

determines those processes, how are they 'designed', and at which moment do they become 'architectural'?

Attempting to map and visualize the invisible, the studio will start by studying spatial histories of global trade on a local scale. We will use the city of Frankfurt as a central European case that exemplifies how material and immaterial goods are being circulated, ranging from formal to informal, from financial transactions to passenger flows and the urban infrastructure of physical products, from migrant communities (geopolitical background) to the Elderly (age), from illegal practices to forms and formats of night labour, from spaces of financial infrastructure and information flows to control rooms, where decisions are being made. The fact that many of those practices are taking place as often unwanted but tolerated invisible practices also points at the question of what kind of urban culture is being promoted today.

While focusing on the local, Frankfurt – as an international city – by default reveals global implications and therefore the project will attempt to unpack relevant questions of geopolitics. As the studio will deal with the question of the invisible, one of the aims of this 'de-stealth' project will be to x-ray the city that we inhabit, to 'make presence' (Saskia Sassen): from informal trade to histories of hidden spaces, from programs without facade to faceless buildings – architectural scale projects that disappear in the city's fabric.

Dealing with such questions of trade and urban practices 'below the radar' (Saskia Sassen) will also entail to study, understand, and speculate on the constructions of identities and communities in the contemporary city. To speculate on this further raises the question of 'urban capabilities' (Saskia Sassen), in other words: why does a particular city lend itself to a specific, localized and customized set of practices?

In the context of this project, the notion of exchange and trade will be interpreted and tested as 'soft encounters' (Siobhan Davis), everyday practices that embody and reveal different notions of presence, awareness and perception. While some phenomena that we will investigate may take place in physically remote neighbourhoods and sites within the urban environment, others may claim and occupy spaces, which change on a 24hr timetable: activities that only take place after sunset (specific kinds of markets, sexual services, gambling, drug trading et al.), activities that illustrate the relationship between practices that 'contaminate and decontaminate' (Saskia Sassen), being open and accessible at times and hermetic at other times. When they accumulate they generate a rupture in the often-homogeneous daily life of the city.

These ruptures produced by the invisible are based on a very specific and alternative interpretation and practice of ownership: one, which tends to often not be based on legal, but temporary ownership, in other words: presence as a result of occupation, creating presence not by "owning" (a specific section of) the public space, but producing presence by inhabiting. What constitutes the thresholds and borders of such practices and architecture? What would such space look like today?

The group will interrogate these spatialized phenomena and their post-public extensions as spaces, which cannot only be rediscovered strategically, but also be rendered as a theatre that performs itself, a set of formally and informally choreographed practices that produce a continuous play of flux.

This endeavour should entail site-specific and research-based investigations and projects. In the Weltkulturen Museum we have, for instance, organized research-based sessions, workshops and displays open to the public, where we take various and specifically scouted and produced mappings and objects as triggers for an understanding of *trade & presence*, in particular an urban political presence. The Weltkulturen Museum will dedicate several exhibitions and events to the overall

theme of "Trading Perceptions" over the following years. The diverse relationships that determine the ways in which artefacts have been circulated and traded, the connections of the museum to global commerce and to changing political and economic incentives are all aspects of the inquiry.

#### Green Room

The Green Room on the upper floor of the Weltkulturen Labor is used as a project space, in which the team has worked on an installation and display of process(es). The studio was invited by the museum to undertake research in this laboratory-like condition, formulating new interpretations and creating original artworks based on the findings, superimposition and conflicts generated by the contemporary condition of Frankfurt (our findings) and the historic depth of the museum's existing and outstanding collection. The space has been used as an archive of mapping and research work on stealth spaces and objects related to formal and informal modes of trade, based on our ongoing investigation of the city of Frankfurt. In order to enhance the historic contextualization of the project, we have also worked with architectural photographs from the image archive as well as with selected architectural artifacts and objects from the collection of the Weltkulturen Museum.

As a working methodology, we have combined internal and external formats, such as discussion groups, workshops, open talks, presentations and (informal) exhibitions. The work on display is presented in a variety of formats, ranging from objects, drawings, photographs and writings to mappings.

#### Spatial Anthropology

In order to understand these spaces in more detail, we have started the year by using a methodology that anthropologists would make use of: we will engage in field work, lead (recorded) conversations with relevant individuals and groups, take photographic and video evidence. [x]

Guest Prof. Markus Miessen

#### Städelschule Architecture Class (SAC)

Dürerstraße 10, 60596 Frankfurt am Main  
www.staedelschule.de, www.criticalspatialpractice.org

Members of ACSP 2012 / 13: Iva Baljkas, Joel Roy, Flaka Haliti, Christoph Esser, Markus Miessen.

Special contributor to the exhibition: Armin Linke.

Thank you for hosting ACSP: Prof. Nikolaus Hirsch (Dean Städelschule), Prof. Ben van Berkel (Dean SAC), Prof. Johan Bettum (Programme Director SAC).

Thank you for hosting Stealth Architecture at Weltkulturen Museum: Dr. Clémentine Deliss (Director), Dr. Yvette Mutumba (Research Curator), Nina Huber (Project Coordinator).

Design Concept: Studio Matthias Görlich (Matthias Görlich, Charalampos Lazos).

THEATRUM MUNDI /  
GLOBAL STREET

WELTKULTUREN  
MUSEUM

# Stealth Architecture



# Architecture + Critical Spatial Practice

Städelschule  
Rundgang 2013  
Feb 8th–10th  
10am–8pm

## Stealth Architecture

Architecture + Critical Spatial Practice  
/ Weltkulturen Museum 2012 / 13  
Städelschule, Frankfurt; Guest Prof. Markus Miessen

Historically, Frankfurt is home to the „Messe Frankfurt“, one of the largest trade fairs in the world, which – in its current legal and operational framework – was established in 1907. However, the actual trade fair dates back to 1152, when Frankfurt was first mentioned as a major port for international trade. One of the central advantages of Frankfurt as a historically interregional and later global city is owed to its highly convenient geopolitical location: next to or close to two major rivers (Main and Rhein), and well connected to major pan-European trade routes and road networks. Today, Frankfurt hosts the ninth busiest airport globally, and is home to the Lufthansa fleet. In 1785 the first recorded manned flight in Germany took place in Frankfurt when a hydrogen-balloon was launched as part of the trade fair. Lufthansa was founded two years after the Messe Frankfurt.

#### Hidden Infrastructures: the enabling space for trade

Since Frankfurt is such an important centre for trade, it bursts with two very different sets of infrastructure: at first, it necessitates a formal infrastructure, which supports, benefits from, and enables official trade. Examples include the trade fair, the stock exchange, the European Central Bank, all major international banks, the airport, the train station, the motorways, business centres, and hotels.

Further, the above phenomenon produces a fertile ground for alternative forms of markets and trade, but also relies on a second-layer

infrastructure, which allows for a trade-capital to operate on a daily basis, an infrastructure, which is often not visible and may not have a clearly recognizable and specifically designed facade or face to it. Examples of this phenomenon include Internet service hubs, server warehouses, the Commerzbank trading floor (Bahnhofsviertel), the largest Internet hub in the world (De-Cix Management GmbH, Ostend & Gallus), Central Data Centres (i.e. on Hanauer Landstrasse & Kleyerstrasse), Deutsche Börse Rechenzentrum Eschborn, call centres, (unofficial) detention centres, informal sex work, sterile environments, and second layer markets.

#### Framework

As part of the larger project *Theatrum Mundi / Global Street*, this year-long research project at the Städelschule investigates the question and phenomenon of (informal) trade, spaces of infrastructure, and – more specifically – practices and buildings without a Face/ade. *Theatrum Mundi / Global Street* is a project that aims to bring architects, urban planners, and visual artists together in order to re-imagine questions of the public, publicness, and everyday street culture of 21st century cities. In New York, *Theatrum Mundi* is working on questions of choreography and public speaking, while the London group is working on questions of space, sound and light, the *Städelschule Architecture Class (SAC)* project will investigate the urban reality and potentials of exchange and trade, as well as the objects and spaces that these elements produce, both in relation to the city and to its spatial setting: meeting points, public and otherwise, in the shade, so to speak.

As a starting point, the group will inquire questions of trade and how those practices spatialize within urban environments: what

## Saskia Sassen:

“The Global Street has to do with an emergent condition that belongs to this epoch. There may have been global streets in the past, but I am interested in this global street in this epoch. It is the production and the product of a very specific conjunction, which is a middle-class project of the 20th century in the West and the Keynesian state, the benefactor’s state. This middle class project hit against an obstacle, an unsurmountable obstacle in the form of young people from middle class families who played it by the rules. They were proud of the social contract between state and middle class. And then suddenly the state abandons them, and the economy abandons them. The liberal project finally shows its limits and these are horrendous. Now the middle class begins to aggregate, and Tahrir Square is an example of this process. But this aggregation includes other sectors, which were not part of this tight social contract. For these, the system also failed. Structurally, theoretically, and politically speaking it is for me a conjuncture that repeats itself in country after country after country. And in each country you can detect a different

genealogy, a different trajectory. Tahrir Square is different from New York, which is different from Barcelona and Madrid, and different from Athens.

The interesting thing is that the street is not the piazza. The piazza is a space for making publicness, but it is marked by ritualised practices and embedded codes. We recognize this, and we knowingly or unknowingly contribute to it. We constitute it collectively. The street does not have embedded codes. The street is a space where you may simply find yourself. It is not a destination; it is a thoroughfare. I see in the global street today a space for making, not just for manifesting, not just for demonstrating. A space for those who lack access to the formal instruments of making – whether that making is a history, a civic or public space, a building or a piazza.”

Excerpt from an interview between Saskia Sassen and Clémentine Deliss, London, 27th December 2012.

## “Trading Perceptions”

Weltkulturen Museum and  
Class for Architecture + Critical Spatial Practice, Städelschule  
Theatrum Mundi / Global Street, Frankfurt

### Trading Perceptions

Over the following years, the Weltkulturen Museum will dedicate several exhibitions and events to the overall theme of “Trading Perceptions”. In many respects the museum is a stock-exchange or trading post of perceptions. The diverse relationships that determine the ways in which artefacts have been circulated and traded, the connections of the museum to global commerce, to the city of Frankfurt as well as to changing political and economic incentives are all aspects of this inquiry.

The Weltkulturen Museum houses a unique collection of 67,000 artefacts from Oceania, Africa, Southeast Asia, and the Americas; a media archive with 120,000 historic and contemporary photographs and documentary films; and a library with over 50,000 publications. Given the legacy of the Weltkulturen Museum in 2013, one may ask whether it is possible for ethnographic collections that once offered a scholarly parallel to imperial trade to become relevant once again as reflectors of today’s routes of exchange and changing patterns of citizenship.

In collaboration with guest artists, writers, designers, architects and researchers from various disciplines, the Weltkulturen Museum seeks to understand how and why its collections were formed and how they connect to a complex, multi-layered understanding of trade. This interdisciplinary research process is currently taking place in the museum’s central feature, the Weltkulturen Labor, which comprises of a lab space, project rooms, artists’ studios and guest apartments. All investigations

in the Weltkulturen Labor feed into future exhibitions, events and publications of the museum.

The museum’s examination of “Trading Perceptions” is part of the international interdisciplinary research project *Theatrum Mundi / Global Street* initiated and directed by sociologists Richard Sennett and Saskia Sassen. *Theatrum Mundi / Global Street* aims to bring architects, urban planners, choreographers, musicians and artists together in order to re-imagine questions of public space and everyday street culture.

### Group Research on “Stealth Architecture” in the Weltkulturen Labor

Within the framework of *Theatrum Mundi / Global Street* the Weltkulturen Museum invited the Architecture & Critical Spatial Practice (ACSP) class of Guest Professor Markus Miessen to contextualize their research on the spatialization of (in)formal trade in Frankfurt basing their inquiry on the history of the museum and its complex connections to local and global commerce.

This research involved mapping the various locations of the museum’s collections within Frankfurt and investigating the classification and administration of artefacts and their resulting presence in the urban context. The outcomes of these investigations are being showcased in the exhibition “Stealth Architecture” presented in the museum’s project space, the Green Room, from 7th February to 8th March 2013.

This group research and exhibition feeds into the development of the next major exhibition at the Weltkulturen Museum: “Ware und Wissen / Gift, Legacy, Acquisition, Exchange” (2013 – 2014). Analysing the diverse relationships that have determined different strategies of acquisition and appropriation, as well as methods employed in the administration of ‘foreign’ objects, the exhibition aims to recast the history

of the museum’s ethnographic collection. This investigation goes beyond the local Frankfurt situation. It resonates with issues facing national and international museums of world cultures today. The challenge lies in raising critical awareness of the contexts, access to, and re-organisation of knowledge based on artefacts gathered from different parts of the world. Of particular interest are the historical precedents of transnational trade routes and the influences these have had on the way foreign cultures have been imagined and collected.

### Anthropology and the Geography of Trade

As a ‘free city’ (Freie Reichsstadt) Frankfurt has been at the centre of international trade for over 900 years. Trade routes were established with outposts across the world leading to and from the town. Fairs were featured in Frankfurt ahead of the banks and as early as the eleventh century. In the sixteenth century various duchies and counties in Germany set up trading posts or ‘colonies’ in places such as Ghana, Venezuela, or the Amazon. The exchange of merchandise and knowledge took place beyond the borders of Europe and played a major part in helping to develop German business interests. Trade colonies and protectorates grew in scale towards the end of the 19th century with the official entry of the German Reich into European imperialism. At this point it was generally recognised that successful trade depended on an intimate knowledge of those cultures one intended to negotiate with. For this reason, a logical connection began to develop between anthropology and commercial geography, which ultimately contributed to the foundation of the Städtisches Völkermuseum in Frankfurt, known today as the Weltkulturen Museum.

Founding director Dr. Bernhard Hagen stated in 1904:

“Our German Fatherland has evolved from a major power into a world power, and German trade and commerce now has large, indeed massive interests in all five continents. What did China, let alone Japan mean to a German merchant only 50 years ago? Today, every large manufacturer or merchant must bear these empires in mind, not to mention the Australian and African markets. He is now cognisant of the names of countries and islands of whose very existence he was not the slightest aware but a few years ago, and a slight upset in a remote corner of East of Asia may trigger the most severe stock market crisis here. [...] Now this is a gap not yet filled by the geography of trade. This is where the new science of ethnography comes into play.” ↴

Imported colonial goods alongside ethnographic items were coveted clues to the mysteries of foreign cultures. The motivation in developing the museum’s collection centred on the one hand on the acquisition of and the scientific interest in ritual artefacts that had been brought back

by travellers and researchers. On the other hand, it was everyday objects circulated in villages and markets in New Guinea through to Tierra del Fuego that ignited scholarly as well as bourgeois curiosity. The connections between commerce, changing understandings of other cultures and the flow of their material artefacts have characterised the style of objects acquired by the museum. Certain archive photographs of the museum stores, which depict the results of an ethnographic expedition to the Sepik in the early 1960s are distinctly reminiscent of market displays.

The relationship between the history of the Weltkulturen Museum and systems of trade can be read in the various locations in which the museum and its collections were housed before it was established on Schaumainkai in the early 1970s. The first grouping of ethnographica from different museums and anthropological societies as well as private collections was housed in the “Handelslehranstalt” (School for Commerce) in the Junghofstrasse. This collection of circa 4000 artefacts formed the basis of the newly founded Städtisches Völkermuseum in 1904. From 1904 to 1908 the museum was housed in a former bank, the Gollische Bankhaus in the Münzgasse. As the collection grew, it began to require more space and in 1908 it was moved to the Palais Thurn & Taxis located in the centre of Frankfurt’s business district in the Große Eschersheimer Strasse. In 1944, the Palais was destroyed and with it around one third of the museum’s collection. However, the majority of artefacts were saved thanks to the commitment of Dr. Karin Hahn-Hissink, who worked at the museum and had begun already in 1942 to organise the transport of artefacts to different locations in Germany. From 1945 to 1961 the museum’s collection was housed in a bunker in Frankfurt, Riederwald, and the daily administration of the museum was performed from the private apartment of Dr. Hahn-Hissink in the Myliusstrasse in Frankfurt’s West-end. Until the early 1990s, the museum stores continued to be scattered around different parts of the city. The fact that these collections were stored in ‘secret’ or rather in ‘unofficial’ locations remains a characteristic of their identity to the present day. Within the urban context, these depots are deliberately not identifiable as spaces belonging to the Weltkulturen Museum. Not only are the artefacts hidden, but their remarkable history and value, as well as the knowledge that surrounds them remains ‘stealth’. The research outcomes of the ACSP class offer a first glimpse into these ‘hidden’ infrastructures. [X]

Clémentine Deliss & Yvette Mutumba

↴ Hagen, Bernhard 1904: Rede zur Eröffnung des Völkermuseums (Manuskript). Excerpts published in: Object Atlas – Fieldwork in the Museum, ed. by Clémentine Deliss (Bielefeld: Kerber, 2012) p. 13. Translation: Hubert Beck, Fiona Elliott



▲ Weltkulturen Museum Store, Frankfurt am Main, Osthafen

▲ Weltkulturen Museum Store, Frankfurt am Main, Osthafen



▲ Weltkulturen Museum Store, Frankfurt am Main, Osthafen  
 ▲ Life-sized portrait figure of a Papuan made of plaster and papier mâché (without wig and festive attire), formerly presented in the earlier permanent exhibition of the museum at the Palais Thurn und Taxis. For the history of this figure and the problematic use of such models please see [http://www.journal-ethnologie.de/Deutsch/\\_Medien/Medien\\_2007/Kubai\\_-\\_ein\\_vornehmer\\_Krieger\\_aus\\_Neuguinea/index.phtml](http://www.journal-ethnologie.de/Deutsch/_Medien/Medien_2007/Kubai_-_ein_vornehmer_Krieger_aus_Neuguinea/index.phtml)

▲ Weltkulturen Museum Store, roof of a granary from New Guinea  
 ▲ Weltkulturen Museum Store, masks and parts of log drums from New Guinea

▲▲ Weltkulturen Museum Store, Frankfurt am Main, Riederwald  
 ▲▲



▲ Data centers area, between Hanauer Landstrasse and Schielestrasse, Frankfurt am Main Ost  
▲

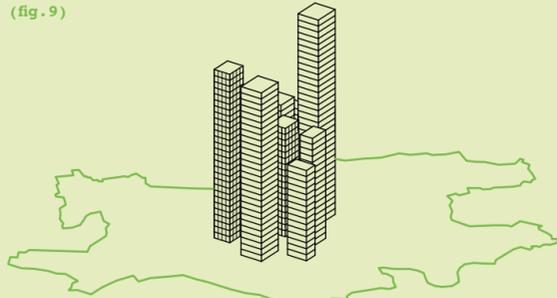
▲ Bunker, Schäfflestraße 18, Frankfurt am Main, Riederwald. From 1945 to 1961 this was the store of the »Museum für Völkerkunde.«  
▲ Since 1987 this space has been used by a carnival social group »Narrhalla 1948« (e.V.).



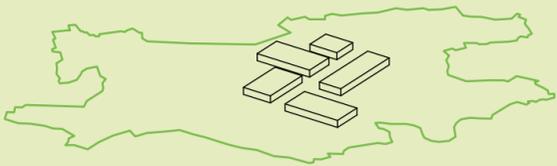
▲ Religious cultural centre (prayer hall), Frankfurt am Main, Hauptbahnhof area

▲ Religious cultural centre (entrance), Frankfurt am Main, Hauptbahnhof area

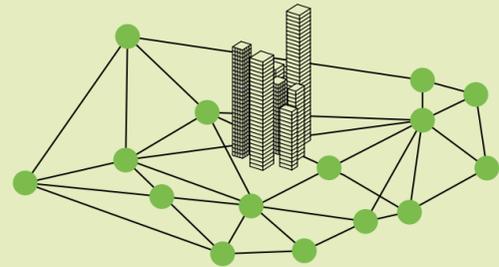
(fig. 9)



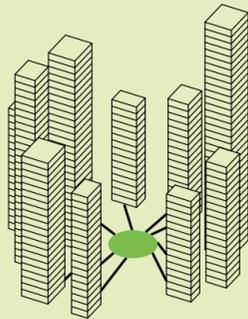
OFFICE SPACE  
example : DEUTSCHE BÖRSE AG ESCHBORN  
23,4 m<sup>2</sup> per employee



DATA CENTER  
example : EQUINIX FRANKFURT  
3 060 m<sup>2</sup> per employee



general internet does not depend on location anymore



electronic trading still depends on low latency!

Hessen is Europe's second largest location for data centers. It has successfully attracted firms that wish to tap into Frankfurt's financial services market. 90% of all German and 35% of all European online traffic is handled in Frankfurt. While Frankfurt has a strong focus, this metropolitan area and other areas in the state also have great strength in manufacturing and for firms sustaining this economic strength, the emphasis remains on building data centers close to headquarters.

<http://www.hessen-it.de/dynasite.cfm?dsid=13424>

### Economies of space

What kind of urban space do data centers (as facilitators of trade) create?

As opposed to office spaces, stock exchanges and banks, where around 25 m<sup>2</sup> facilitates 1 employee, data centers use around 3,000 m<sup>2</sup> per employee. (fig.9)

This huge difference produces different urban conditions, spatialities, and immediately effects the surrounding area and neighborhood. While the relationship between office spaces and urban space can be discussed as one that is muting the urban street life during the night, it usually and nevertheless creates an activation of urban space during daytime, especially during lunchtime. Areas in which data centers are placed, however, become drained of all public life. This phenomenon results in an urban condition in which one is facing culturally empty and programless areas, both during day- and nighttime.

The future predictions today aim at moving data centers out of the cities, which will then, as a result, produce vast single-purpose zones, special economic zones and enclaves. But what happens in those cases, where the close distance still needs to be established to improve low-latency? What happens could happen to urban street life in such case?

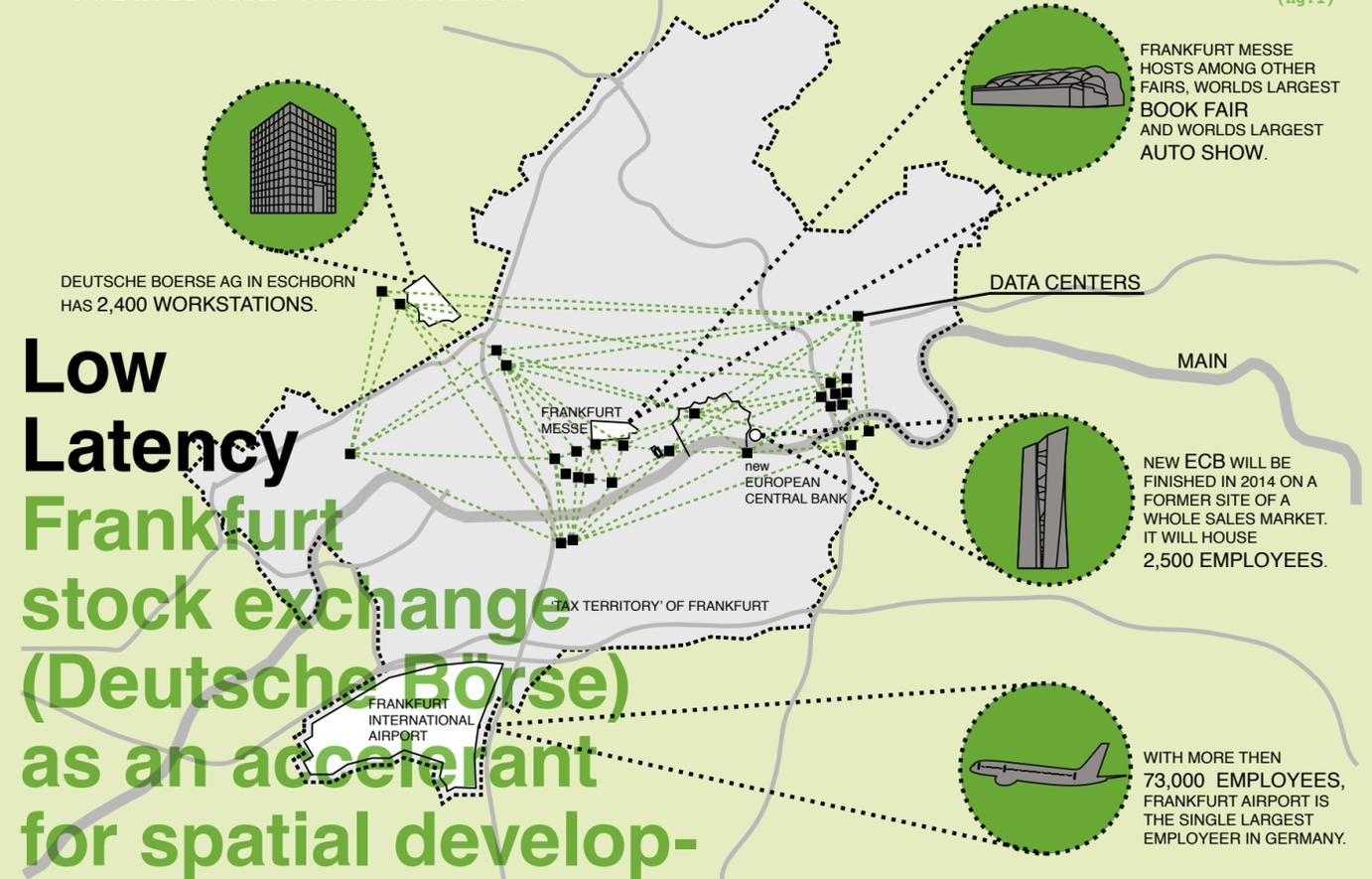
Throughout history, trade was the accelerant for human settlements and urban developments. Today, electronic trade has replaced most other forms of trading and has become an accelerant for the development of new types of urban and spatial infrastructures. As the user interfaces decrease in physical size, the size of the network is rapidly growing and is in desperate need of more physical datums. The transformation of something previously thought of as 'hidden' is showing its face through spatial transformations of urban space as the size of the physical datascapit facilitates increases. Can these spaces somehow allow for urban co-habitation? ■

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Thanks to:  
Weltkulturen Museum / Clémentine Deliss, Yvette Mutumba, Nina Huber

### VITAL TRADE ORGANS / FRANKFURT AM MAIN



(fig. 1)

# Low Latency Frankfurt stock exchange (Deutsche Börse) as an accelerant for spatial development of data center facilities and its impact on urban development

by Iva Baljkas

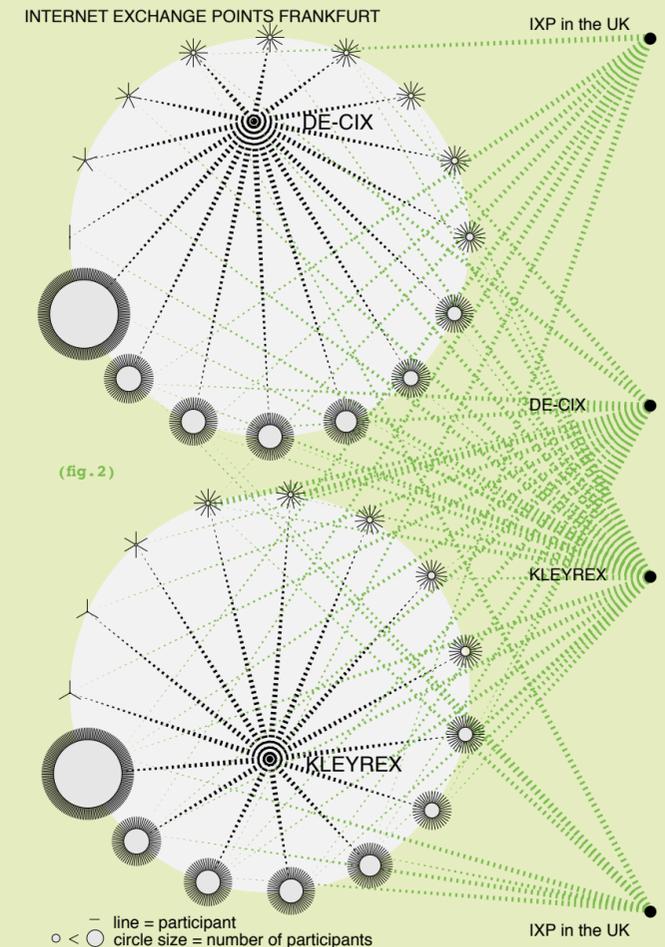
When trade is mentioned, there is one city in the heart of Europe that immediately comes to mind. Frankfurt am Main has the reputation of being the bankers' city. With its highrises that create an atmosphere of an American downtown, it is sometimes referred to as 'MAINhattan' amongst its residents.

Frankfurt's geopolitical location in the heart of Germany, between the major rivers of Rhein and Main, has been a central advantage for trade possibilities and potentials throughout history. Frankfurt's trade fairs date back to the 12th century while the 'Messe', the well known Frankfurt Trade Fair, was established on today's premises in the beginning of the 20th century.

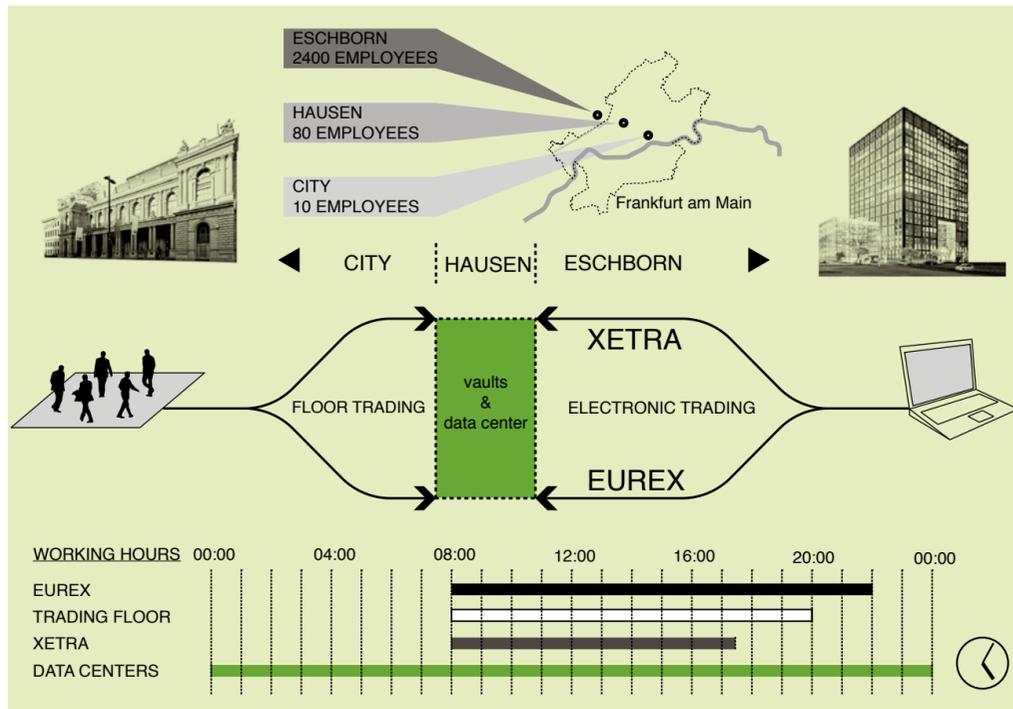
Vital trade organs in Frankfurt can be recognized through the 'European Central Bank', the 'Messe', 'Frankfurt Inter-

national Airport' and 'Frankfurt Stock Exchange' (FSE). Likewise, most European and global banks have facilities located in the highrise agglomeration of the Bankenviertel. (fig.1)

The world's 10th largest stock exchange by market capitalization is located in the Innenstadt, within the central business district. Frankfurt's 'Wertpapierbörse' is operated by 'Deutsche Börse'. The stock exchange is usually thought of as brokers hectically moving around, panically following second-by-second news on screens, while talking to several other global traders on the phone. However, today's reality has changed dramatically, especially in regard to its spatial repercussions. (fig.2)



(fig. 2)



(fig. 3)

A short history of Deutsche Börse

The origins of the stock exchange in Frankfurt date back to the 9th century, but it was only in the 16th century that Frankfurt became an economically prosperous city with foundations in trade and other financial services. It was then that the Börse was founded to set the first fixed currency exchange rates. In the 1870's FSE moved to its location at Börsenplatz. In 1993, Deutsche Börse became the owner of FSE, and it operated businesses for the exchange.

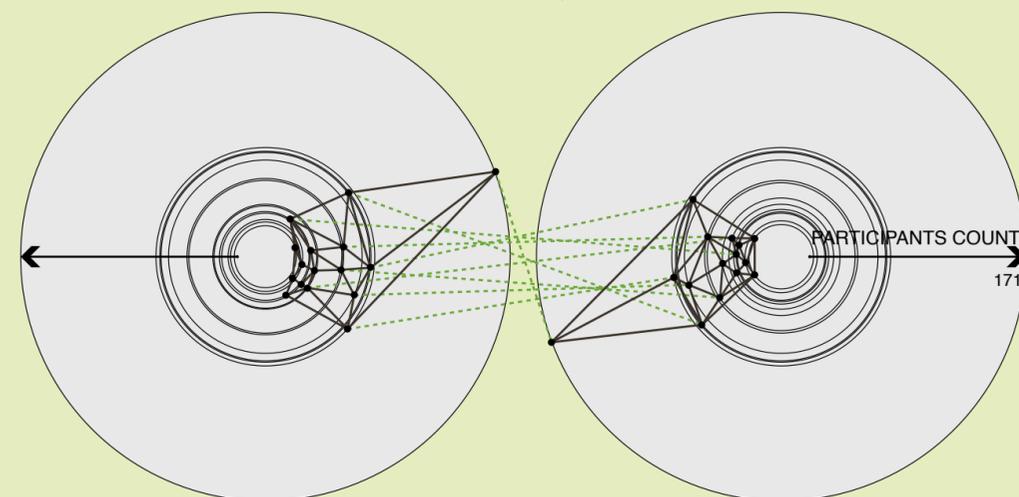
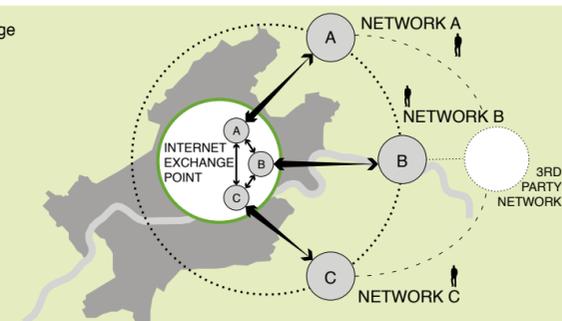
Today, 'Deutsche Börse Group' (DBG) holds three different locations and sites in the larger Frankfurt area. The headquarter employs more than 2,000 workers and is located in Eschborn, just outside the tax territory of the city of Frankfurt. Before DBG moved to Eschborn it was located in Hausen, in the western part of Frankfurt, but currently only the vaults and the data center remain at this site. The image

that comes to mind when thinking of trading – the one of brokers shouting and staring at large screen – is still operative in the city's center, at the 'Börsenplatz', but with only 10 employees of DBG. (fig.3) Most of the trading is electronic trading, through Xetra and Eurex, trading systems for securities and shares, developed by DBG and spread throughout the world. (fig.4)

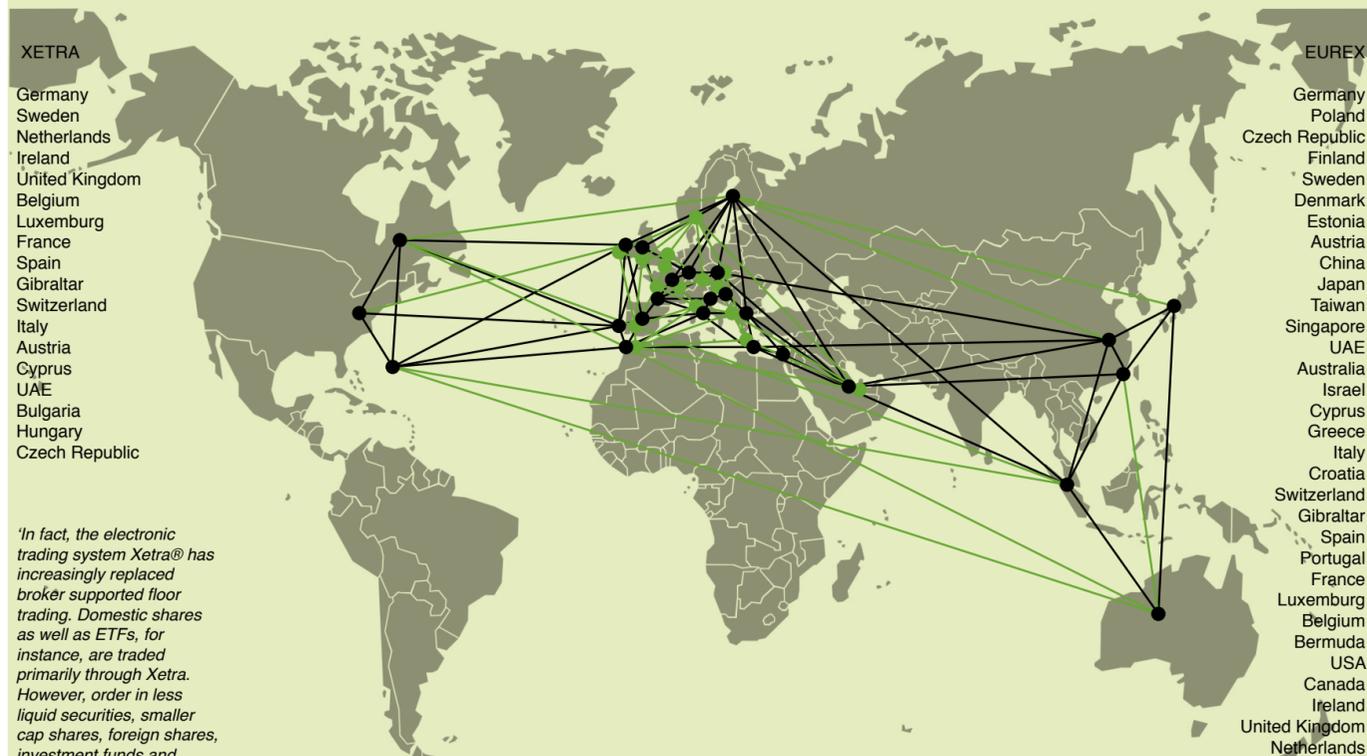
What is it that enables electronic trade?

An Internet Exchange Point (IX or IXP) is a physical infrastructure through which Internet Service Providers (ISPs) exchange Internet traffic between their networks. Is the fact that Frankfurt has the largest Internet Exchange Point in the world (by peak traffic) somehow related to the (spatial) phenomenon of the Frankfurt Stock Exchange?

Full name: Deutscher Commercial Internet Exchange  
 Abbreviation: DE-CIX  
 Founded: 1995  
 Location: Frankfurt, Germany  
 Website: www.de-cix.net  
 Members: 225  
 Ports: 277  
 Peers: 487  
 Peak: 2232.68 Gbit/s = 2 TERABITS/SEC  
 Daily (avg.): 1369.7 Gbit/s



(fig. 4)



'In fact, the electronic trading system Xetra® has increasingly replaced broker supported floor trading. Domestic shares as well as ETFs, for instance, are traded primarily through Xetra. However, order in less liquid securities, smaller cap shares, foreign shares, investment funds and almost all bonds are still traded on the Frankfurter floor. Moreover, after the closing of trade on Xetra at 5.30 p.m., late trading in all securities takes places exclusively on the floor.'

<http://deutsche-boerse.com>

- EUREX
- XETRA

Eurex is one of the world's leading derivatives exchanges, providing European benchmark derivatives featuring open and low-cost electronic access globally. Eurex was established in 1998 with the merger of Deutsche Terminbörse (DTB, the German derivatives exchange) and SOFFEX (Swiss Options and Financial Futures).

Xetra ("Exchange Electronic Trading") is a worldwide electronic securities trading system based in Frankfurt, Germany. It was created for the Frankfurt Stock Exchange and launched in November, 1997. More than 14 stock exchanges around the world have licensed the Frankfurt Stock Exchange Xetra electronic trading platform.

- KLEYREX**
- 1 COLOCENTER FRANKFURT / ESCHBORN
  - 2 TELEHOUSE FRANKFURT
  - 3 INTERNIC FRANKFURT
  - 4 EQUINIX FRANKFURT CITY
  - 5 AIXIT OFFENBACH
  - 6 DATABURG FRANKFURT
  - 7 AIXIT FRANKFURT
  - 8 TELECITY GROUP FRANKFURT/ LYONER STRASSE
  - 9 NEWCOLO FRANKFURT
  - 10 TELECITYGROUP FRANKFURT
  - 11 ITENOS FRANKFURT
  - 12 INTERXION FRA2
  - 13 INTERXION FRA3
  - 14 INTERXION FRA1
  - 15 INTERXION FRA4
  - 16 ANCOTEL FRANKFURT
- DE - CIX**
- 1 EQUINIX FRANKFURT CITY
  - 2 EQUINIX FRANKFURT NORTH
  - 3 GLOBAL CROSSING FRANKFURT
  - 4 EQUINIX FRANKFURT CITY
  - 5 DATABURG FRANKFURT
  - 6 INTERXION F RA 6
  - 7 NEWCOLO FRANKFURT
  - 8 INTERXION FRA 5
  - 9 TELECITY GROUP FRANKFURT
  - 10 ITENOS FRANKFURT
  - 11 INTERXION FRA 2
  - 12 INTERXION FRA 3
  - 13 INTERXION FRA 1
  - 14 INTERXION FRA 4
  - 15 ANCOTEL FRANKFURT

(fig. 5)

SHARED DATA CENTERS

Internet Exchange points and data centers in Frankfurt

In 1995, DE-CIX (Deutsche Commercial Internet Exchange), the world's largest Internet exchange point (by peak traffic), established its headquarters in Frankfurt.

A closer look into networks and the Internet as a 'network of networks' demonstrates that Internet exchange points were developed, historically, so that different networks, carriers and Internet service providers can peer with one another for free. The process of peering happens when two networks exchange data between each other's customers for free and for mutual benefit.

Why is it that the largest peak traffic of 2 terabytes per second happens in Frankfurt?

Internet exchange points are operated through multiple data centers across the city. The two biggest Internet exchange points in Frankfurt also share

space in the data centers, so that the process of peering can work more efficiently. Almost half of the data centers are shared in that way between DE-CIX and Kleyrex, the two largest Internet exchange points located in Frankfurt. (fig.5)

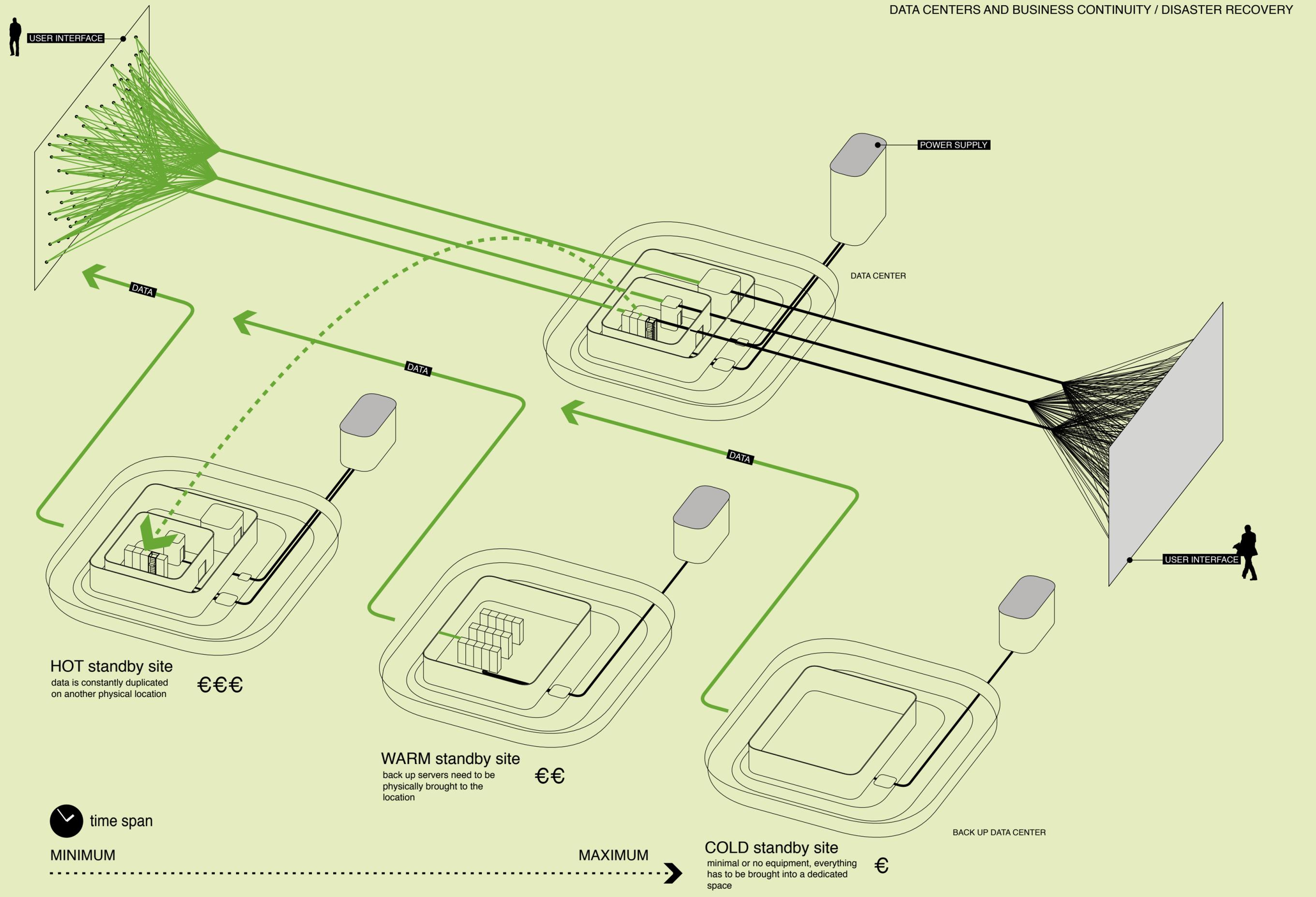
These two territories and sites have the most dense accumulation of data centers, one in the West of the city and the other one towards the East. However, data centers can also be found all around town. Spatially, these locations are chosen so that they are close to neighborhoods in which exchange and trade take place. The area in the West is close to the Bankenviertel and the newer one, near Osthafen, is close to the new premises of the European Central Bank (ECB), which will open in 2014 and will employ around 2,500 workers. The physical distance from the data centers to the spaces of actual trade can be best described by using the term 'low-latency'.

Low-latency is a crucial aspect in capital markets, where speed of reaction of the company towards respective markets needs to be faster than the one being utilized by the competitors' reaction in order to increase profit. General Internet connections are not dependent on physical location anymore, as the global communications networks have improved and the costs of having access to the Internet have decreased substantially.

When it comes to trading, however, the physical, i.e. spatial, location is still of primary importance. The result of this capitalist process is that the trading engines and data centers can territorially be found as close to the stock exchanges as possible, in order to reduce latency even more. This is also where and when 'retrofitted' versus 'purpose built' data centers come into the discussion.

Purpose built data centers are more sustainable, more secure and based on more effi-

cient internal organization. The central problem in regard to urban development is that these huge facade-less objects can only be placed in the outskirts of the city. On the contrary, retrofitted data centers are not so efficient in regard to performance, but can be placed within the spatial exchanges or extremely close to them, even though they are less sustainable and have less space for servers in their maze-like spatial configurations.



USER INTERFACE

POWER SUPPLY

DATA CENTER

DATA

DATA

DATA

USER INTERFACE

**HOT standby site**  
data is constantly duplicated on another physical location  
€€€

**WARM standby site**  
back up servers need to be physically brought to the location  
€€

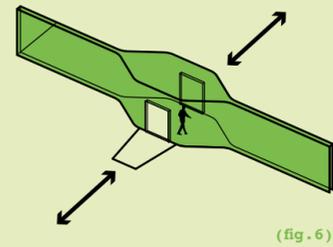
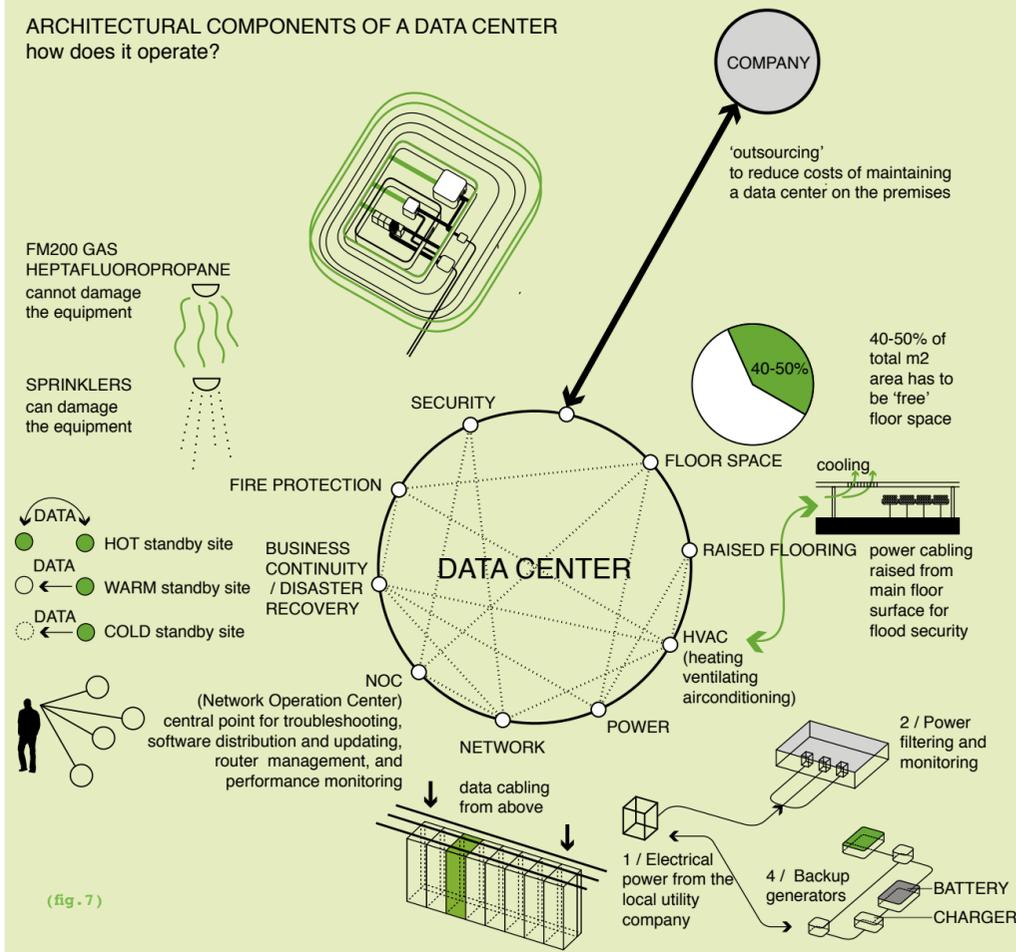
**COLD standby site**  
minimal or no equipment, everything has to be brought into a dedicated space  
€

BACK UP DATA CENTER

time span  
MINIMUM

MAXIMUM

ARCHITECTURAL COMPONENTS OF A DATA CENTER  
how does it operate?



(fig. 6)

Security issues

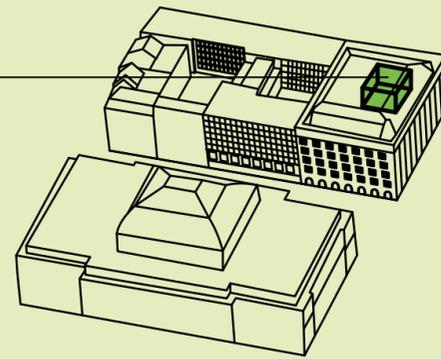
One of the most relevant issues in regard to contemporary data centers is security, both in cyber- and physical space. Cyber security can be reduced by ensuring that a data center is cloud enabled and virtually protected. Physical security is another issue. Data centers use different physical layers of spatial security. Usually the area around the data center is fenced and video monitored for a variety of potential hazards. To physically enter a data center, one has to pass ID control and, to get close to the servers, companies make use of proximity cards, biometric radars and mantraps - a new kind of 'deep space', with two doors, where only one person can enter at the time and only when the first door is closed the second one opens to let the person enter the next space.

Clients can also dictate a specific security package when renting out a separate room within the server space(s). On the other hand, information flow enters the space through heavy cabling. (fig. 7) In today's global market system, money means data. Hence, data centers today are more secure than the banks that supposedly hold that very money. (fig. 8)

For a data center to be operated, different architectural components have to be put in place and enabled, from raised floor to heating and ventilation systems, from power back up to fire security, from network cabling to percentage of server area. The most important aspect, however, is business continuity and disaster recovery. All data centers have different and several forms of back up. They differ in time and cost required to run the back up data center.

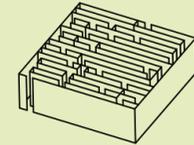
A 'hot' data center backs up data as data is received in the main data center. These sites obtain all the equipment that the main data centers hold while they can start running immediately in case the source data center faces any kind of hazard. Hot back up data centers have all the physical requirements for a data center to run, but the actual servers need to be brought in one by one. A 'cold' data center only occupies a space as if it was only reserving a territory for business continuity. All equipment has to be brought in. Cold data centers also take most time to start running.

DATA CENTER



Maze-like configuration

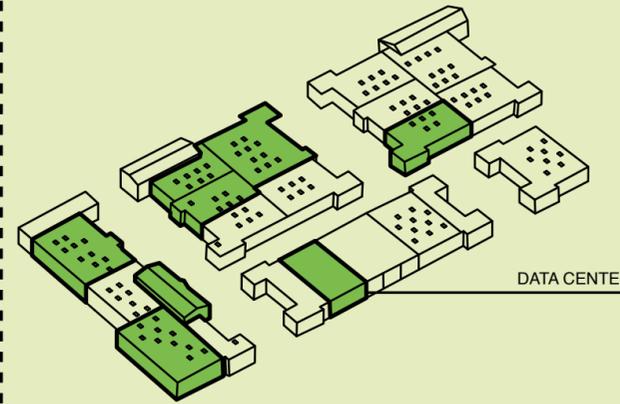
- .Ramps up to white floor
- .Odd shaped rooms
- .Mechanical gear on white floor
- .Maintenance on white floor
- .Loading dock in rear of building
- .Complex infrastructure layout
- .Separated white floor



RETROFITTED



AIXIT FRANKFURT BORSEN PLATZ



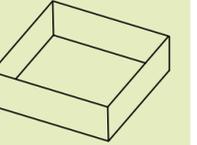
DATA CENTERS

PURPOSE BUILT



INTERXION FRANKFURT HANAUER LANDSTRASSE

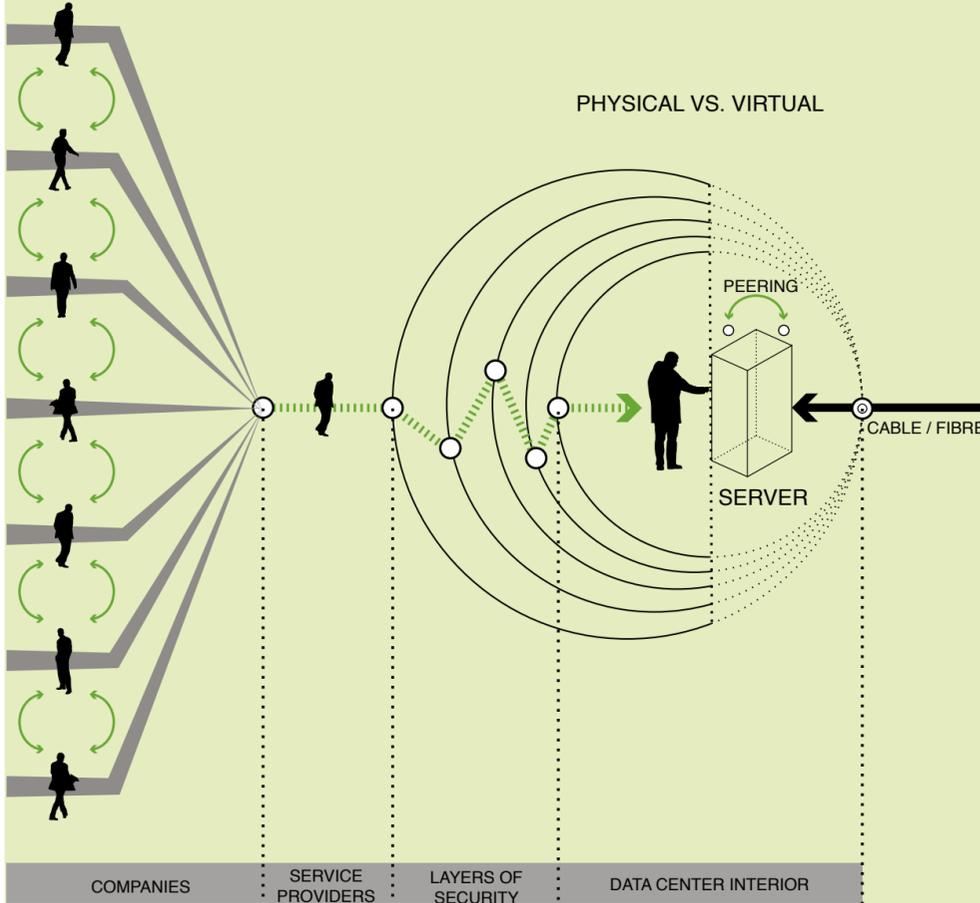
- .Simple floor plan
- .No ramps
- .Mechanical gear in gallery
- .Maintenance off white floor
- .Loading dock and entrance near security booth
- .Simple infrastructure layout
- .Single white floor space



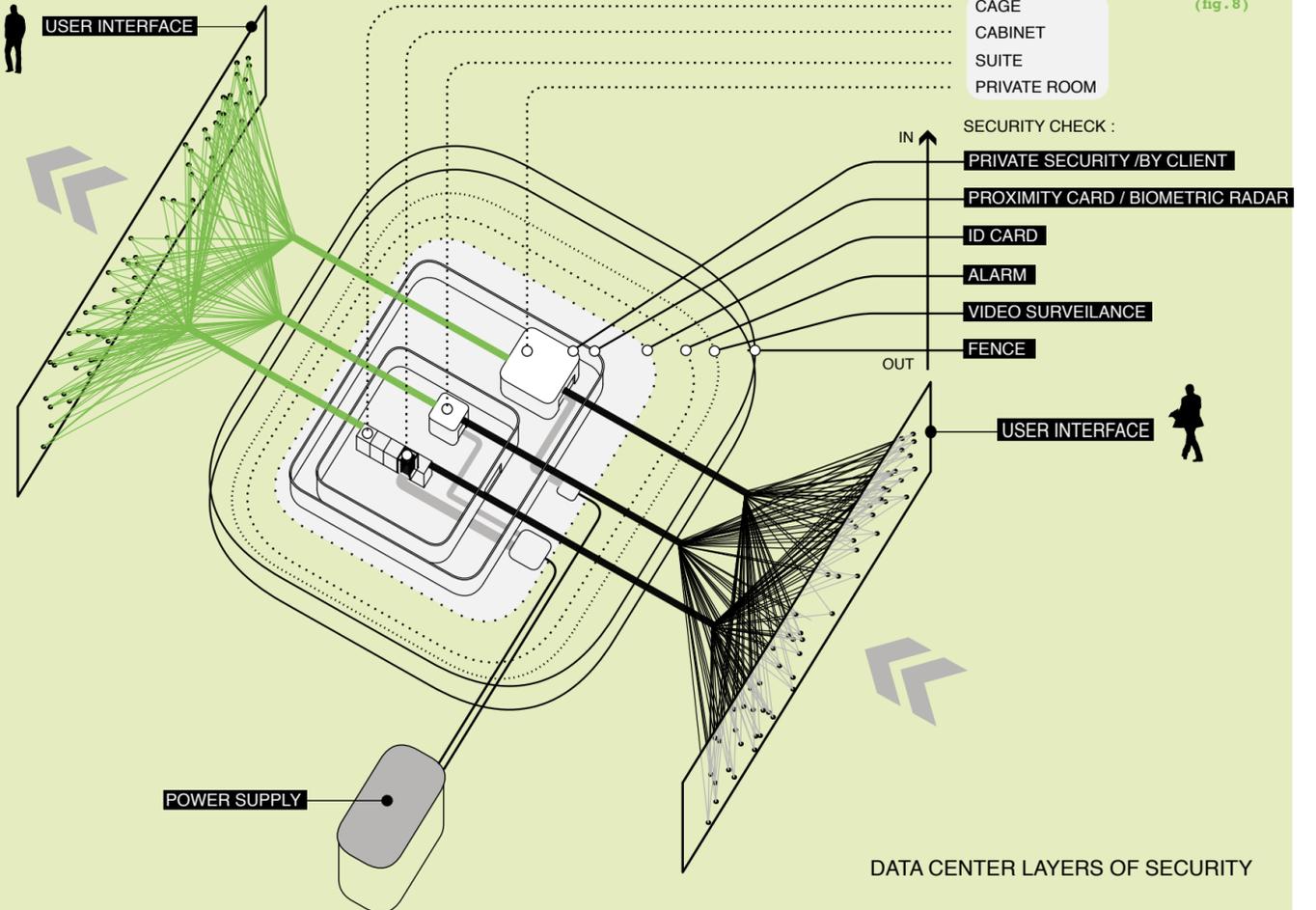
(fig. 8)

WAYS OF ENTERING A DATA CENTER

PHYSICAL VS. VIRTUAL

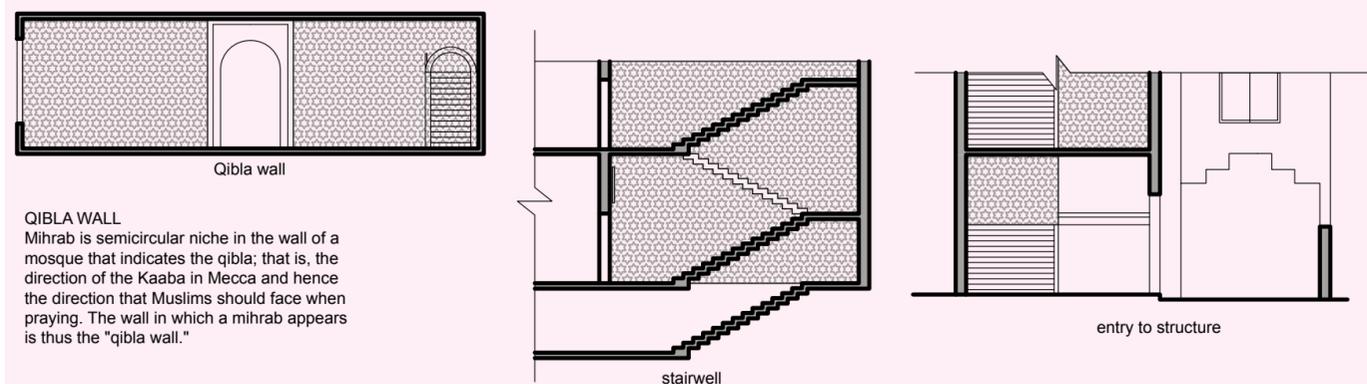
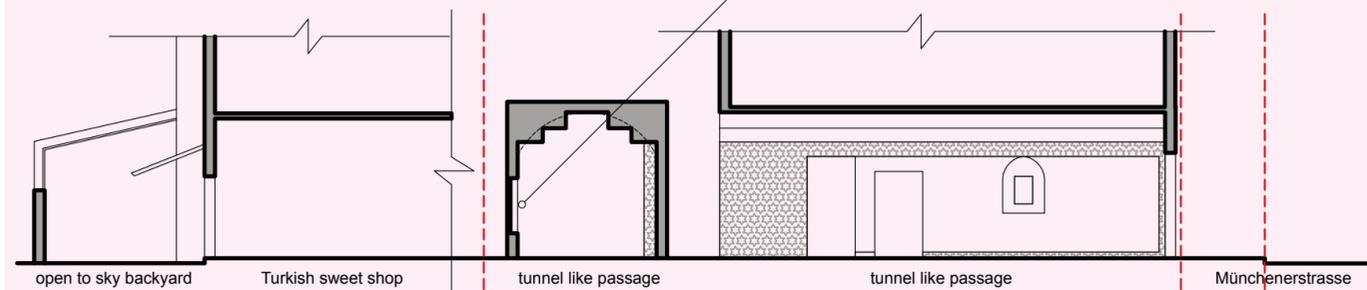
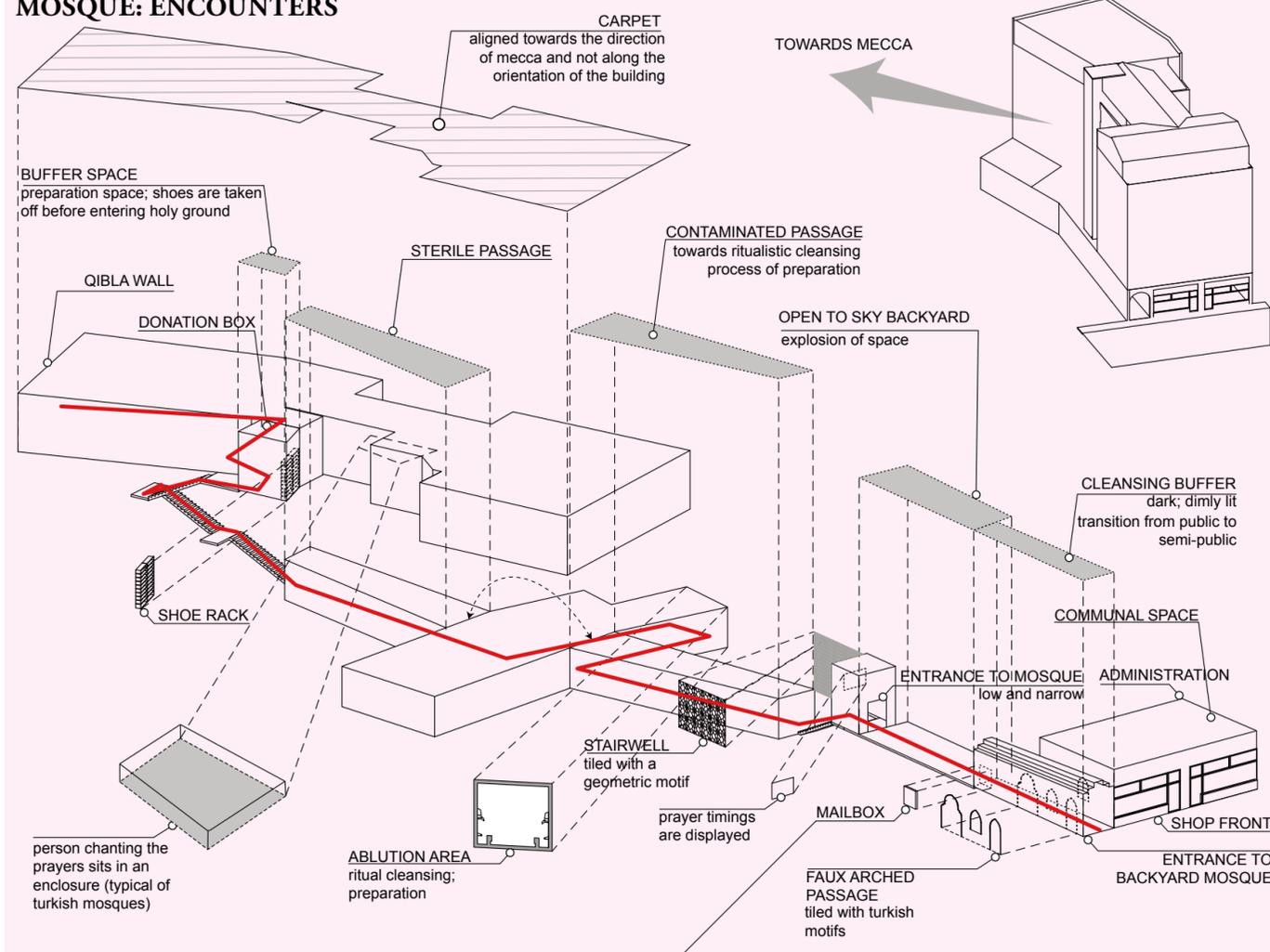


880 PARTICIPANTS PEER AT DE-CIX EXCHANGE POINT FRANKFURT



DATA CENTER LAYERS OF SECURITY

## MOSQUE: ENCOUNTERS



The Central Mosque in *Münchenerstrasse* is a perfect example of a retrofitted stealth space. Inconspicuous from the street, it nevertheless provides the infrastructure and sets the stage for a vibrant local neighbour-

hood. Its parasitic beginnings (i.e. parasitic takeover of a former residential building) have now settled into a symbiotic relationship with other trade spaces on *Münchenerstrasse* (eg. The Turkish bookstore, Music

store, supermarkets etc). This second layer communal space serves as an information dispenser to locals and new comers as well. ■

# INCIDENTAL SYMBIOSIS

by Joel Roy

*'If a building or building-idea or book has content, conveys content, disseminates content, then it is a container: in other words it is close to nothing. It is certainly no organism, nothing with signs of life.'* ↓

*'When we think about space, we have only looked at its containers. As if space itself is invisible, all theory for the production of space is based on an obsessive preoccupation with its opposite: substance and objects, i.e. architecture'* ↓↓

The *Bahnhofsviertel* of Frankfurt am Main, Germany (circa 2012) is a vibrant neighbourhood. It is an accumulation of various layers; social, physical and economic. Home to the largest percentage of immigrant population in Frankfurt, the *Bahnhofsviertel* is an amalgam of old buildings as well as some recent additions. The new structures appear to meld into the existing urban fabric thus rendering them incognizant. Seemingly homogenous, the façades encompass myriad programmes obscured by its faux-classicism. The result is a nebulous heterogeneity.

The expansion of old cities to accommodate the new – structures, people or programmes – is now a global phenomenon. The old is either being torn down or retrofitted to suit the new. Zoning of neighbourhoods has been an often-used tool to structure these changes. The *Bahnhofsviertel* was designated and designed as a residential neighbourhood to accommodate 11,000 local residents. However, current estimates peg that figure at 2,125 residents. What happened to the residual spaces? Current practices in urban planning involve delineation of urban areas into specific zones. Even so-called 'mixed-use' developments are demarcated as such. Does zoning lead to spatial limitation? Does it subvert interpenetration of layers? Zoning and demarcation are rigid tools that seek to wrest control away from the street-level and reduce the possibility of unintended consequences; harmful or beneficial.

### COLLABORATION: INTENTIONAL OR INCIDENTAL?

The plan for the revitalization of the *Bahnhofsviertel* envisages the district as a mixed-use zone. ↓↓↓ However, it does not account for the fact that the *Bahnhofsviertel* is already a dense colloid of spatial uses. Sports bars double up as spaces similar to Turkish teahouses. Religious spaces become areas of rest or meeting grounds for business and communal discussions. They serve as information dispensers to a local community and act as catalysts for trade. Immigrants, corporate workers, informal markets, religious spaces, second-layer communal spaces co-exist, cross-pollinate and enrich each other.

*'Collaborative processes necessarily function within a given framework. They imply a closed system in which the options available for choice and those who present them cannot be challenged.'* ↓↓↓↓

In a radically dynamic world, does the architect impose his or her vision on collaborative processes? Parasitic instances of architecture and program that lie beneath the visible abound and make the *Bahnhofsviertel* the complex neighbourhood it is. Users take over a space, adapt it and make it their own. They form representative groups to communicate between their heterogeneous communities and the authorities. A dialogue is set up between those two stakeholder groups for the benefit of the neighbourhood and the city at large (the *Bahnhofsviertel* has one such forum). Older spaces are retrofitted to accommodate new programmes. The intended use of the space is diluted and new user groups emerge. The older façades remain, concealing and lending credibility to the new user.

### TORRE DAVID (CARACAS, VENEZUELA): URBAN BLIGHT OR FUTURE MODEL?

*Torre David* is the 3rd tallest skyscraper in Venezuela. Although construction began in 1990, it has not yet been finished due to the crisis of 1994. The building lacks basic facilities like electricity, running water balcony railings and even walls in many places. Despite these, squatters have since occupied the building. Today more than 750 families live in this structure that occupies a legal grey zone. Residents have managed to equip themselves with running water up to the 22nd floor. An ad-hoc community with homes, stores and even a dentist running his practice from the tower has appropriated the derelict concrete shell. The *Torre David* project in Caracas is an example of the power of parasitic interventions within even a literal rigid framework. ↓↓↓↓ Where does the role of the architect stop? Does it stop at all? Can the architect be a catalyst for parasitic (as opposed to purely collaborative) processes? Is that contradictory? Does it mean that, like in the accidental case of *Torre David*, the architect facilitates the construction of a space for such entropic takeovers?

### CAN THE ACCIDENTAL BE DESIGNED?

Beyond the default modes of design practices, what are the possible avenues that an architect can explore in order to act as a 'spatial enabler'? What kind of architecture allows for parasitic spatial behaviour to occur and then stabilise into a symbiotic urban relationship (as in the case of the *Bahnhofsviertel*)? In a scenario like this, what role does the architect play? The architect may help to prepare for this, eventuality; as an enabler, the architect provides guidelines that are malleable enough to allow for such accidental parasitic instances. The process can then be designed to allow it to run its course with a certain degree of control thereby opening up multiple possibilities. A measure of control is required to enable the space and for users to find its equilibrium. However, control is exerted only in terms of a catalogue of potential guidelines. Such a parasitic process enables a neighbourhood to grow as an aggregation of diverse instances multiplying the chances of unintended consequences – thereby contributing to the proliferation of a vibrant urban neighbourhood.

↑ Bill Millard (2004) Banned Words! Content pp 91  
 ↑↑ Rem Koolhaas, Junkspace, Content pp 163

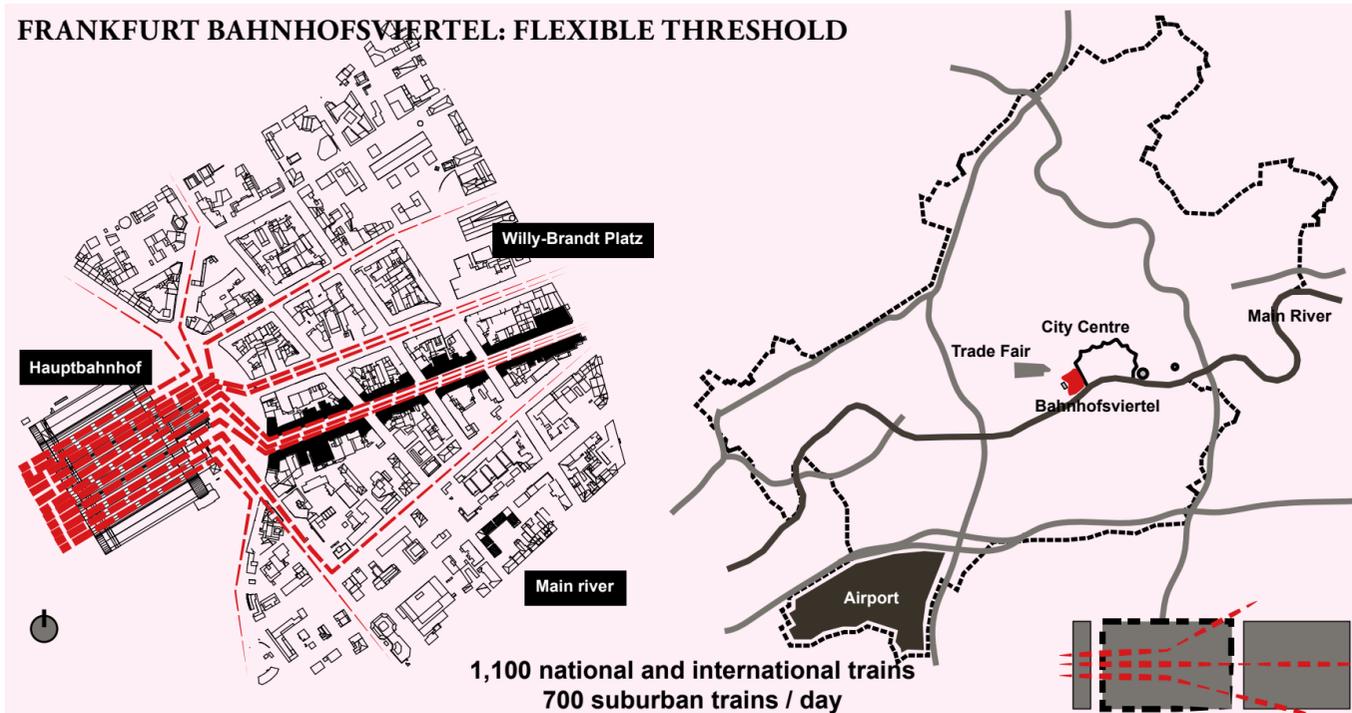
↑↑↑ Frankfurt state plan  
 ↑↑↑↑ Eyal Weizman, The Paradox of Collaboration, The Nightmare Of Participation pp 9

↑↑↑↑ Urban Think Tank, Torre David

Thanks to:  
 Weltkulturen Museum / Clémentine Deliss,  
 Yvette Mutumba, Nina Huber

## How does an architect enable parasitic processes in an urban fabric?

## FRANKFURT BAHNHOF SVIERTEL: FLEXIBLE THRESHOLD



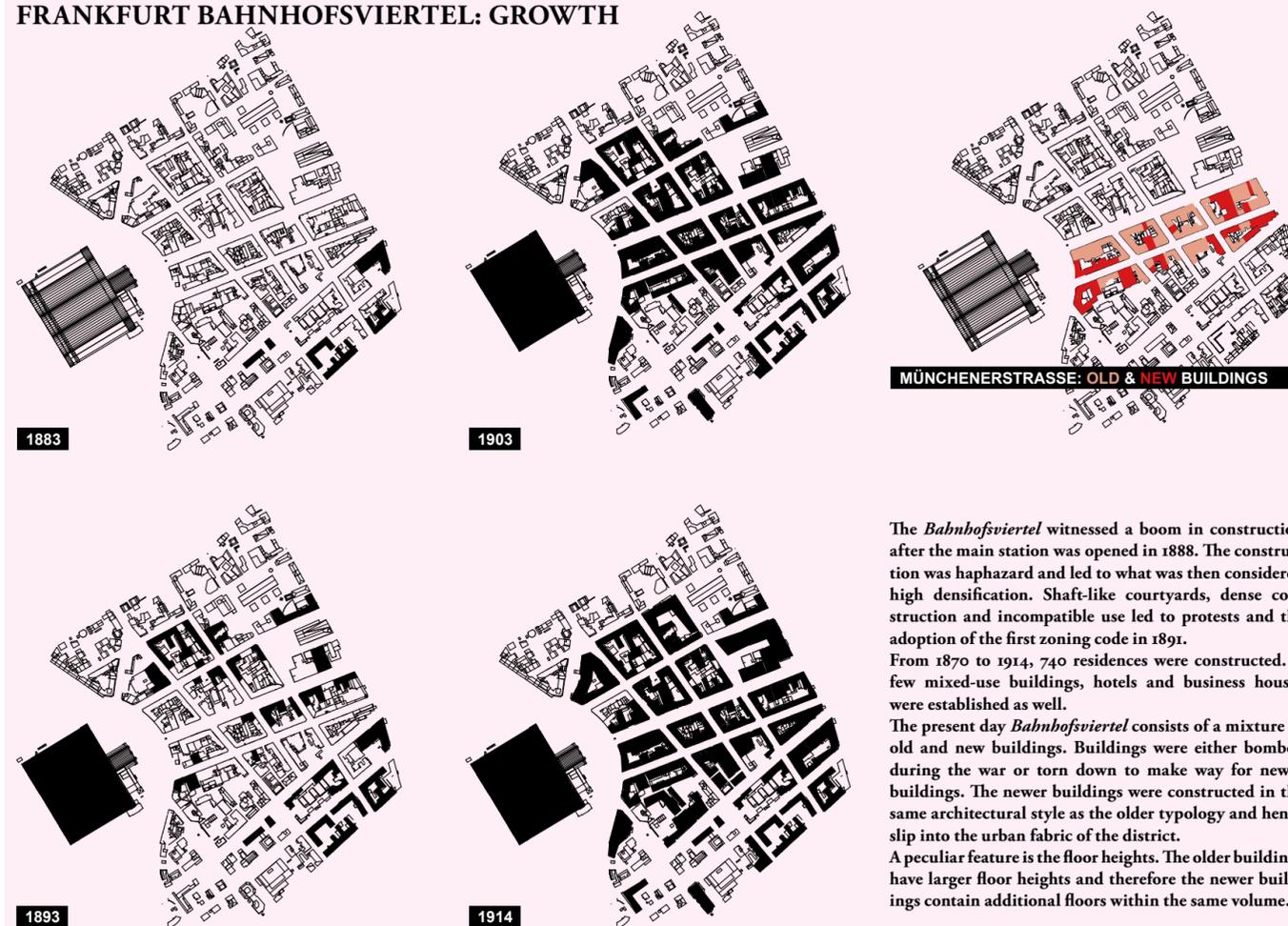
1,100 national and international trains  
700 suburban trains / day

Frankfurt's central station is the most important rail transport hub in Germany. Every day, more than 1,100 trains connect the city with many national and international destinations and around 700 suburban railway trains take passengers to stations within Frankfurt and the surrounding area.

Flanked by the so-called 'Bank District' (Willy-Brandt-Platz area), the city centre to the West, and the Trade Fair and other upscale locations to the East, the *Bahnhofsviertel* is a study in contrasts. Banks, corporate entities, markets, sex trade, and tolerated drug consumption co-exist in this vibrant and unpredictable hotbed of the informal.

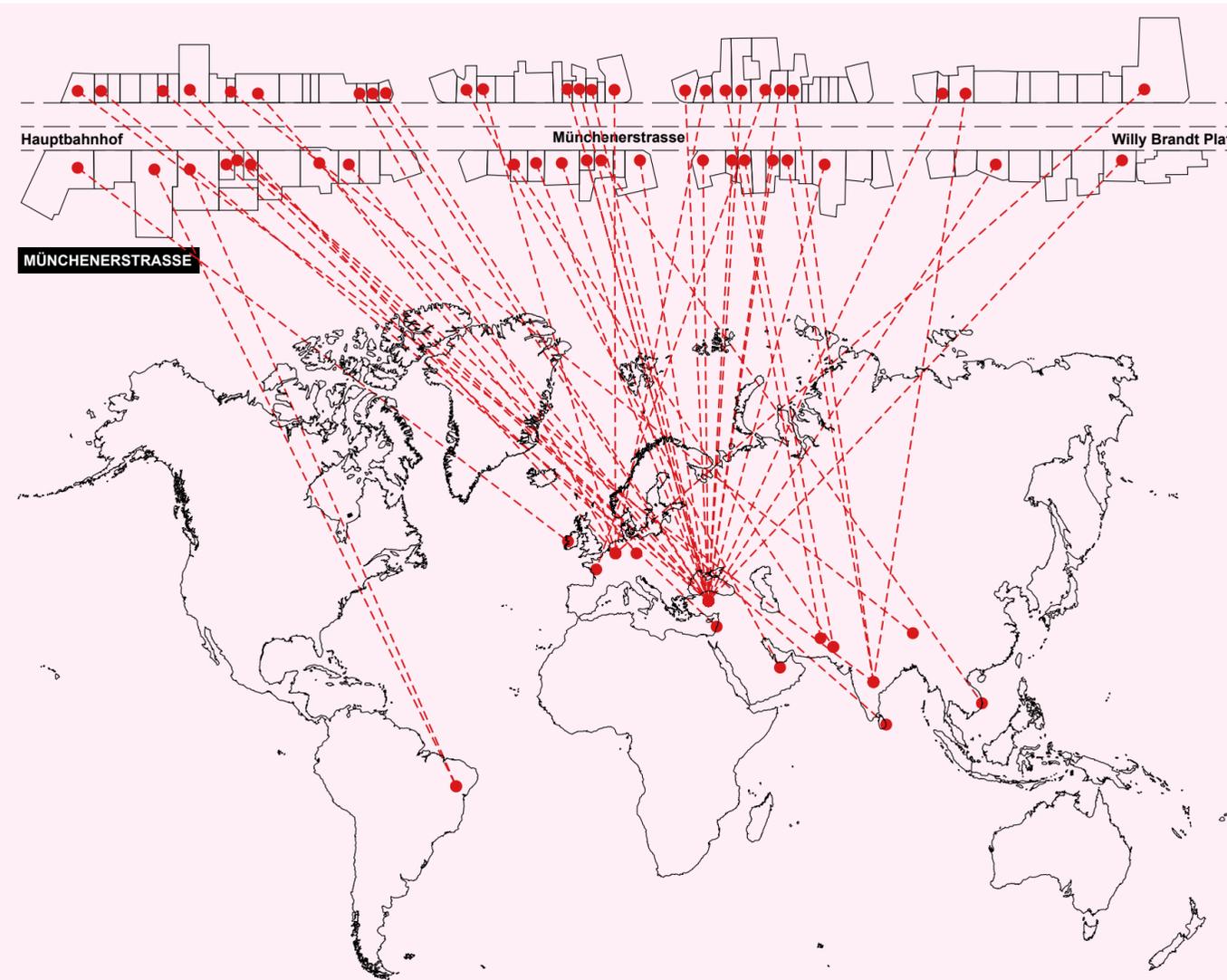
The *Bahnhofsviertel* presents a pause, a rupture; a threshold in the city that allows a visitor to immerse in its heterogeneity before entering the homogenized city itself.

## FRANKFURT BAHNHOF SVIERTEL: GROWTH



The *Bahnhofsviertel* witnessed a boom in construction after the main station was opened in 1888. The construction was haphazard and led to what was then considered high densification. Shaft-like courtyards, dense construction and incompatible use led to protests and the adoption of the first zoning code in 1891. From 1870 to 1914, 740 residences were constructed. A few mixed-use buildings, hotels and business houses were established as well.

The present day *Bahnhofsviertel* consists of a mixture of old and new buildings. Buildings were either bombed during the war or torn down to make way for newer buildings. The newer buildings were constructed in the same architectural style as the older typology and hence slip into the urban fabric of the district. A peculiar feature is the floor heights. The older buildings have larger floor heights and therefore the newer buildings contain additional floors within the same volume.



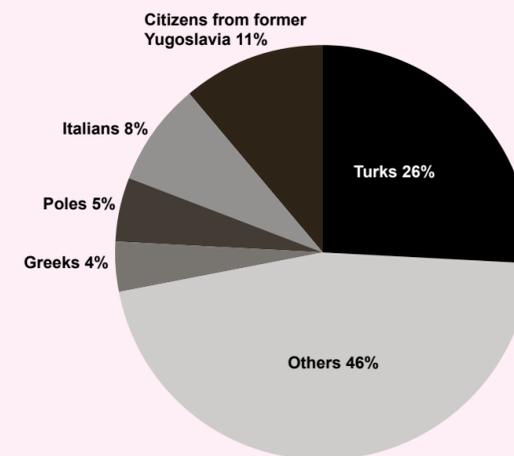
69% of the population in the *Bahnhofsviertel* have an immigrant background.

## FRANKFURT BAHNHOF SVIERTEL: IMMIGRATION PATTERNS

The general socio-spatial development of Frankfurt should not hide the fact that some districts have a high concentration of foreigners. In 1999, the highest concentration of foreigners was found in inner city districts, which were characterised by a high proportion of old buildings, comparably low housing standards and many small businesses. The districts that are situated north of the Main river in Frankfurt registered the highest proportions of foreigners – namely: *Bahnhofsviertel* (69%), *Gutleutviertel* (55%), *Innenstadt* and *Gallusviertel* (both 48%). 69% of the population in the *Bahnhofsviertel* have an immigrant background.

Frankfurt has the highest density of jobs in Germany, at 918 jobs to 1,000 residents. This high concentration of jobs can be attributed to the number of commuting professionals. In 2002, more than two thirds (65%) of all people employed in Frankfurt resided outside the city. Of Frankfurt's 2005 resident population, almost half (48%) are gainfully employed, of whom 62% are white-collar workers, 18% are blue-collar workers, 15% are self-employed, and 5% are government officials.

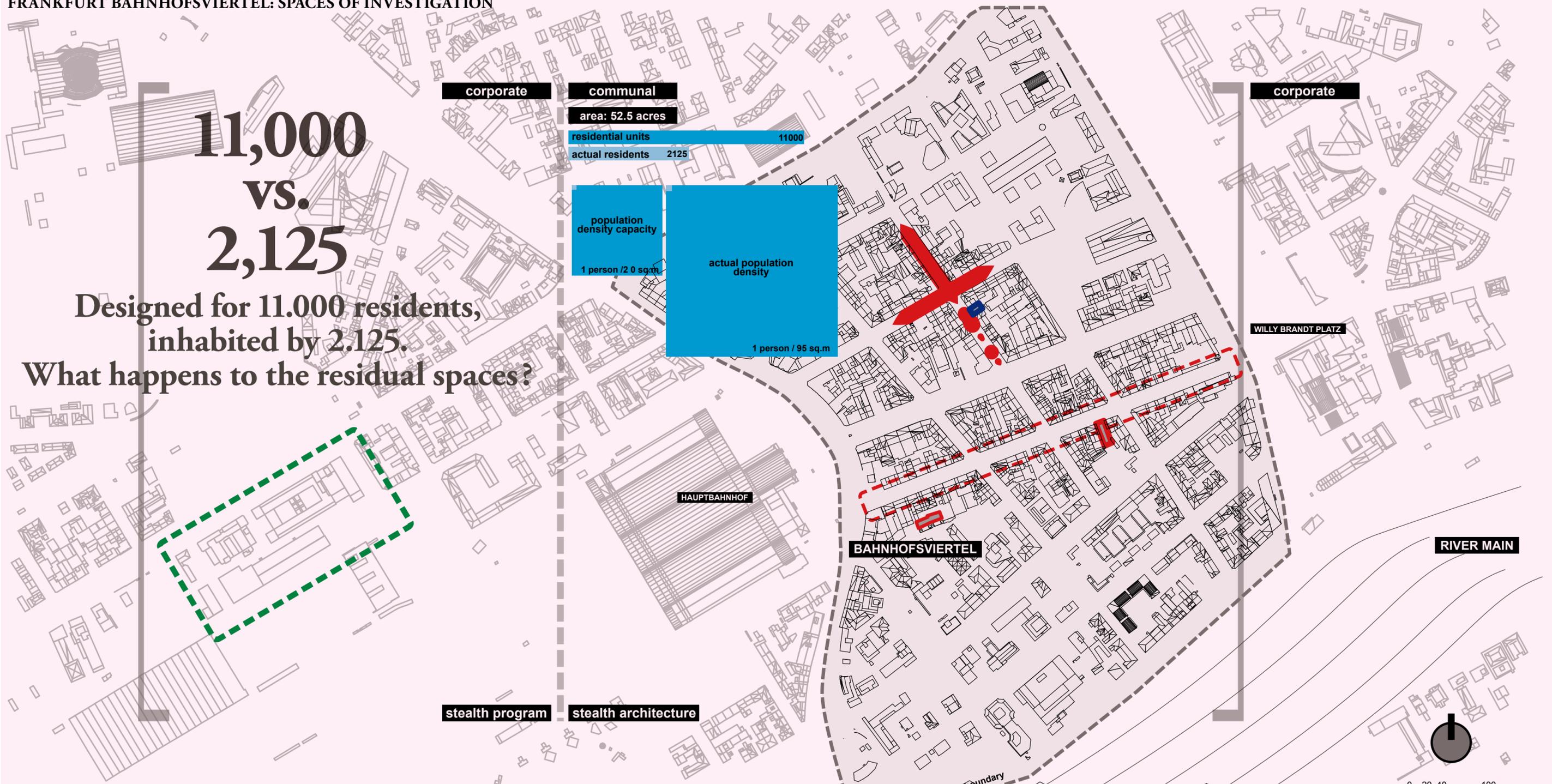
Foreigners in Germany, by nationality, 2006 (%)



Source: Compiled by the European Forum for Migration Studies (EFMS) based on data from the Federal Statistical Office of Germany (Statistisches Bundesamt Deutschland, Destatis), 2006

11,000  
vs.  
2,125

Designed for 11.000 residents,  
inhabited by 2.125.  
What happens to the residual spaces?



corporate

communal

corporate

area: 52.5 acres

residential units 11000

actual residents 2125

population density capacity

1 person / 20 sq.m

actual population density

1 person / 95 sq.m

HAUPTBAHNHOF

BAHNHOFSVIERTEL

WILLY BRANDT PLATZ

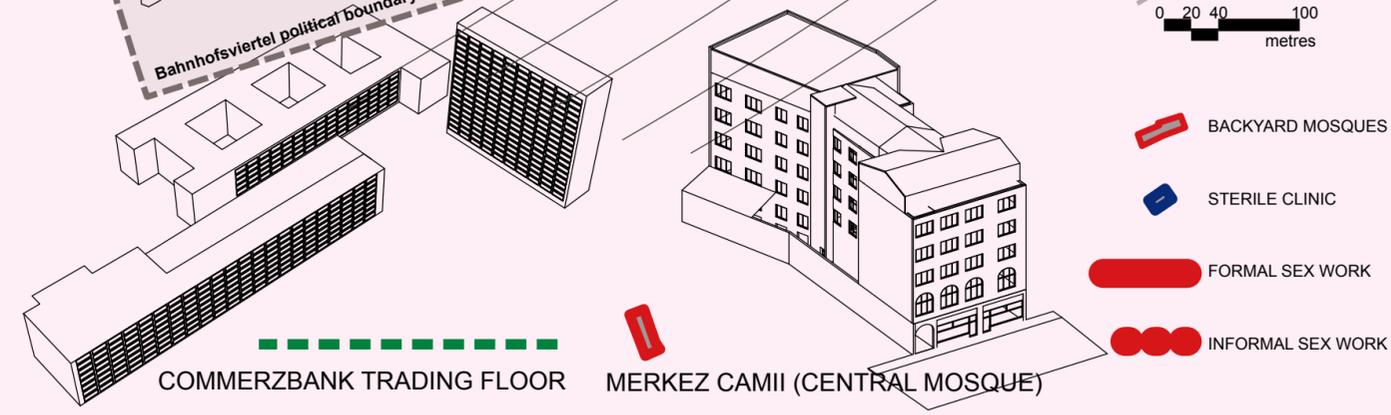
RIVER MAIN

stealth program

stealth architecture

Bahnhofsviertel political boundary

0 20 40 100 metres

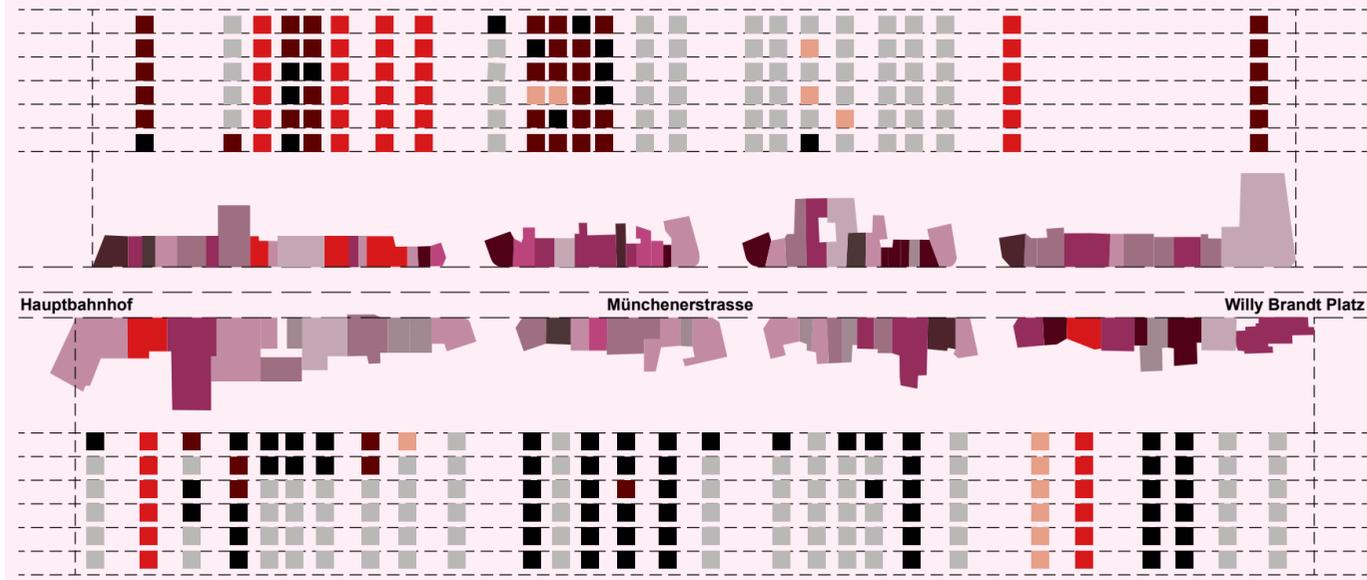


-  BACKYARD MOSQUES
-  STERILE CLINIC
-  FORMAL SEX WORK
-  INFORMAL SEX WORK

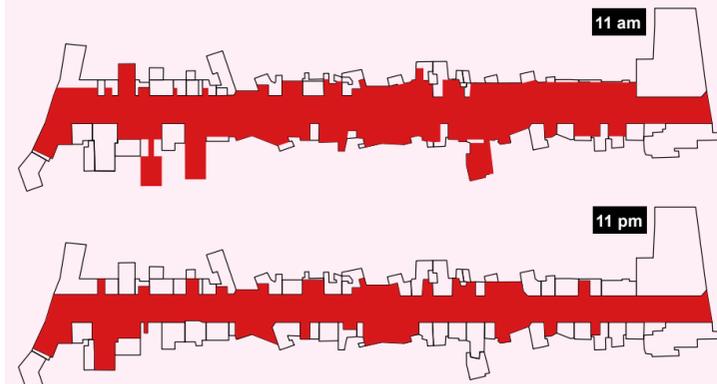
COMMERZBANK TRADING FLOOR

MERKEZ CAMII (CENTRAL MOSQUE)

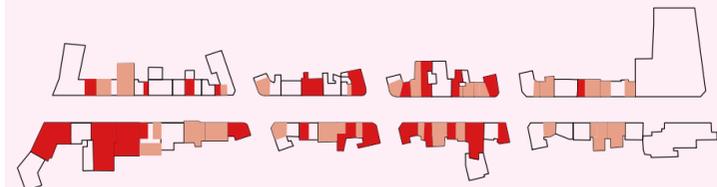
## MÜNCHENERSTRASSE: SECTION AS A COLLOID OF USES



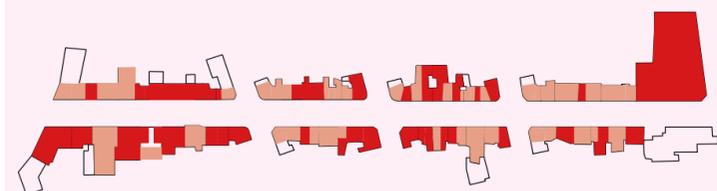
- Small Practices
- Residential
- Corporates
- Hotels
- Vacant



Time Based Access



- Primary
- Secondary



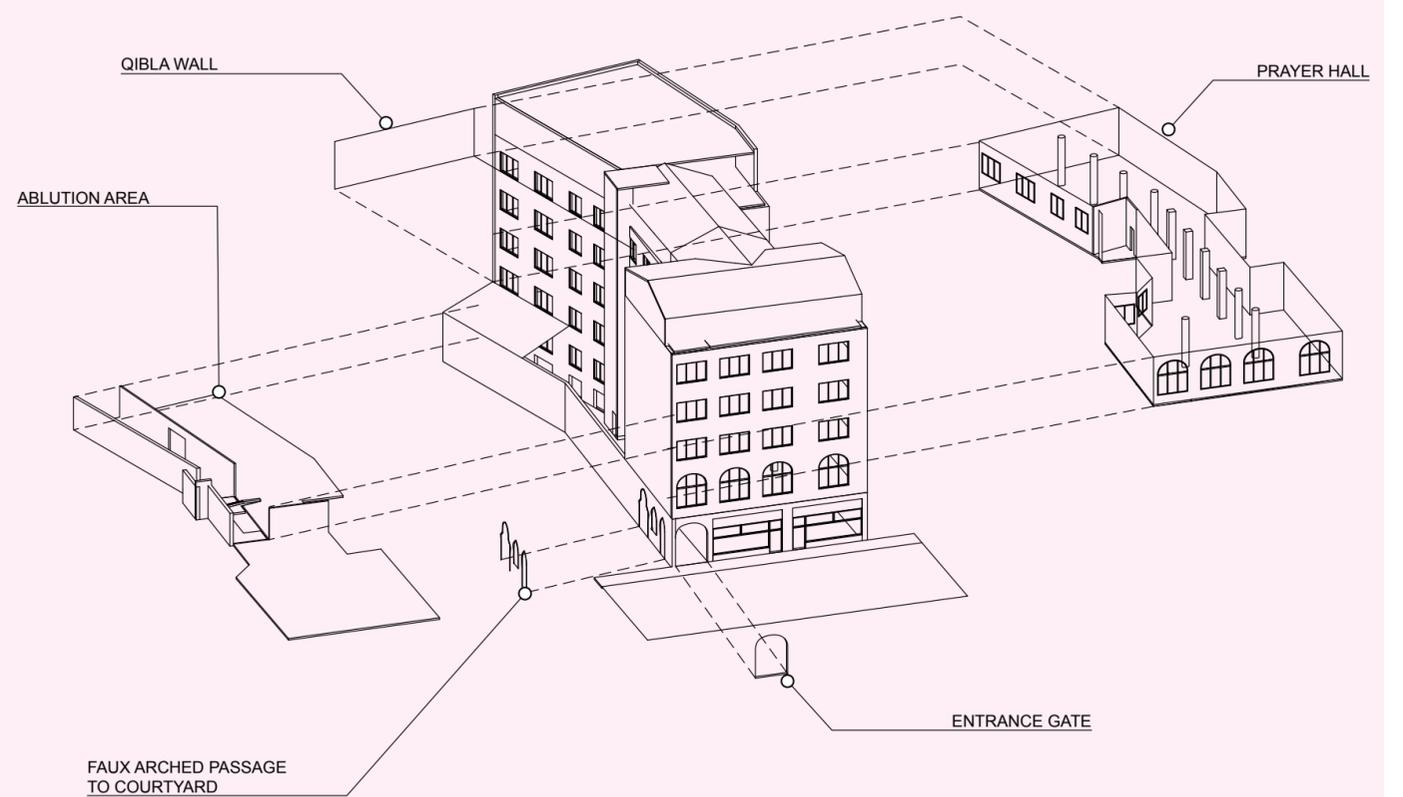
- Services
- Goods



Doorbells as sectional studies

*Münchenerstrasse* is an extremely dense colloid of different user groups. Small practices, informal markets, corporates, religious spaces and communal spaces co-habit the space. The neighbourhood has a time-centric spatial distribution and is constantly morphing to support the colloid. The intended residential spaces have long been transformed into various other heterogeneous programmes. Access and boundaries are flexible and appropriated according to need. Spaces of trade double up as social spaces. Sports bars function as Turkish teashops, stores double up as basement restaurants.

## MERKEZ CAMII (CENTRAL MOSQUE): MÜNCHENERSTRASSE 21



The 'Merkez Camii' (Central Mosque) on *Münchenerstrasse* in the *Bahnhofsviertel* is a Turkish mosque situated within what was formerly a residential building. Invisible from the street, the parasitic programme has gradually embedded itself within the colloid that is *Münchenerstrasse*. So much so, that it now is a catalyst for the other Turkish run programmes by serving as an attractor.

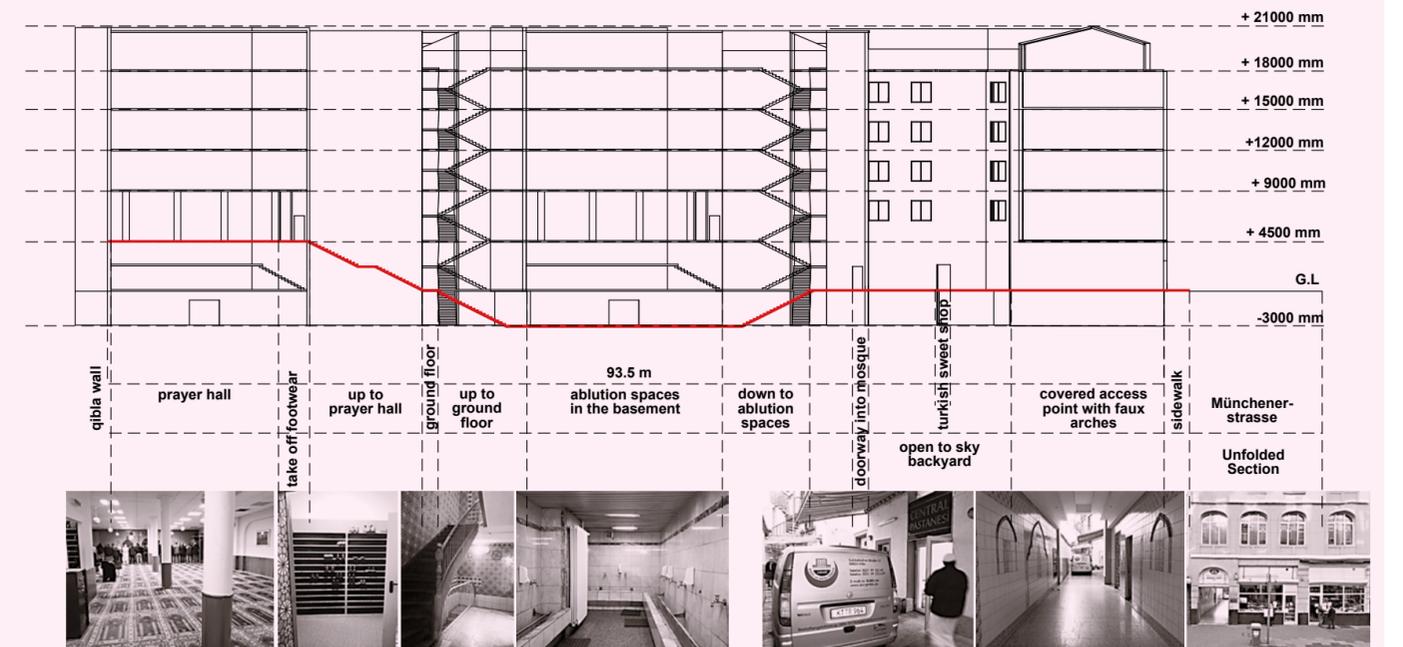
The mosque is primarily a religious space, but also functions as a secondary communal space facilitating a network of a specific user group.

The mosque is accessed through a non-descript entrance that leads to a tunnel like passage opening out into the backyard. The facade gives no indication of the space within and a user has to traverse a 93.5 metre long pathway to get to the place of worship. Along the path lie spaces of ablution, rest, regeneration and preparation. This deep space camouflages the mosque and dissociates it from the facade.

The Central Mosque in *Münchenerstrasse* is a perfect example of a retrofitted stealth space. Inconspicuous from the street, it nevertheless provides the infrastructure and

sets the stage for a vibrant local neighbourhood. Its parasitic beginnings (i.e. parasitic takeover of a former residential building) have now settled into a symbiotic relationship with other trade spaces on *Münchenerstrasse* (e.g. The Turkish bookstore, Music store, supermarkets et al). This second layer communal space serves as an information dispenser to locals and new comers as well.

### 93.5 metres of deep space



# “Ex-Spatium”

By Flaka Haliti

Oxford Dictionary / Origin: Expatriate

Mid-16th century (‘roam freely’): from Latin *exspatiari* ‘move beyond one’s usual bounds’, from *ex-* ‘out, from’; *spatiari* ‘to walk’ (from *spatium*: ‘space’)

It is easy to understand that Frankfurt is considered one of the most international cities in Germany. As a major European financial center it is home to a multitude of leading companies from within the financial sector and beyond.

With more than 300 national and international banks, and a highly developed infrastructure, including Frankfurt International Airport, it has produced a city that is both attractive to corporate companies as well as to trade fairs and exhibitions. As a result, the employment density also reports for a huge number of national and international commuters, who have influenced the international image of the city. This image, however, exists not because of the high numbers of immigrants, but because of the high number of fellow expats living and working in the city.

The reason for every expats arriving to Frankfurt is not because of the specific quality of life that can be found in the city, but because of the high-level, white-collar employment opportunities that exist, and continue to grow.

The “internationals”, who are coming and leaving, produce a continuous state of flux. They live in the city for a certain period of time only, work in trading or related local businesses, and yet do not “trade” their cultural backgrounds. In Frankfurt, the existence of a huge international community seems to not have socio-spatial impact and interference on and with locals. They would rather be defined as existing in a constant spatial transit position.

Considering the issue of multiculturalism and its related debates that were led in Germany over the past decade possibly could effect the confusion in understanding the differences between the definition of “labour” amongst internationals/expatriates and immigrants. What kind of different cultural and economic role do they embody?

Taking into account that there is no clear and ultimate definition of “labourers”, “(im)migrants”, “foreigners”, “expats” or “internationals” in fact has resulted in a situation in which the image of the city of Frankfurt has turned controversial – especially when considering its international attributes.

How difficult is it to feel international in Frankfurt as an expat, coming from a non-western country? How difficult is it for someone, who has a migrant background, but has lived in the city or country through generations? How big are the expectations by the local Frankfurt population that the “international” should learn and master the German language? How easy is it to exchange ones cultural view and belief system without being able to speak the local language? The requirement for German language courses is not an imaginary pragmatic response to an existing condition, but a first pass trade for every international in regard to integration.

One could argue that there is no concrete input (and output) taking place amongst locals and internationals. None of them affect the life of the other, which results in a situation in which internationals are not giving a real cultural contribution to the city and its quality of life. There is no socio-spatial integration, which may be the result of missing policies that would govern and reduce spatial segregation that has led to parallel realities. Because of the lack of cultural exchange amongst locals and internationals, expats have ended up choosing an international community reunion as a “loophole”, as, in most cases, the immigrant community does, too.

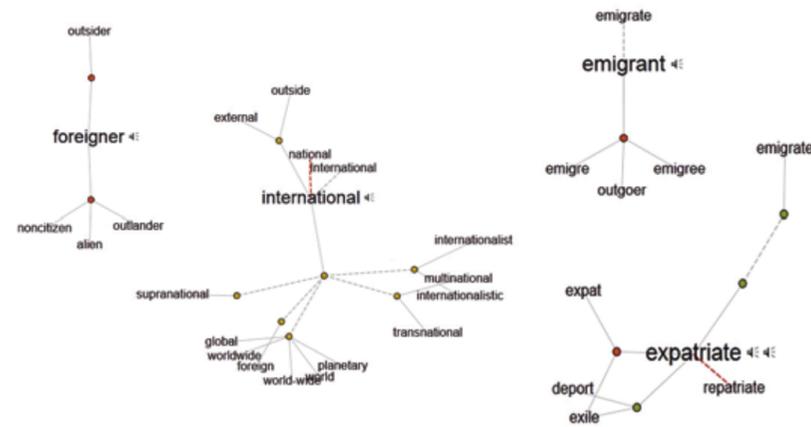
As an example, this project has observed the social network “InterNations”, which provides an expatriates’ community for people living and working abroad as well as all global minds, as the network claims. InterNations has their own expats fellows in the city of Frankfurt, with up to 6’000 internationals members, organizing 2–3 events per month, with 300–400 people attending.

To be registered as a basic member is free of charge. But with limited access to the online network. The potential user will be charged an entry fee to every exclusive physical event of the network. In case one is qualified as an “albatross member”, which includes monthly payments, then one is granted free entry to all events and granted non-limited access to the online network, where one can meet fellow expats. The payment has to be made by credit card. It points at the fact that the InterNations network has a very specific target group of members, which increases the possibility and impact of exclusion of, for example, international students, immigrants and other communities.

When Frankfurt is considered an international city by people, who do not live in the city, it is usually because of the presence of people and communities such as expat members of InterNations.

One of the French/Indian local members of InterNations, qualified as an ambassador of the InterNations community, told me during the interview that, as an expat in Germany and according to her own experience, she feels more discriminated in Berlin than Frankfurt. This came as a surprise to me, considering that Berlin is mostly understood as a very heterogeneous city with a certain history and tradition of multiculturalism.

However, she also told me that she has no real contact with locals in Frankfurt. According to her impression, Frankfurt’s locals often are more likely to be found in the suburbs than in the city. Perhaps this is the reason why she does not feel discriminated in the city: because she has no real possibility to meet locals.





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Offenbach am main  
Germany

**Invoice No.** A-13122012-117745      **Invoice Date** 13.12.2012      **Customer No.** 240506      **Contact.** support@internations.org

**Invoice for Online Albatross-Membership**

Item	Price
InterNations Albatross-Membership on www.internations.org for period 13.12.2012 - 13.03.2013	17.85 EUR
Thereof applicable VAT (19%)	2.85 EUR
Thereof net amount	15.00 EUR

**Payment**

According to our General Terms and Conditions, payment is due immediately.  
The payment was made by credit card, and the amount will be automatically collected from:

Credit Card Type: Eurocard  
Credit Card No.: \*\*\*\*\*  
Card Holder: \*\*\*\*\*  
Valid until: 02/2015

For your convenience, your Albatross Membership will be automatically renewed. You may cancel your membership at any time.

We thank you very much for choosing the InterNations Albatross Membership.

With kind regards from Munich

Your Internations Team

**InterNations GmbH**  
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## The Dust-Market of the Western World

It consisted of chambers – a wide network, mazelike lots, subterranean. The market-system was similar to the one of the Hair-Carpet-Makers. In the beginning the Dust-Market only related to the Western World. It turned out later that the rest of the world was part of it as well.

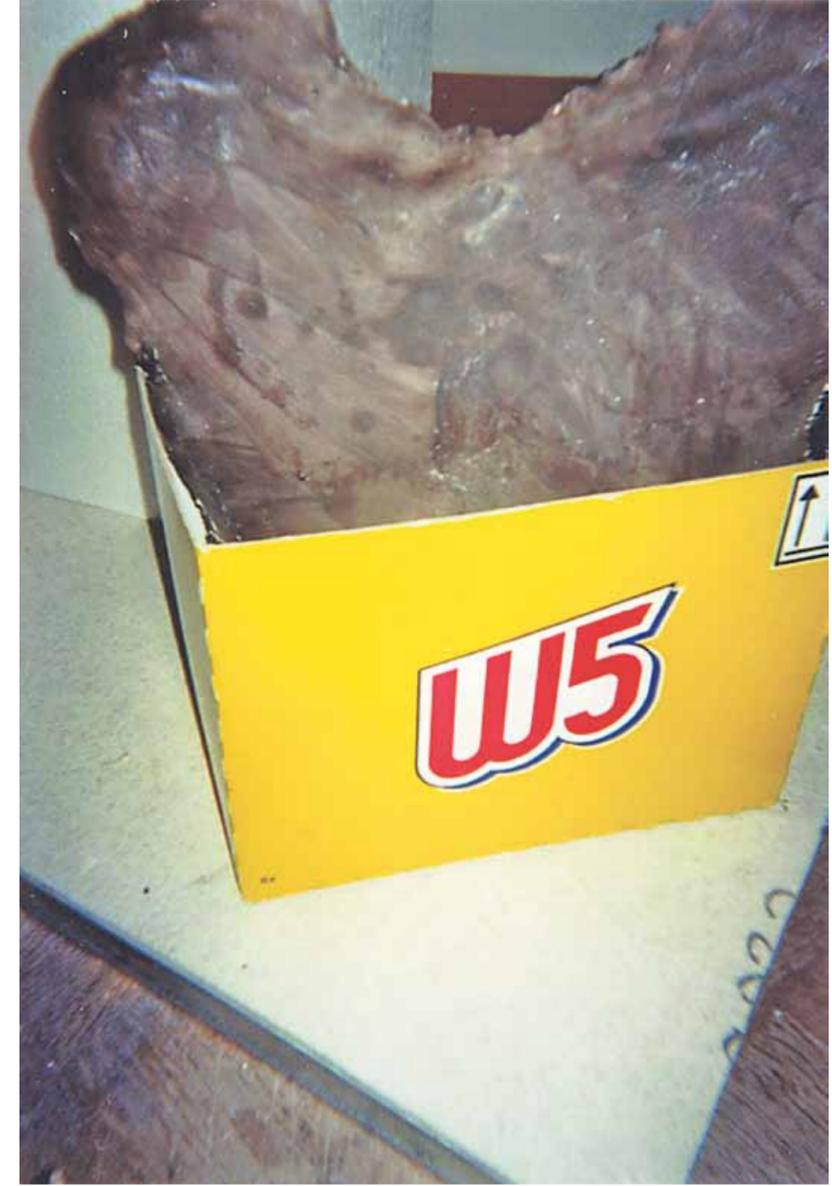
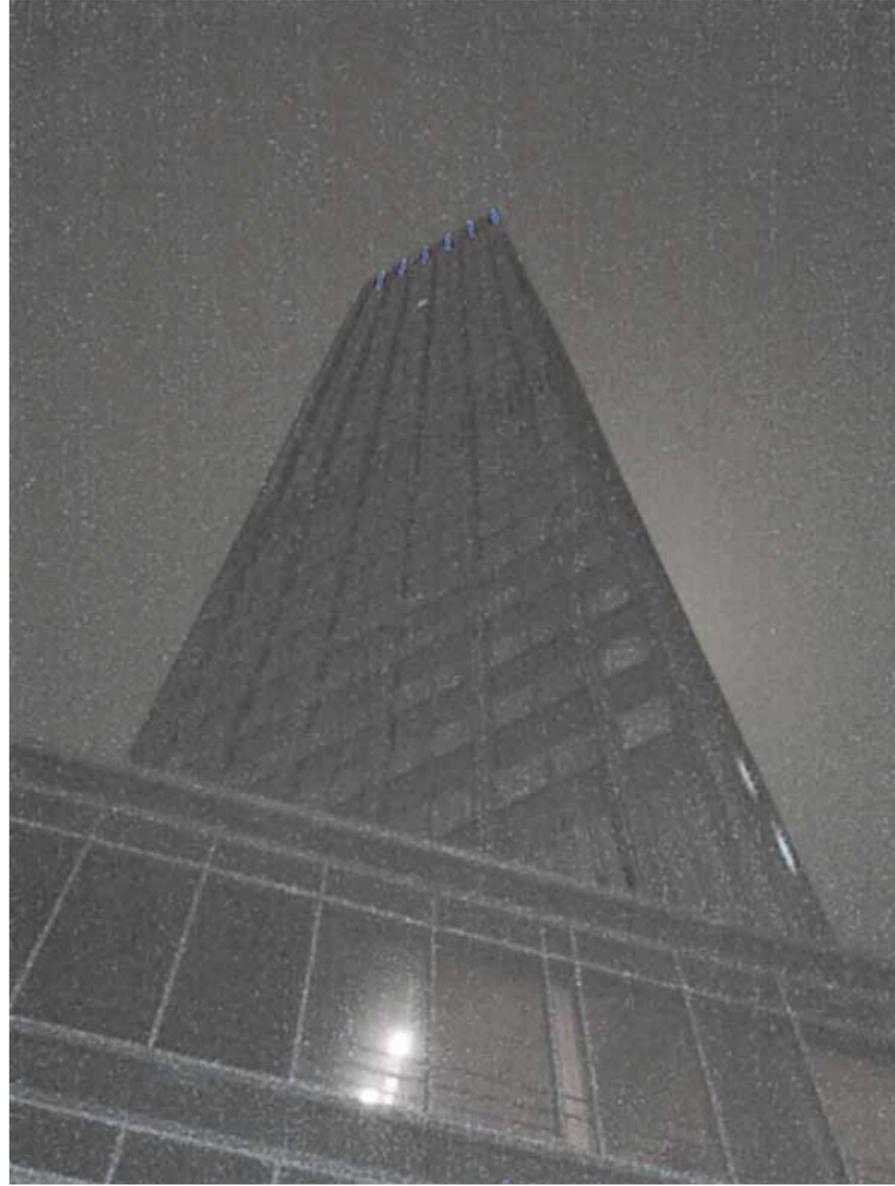
Keyword: Symbiosis

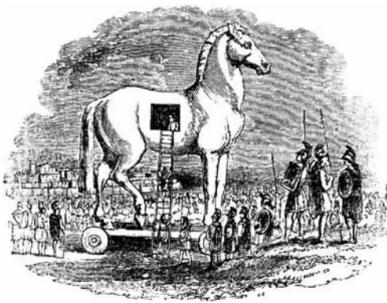
The Dust-Markets' hierarchy was ruled by the supreme figure called 'Dust-Market's-President'. He was in charge of the Key: the universal key that allowed him to access all parts of the market. It was his job to make sure that commercial laws were followed. His authority was demonstrated simply by the very fact of his being. He was the trusted head – the experience of his power was instantaneous, this was true.

The Market had two problems. The first one was the wind: powerful storms – the reason for being underground – that frequently intruded upon the system of chambers – a catastrophe that suffocated thousands of merchants. The second problem was the article of exchange itself. Many of the merchants starved because they were only able to trade dust with dust. Some of them died of thirst. The goods the dust once was have long been forgotten. Some of the oldest merchants still had faded memories in their mind.

To get into the league of Dust-Traders certain abilities were required; a moral sense and a natural conscience. In addition they did not want to hunt nor gather, but that was not necessary because there was enough dust. There were attempts to reduce the amount of dust but the market was flooded with foreign imports.

Now they stand in front of the facades – what remains of their existence. Behind them are the streets and the rooms. Perplexed they gaze into the sunset, dreaming of the good old times – somewhat Neolithic-like conditions.





from:  
S.G. Goodrich  
*Lights and Shadows of European History*  
(Boston: Bradbury, Soden, & Co., 1844)

**Stealth architecture is not embedded within an aesthetic category; it is a praxis, a set of functional urban operations that transgress imposed political and economic models. Stealth urbanization is the site from which to produce new interpretations of infrastructure, property and citizenship.**