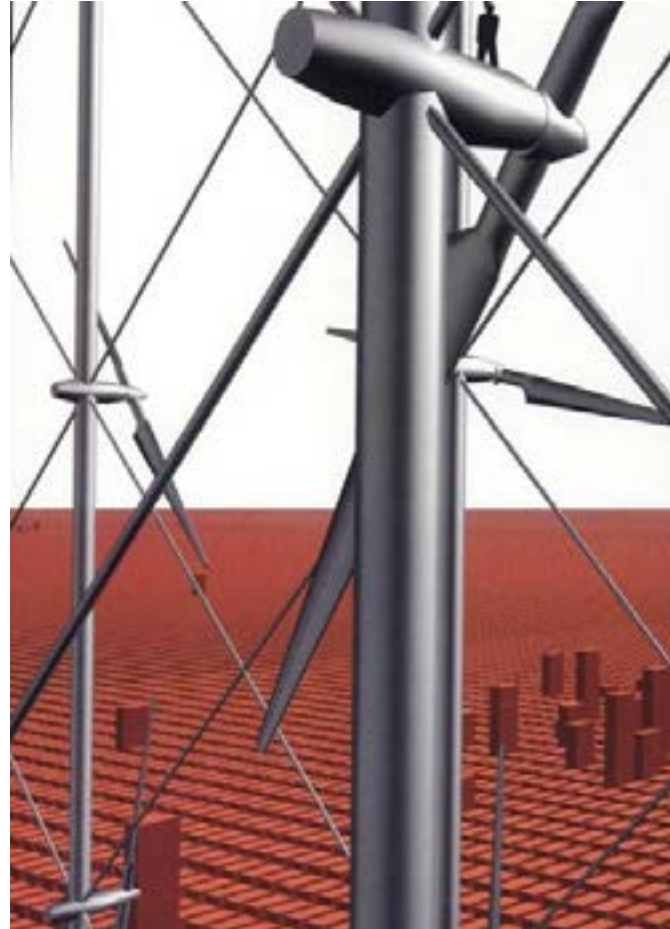
iCO ₂ forest	4.52 km ³
Agriculture	33.97 km ³
Greenhouses	0.20 km ³
Aliment gardens	0.07 km ³
Nature	1.28 km ³
Industry	177.1 km ³
Living area	10.78 km ³

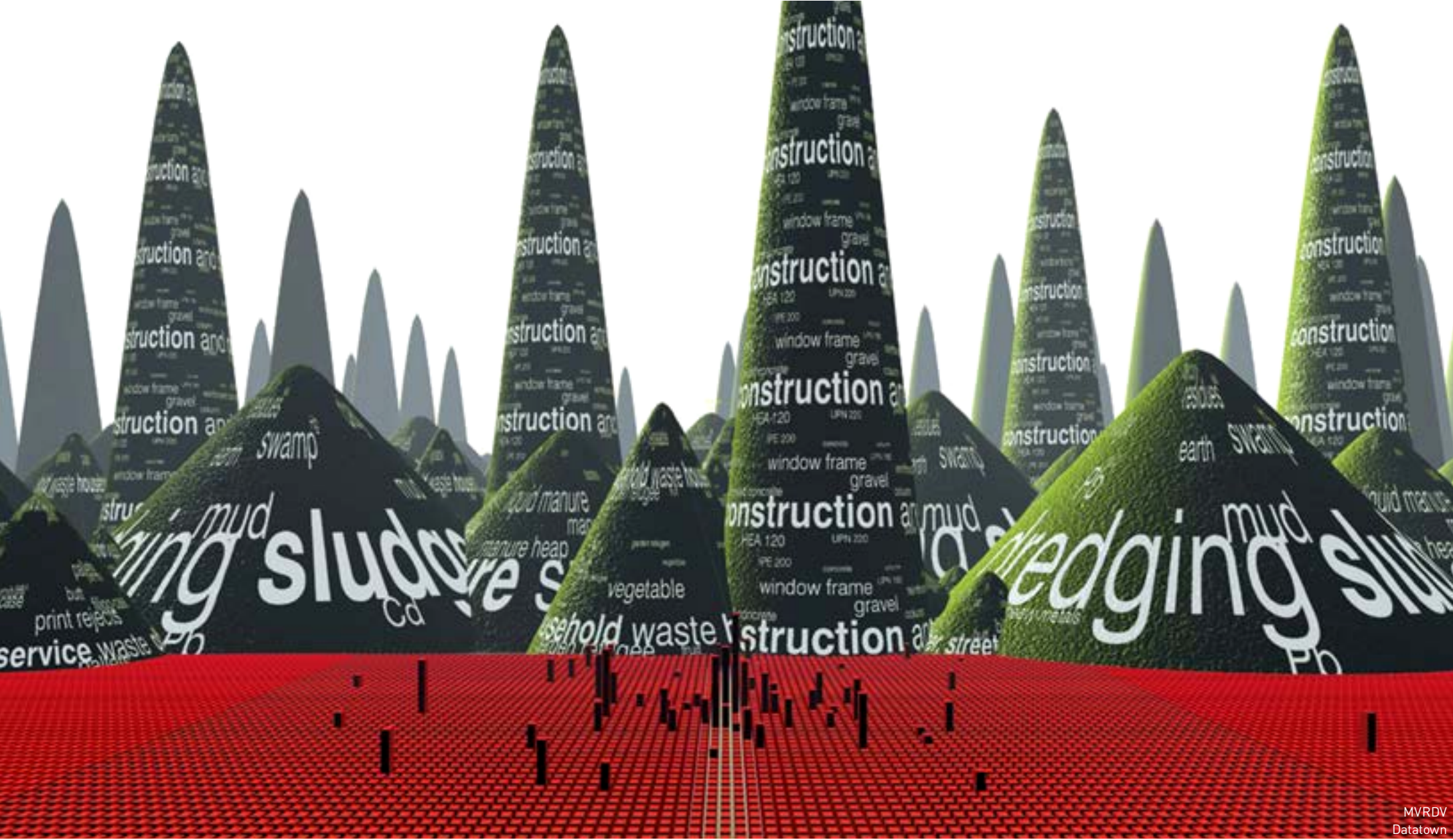
Of all water consumption only 10.2% needs to be of 'spa quality'. This means that 23.1 km³ of drinking water reservoirs and 204.82 km³ of non-treated water basins have to be installed.













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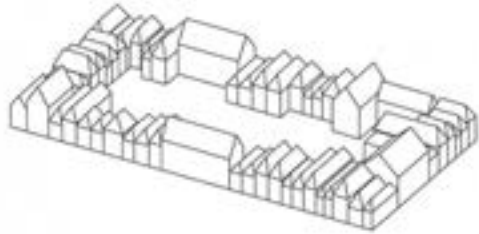
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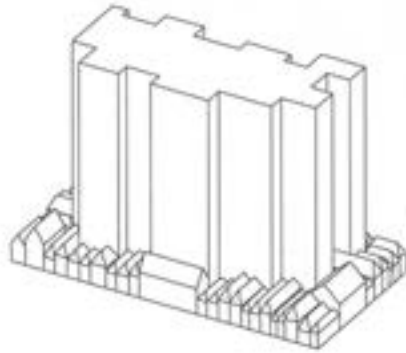
„Würde Spanien sein Bruttosozialprodukt nur
aus dem Tourismus ziehen, könnte das Land
wieder „Landschaft“ werden.“



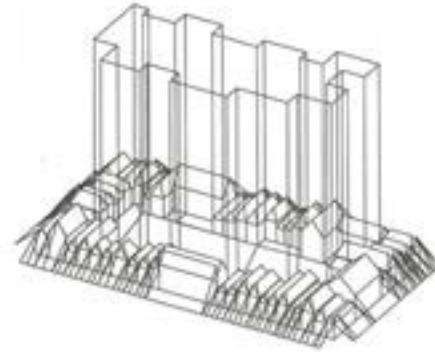
Monuments Act – Thematisiert wird hier eine fiktive Altstadtverdichtung in Amsterdam. Nur ein Parameter wird berücksichtigt, die Unsichtbarkeit der Neubebauung von der Straße. Dadurch erhöht sich die Dichte auf 7,8 (Geschossflächenzahl).



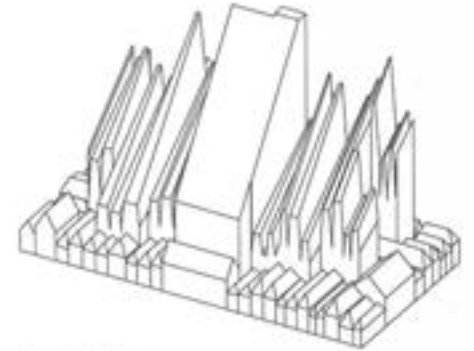
1. 18th century block



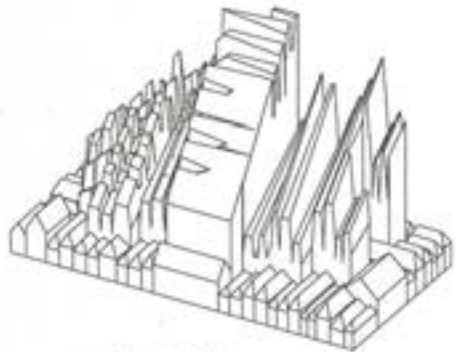
2. extrusion of the inner court



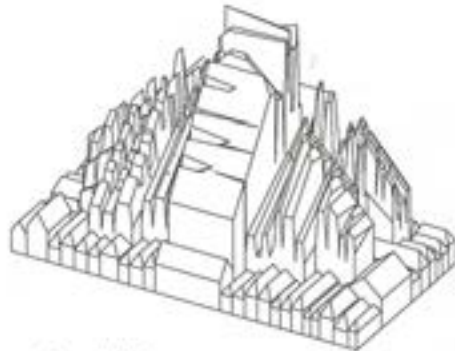
3. viewlines from the street



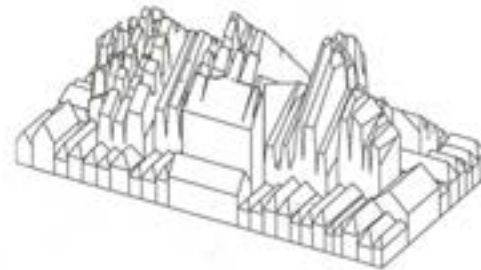
4. cut off 1



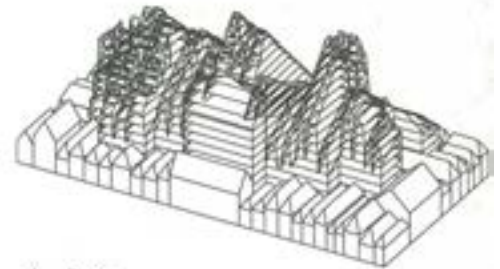
5. cut off 2



6. cut off 3



7. cut off 4



8. floors
FAR = 7.8

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Costa Iberica
Luftbild Benidorm

NECESSARY SURFACE
TO REACH G.D.P. WITH SUSTAINABILITY



OLIVE OIL: 378%



CORN: 590%



WINE: 32%



ORANGES: 72%



PORTS: 9%



POTATOES: 187%



ECOTOURISM: 12%



MASS TOURISM: 0.024%

Benötigte Oberfläche um das B.I.P. mit einer Aktivität zu erwirtschaften.



Sorry, MVRDV

- 1 Are you doing **research** or playing the **game**?
- 2 Can all the **fact** become data?
- 3 Too **platonic** to be true
- 4 how much **value** these **research** have?
- 5 Too **abstract** to be **built**.
- 6 What' s building **materials**?
- .

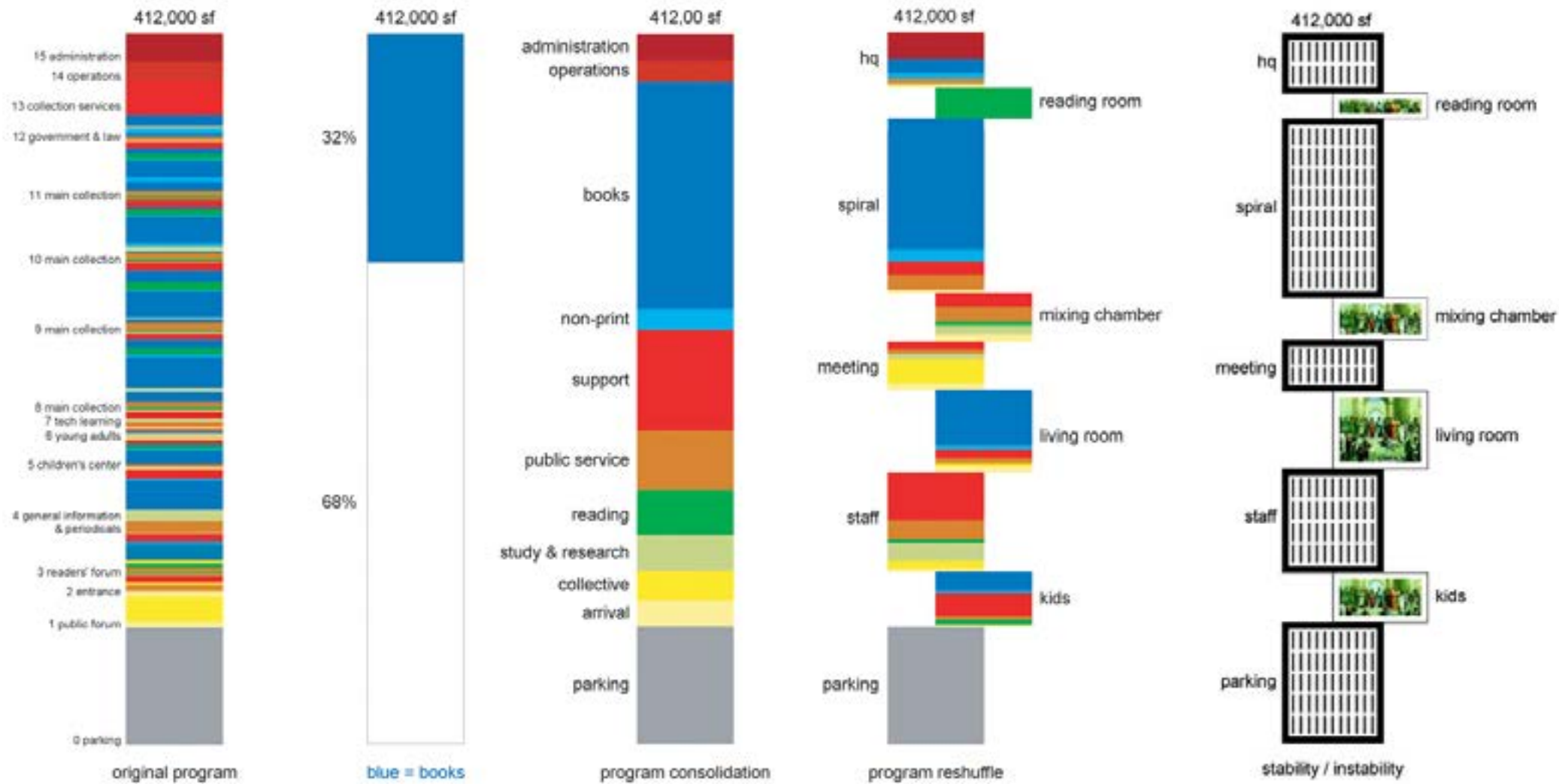
LET'S WATCH SOME VIDEO!!!

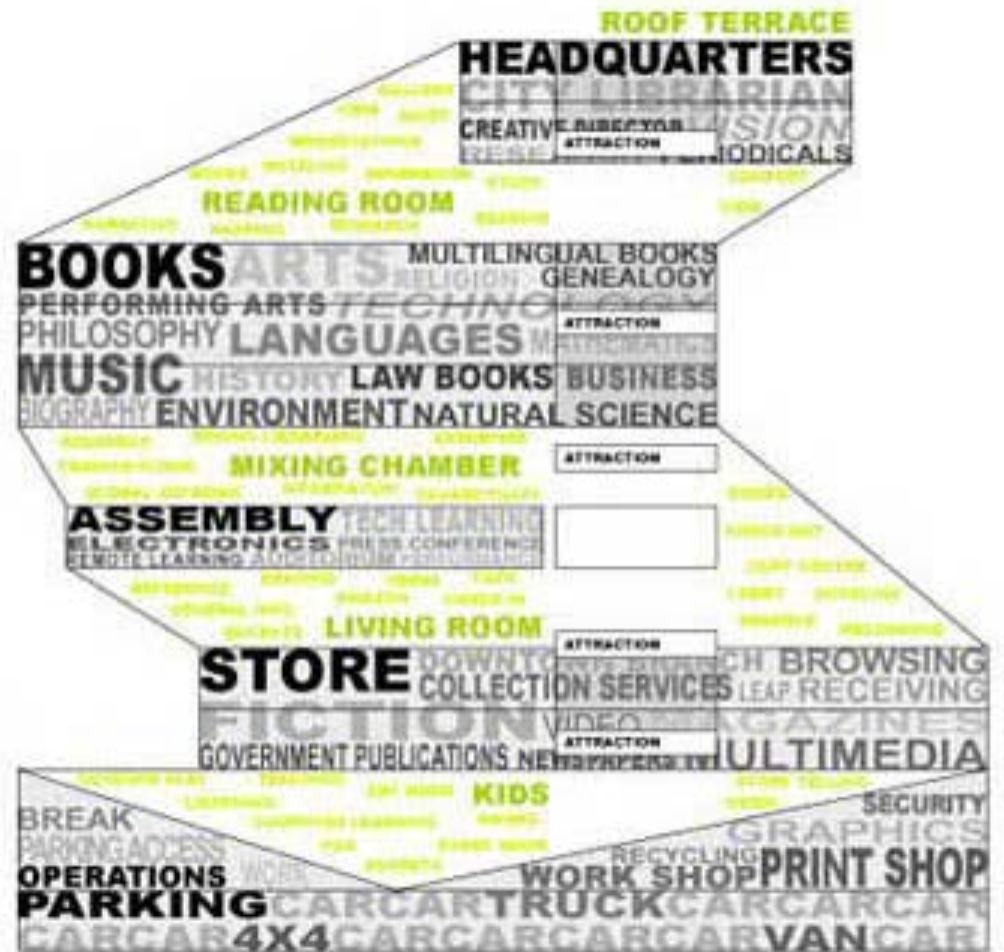
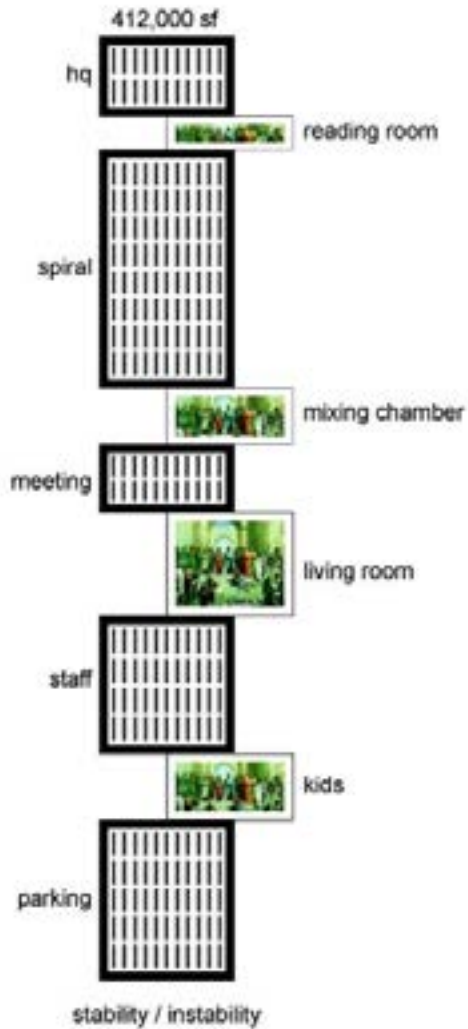
3. Architektur aus Daten und Mengen

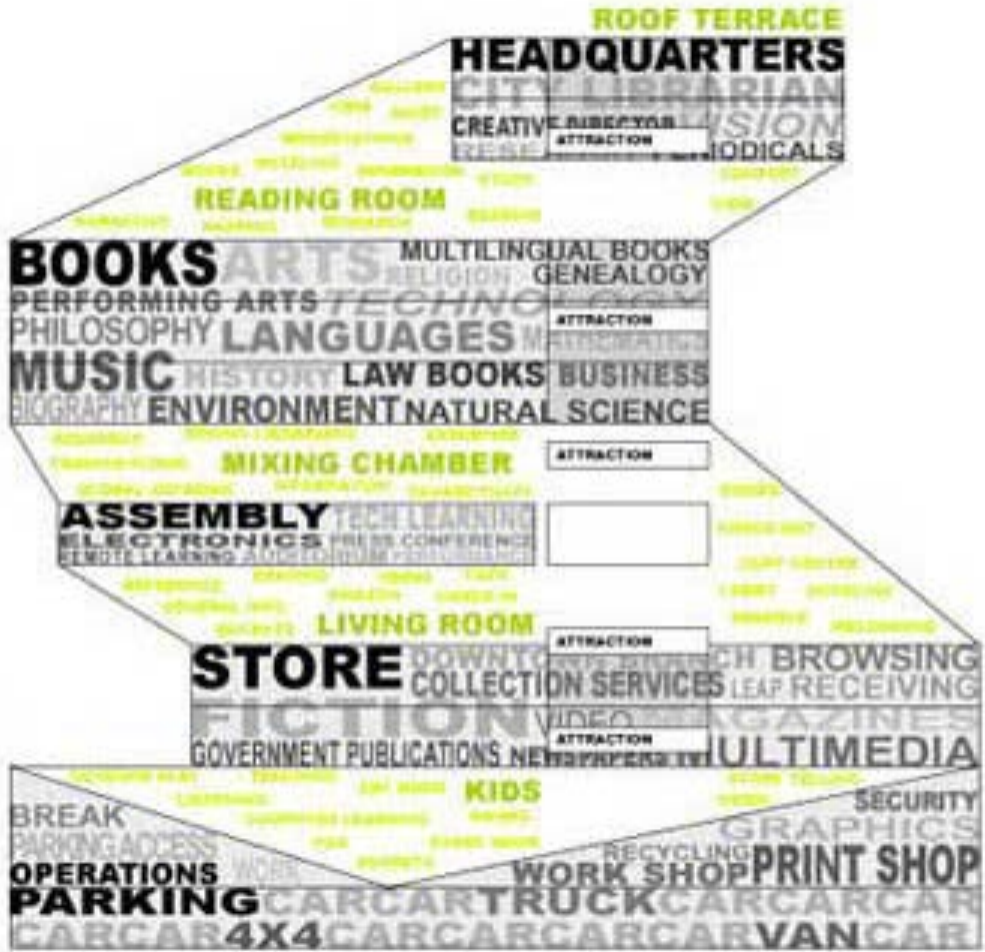
**06. OMA/REX
Seattle Library
2004**

Architektur/Gestaltung als (buchstäbliche)
Anordnung raumprogrammatischer
Bausteine.

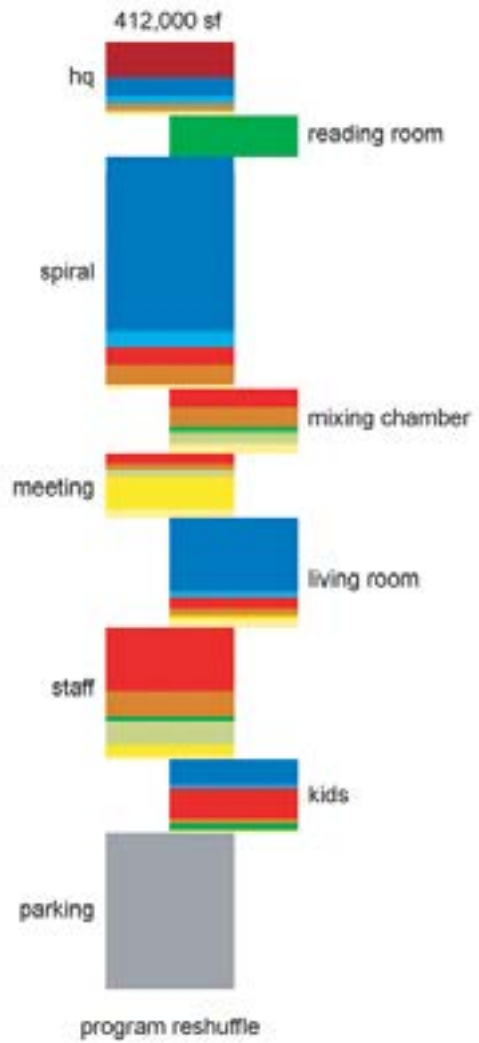
Ein Spiel zwischen Haupt- und
Nebennutzungen, öffentlichem und privatem
Raum, Objekten und Leere.













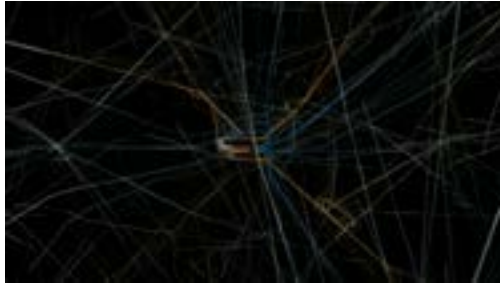
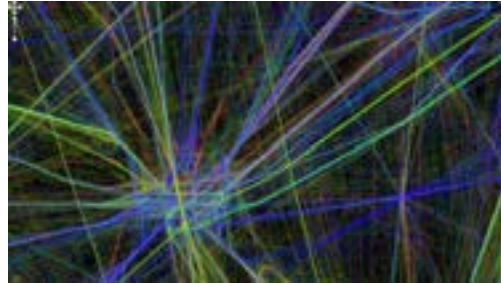
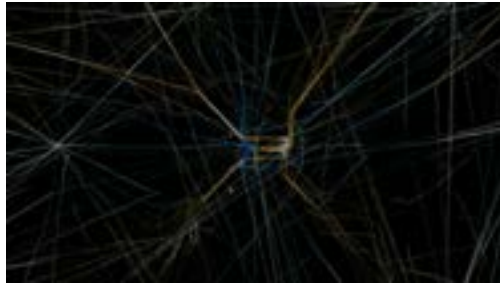
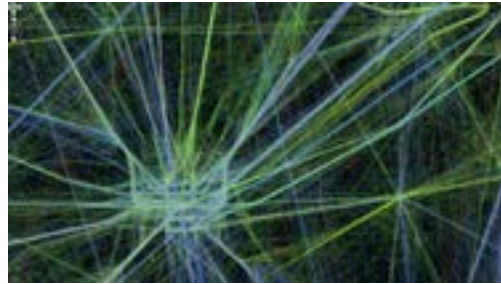
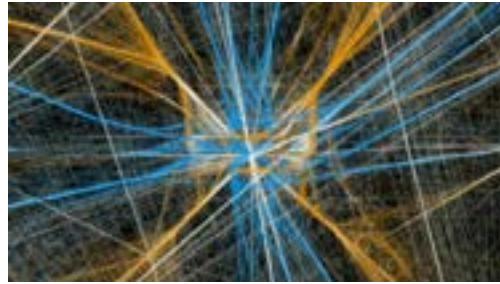
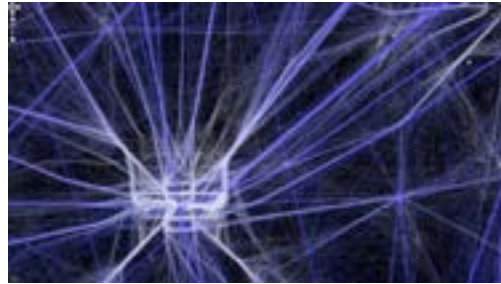
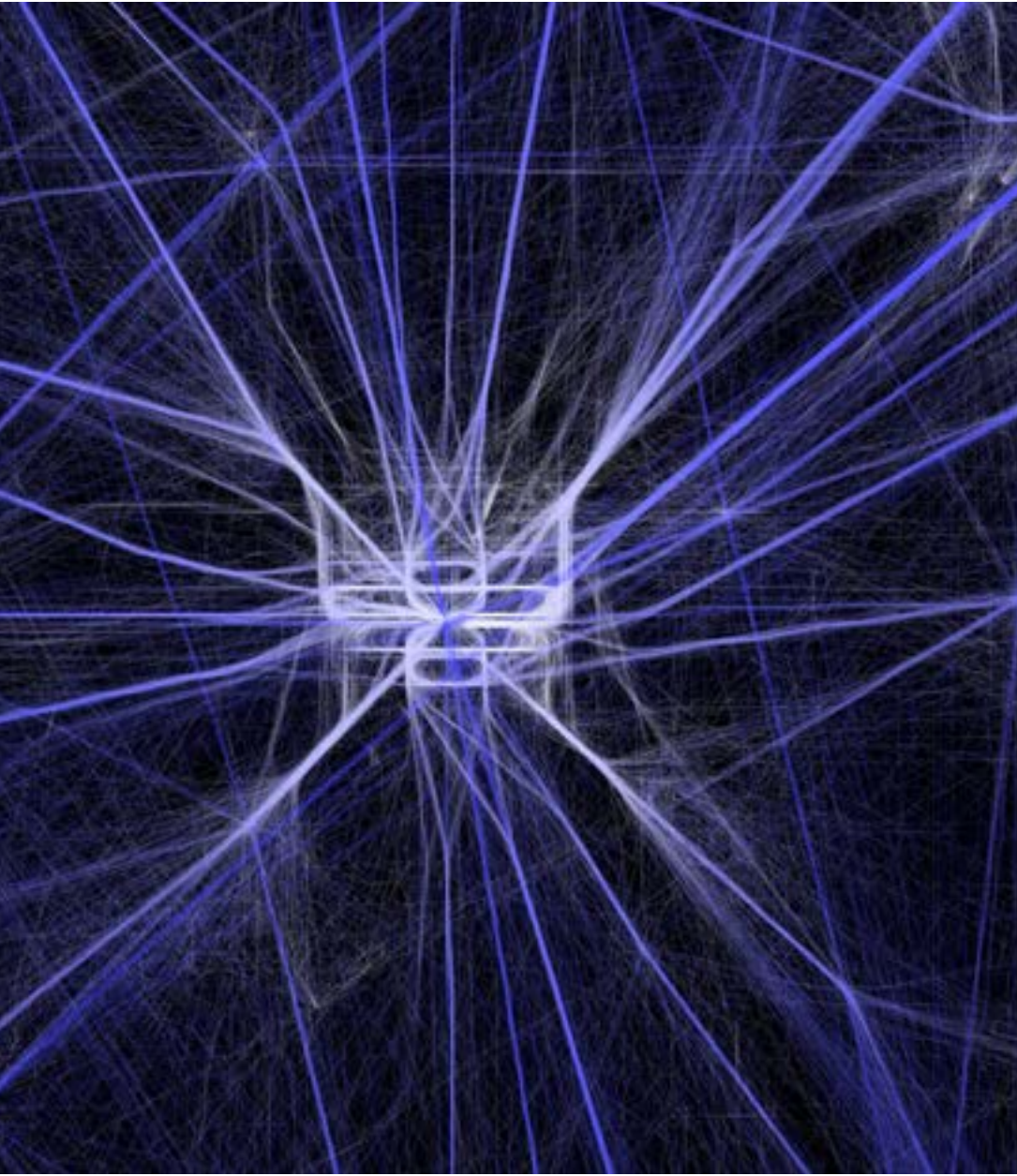


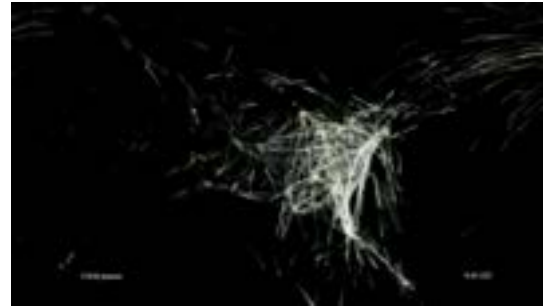
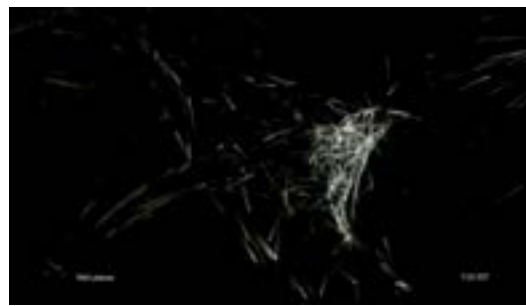
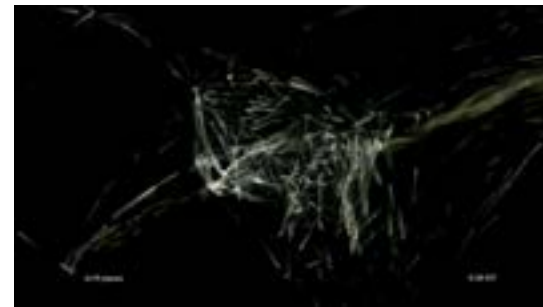
4. Kunst aus Daten und Mengen

07. Aaron Koblin
Artfully visualizing our humanity
Flight Patterns
2004

08. Ursus Wehrli
Kunst Aufräumen
2002



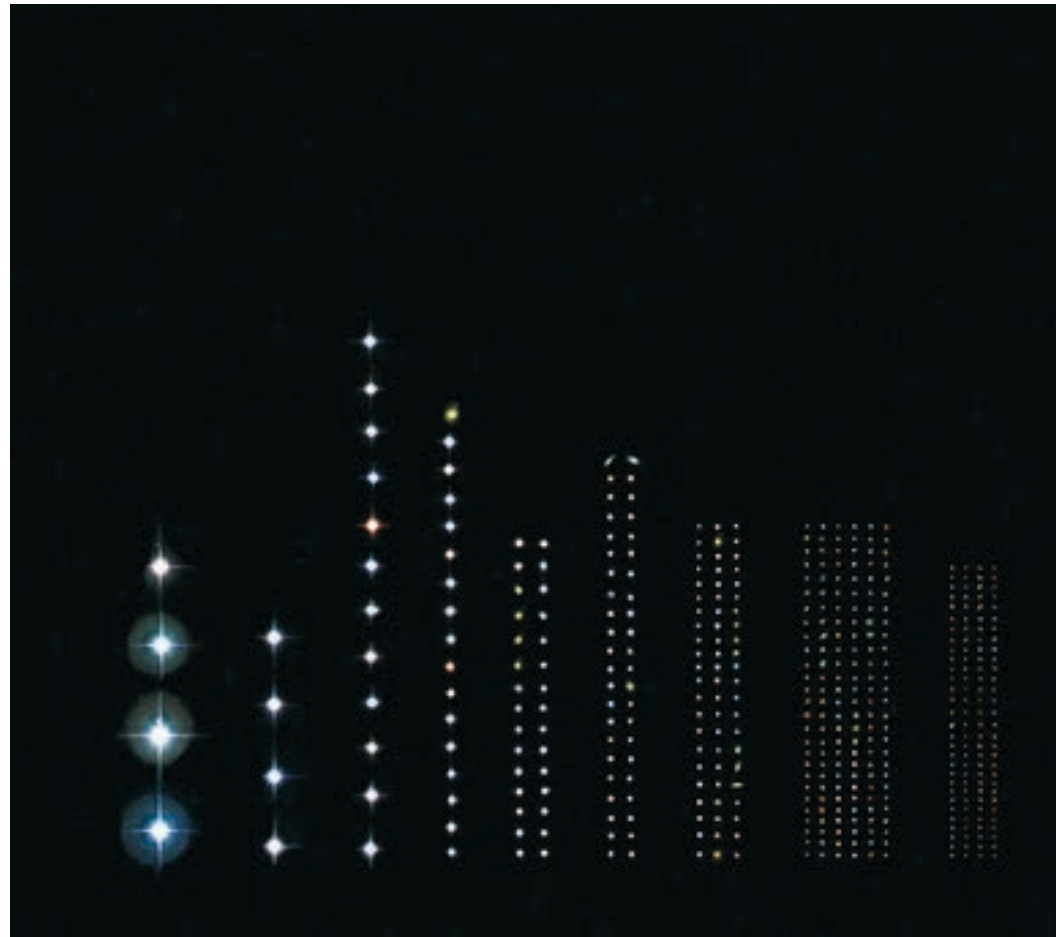




Flight Patterns over North America



Multiscalar Winter 2011/12
Datenkarten



Ursus Wehrli
Kunst Aufräumen, 2002



5. Anleitung

1. Nehme Daten, Mengen und Massen der Schrebergartensiedlung auf.

2. Erfinde 3 neue Konditionen (Was wäre wenn...) für den Ort.

3. Platziere die aufgenommenen Daten streng nach den Vorgaben der gewählten Kondition.

4. Betrachte dabei jede Kondition unabhängig. Es entstehen so 3 verschiedene Projekte, 3 verschiedene Datenkarten.

Graphisches Vorbild sind die Projekte von MVRDV und OMA

6. Referenzen - Links

Artikel:

James Corner, The Agency of Mapping

www-lectures and clips:

Seattle Library, OMA / REX (Hyperrealism)

http://www.ted.com/talks/lang/engjoshua_prince_ramus_on_seattle_s_library.html

Aaron Koblin, Artfully visualizing our humanity

http://www.ted.com/talks/aaron_koblin.html

Grand Paris, MVRDV

<http://www.youtube.com/watch?v=lyvSzmBkg9s>

www-links:

Eric Fisher's „The Geotagger's World Atlas“

<http://www.flickr.com/photos/walkingsf/sets/72157623971287575/>