# DeTROYt

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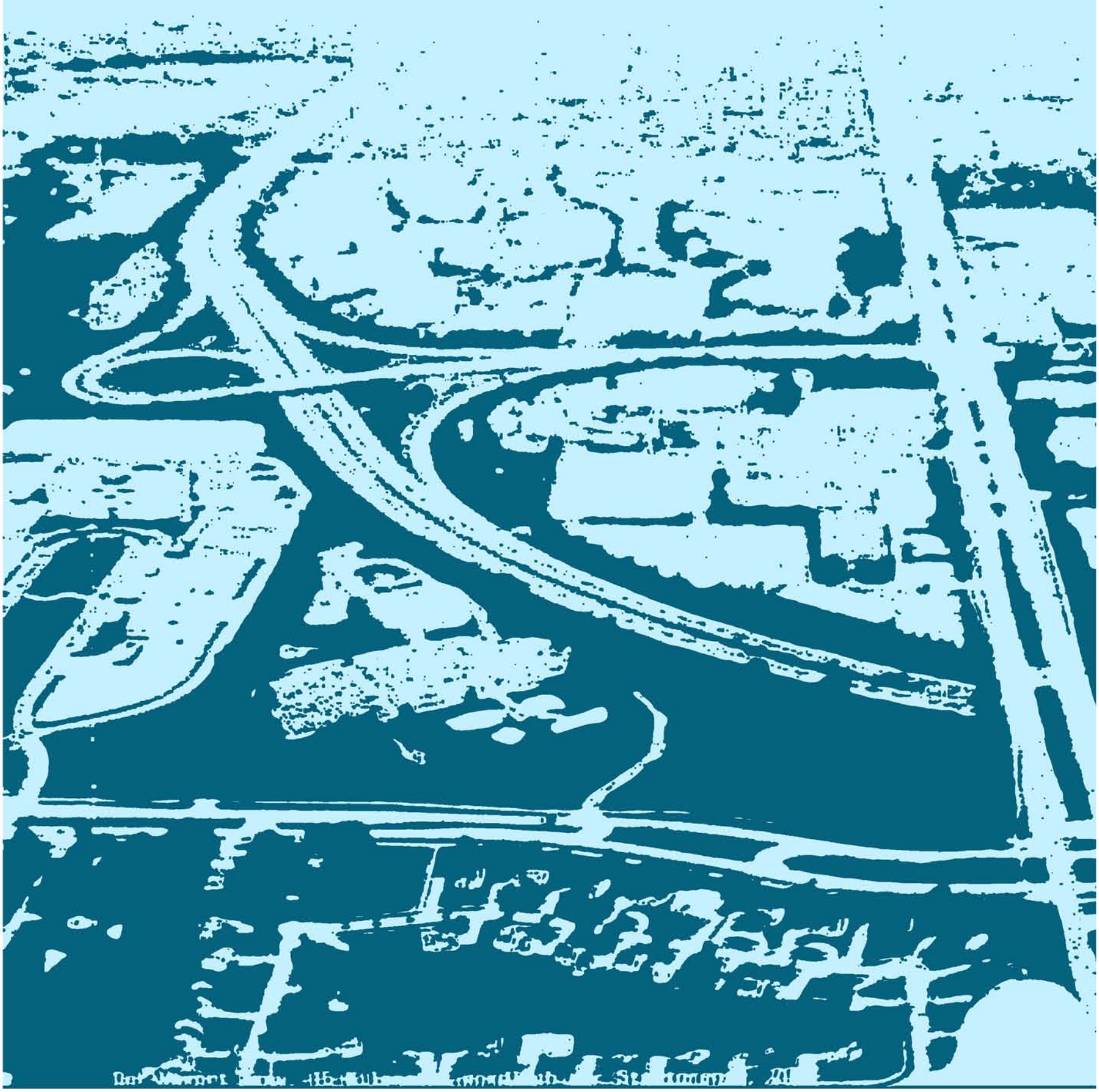

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ABSTRACT

An attempt to save the city of Detroit, Michigan, and its existing buildings by giving it a new meaning and future. Cars and roads are eliminated. Tiger Stadium is converted into a city-wide freight receiving and shipping facility. A system of pneumatic tubes is implemented in each neighborhood, with a district tube router facility inside the LaFayette Tower. Apartments vitalize the landmark Fisher Building. A new multi-storey research/ education/ work station with more stairs then elevators fills in an old parking lot.

# DeTROYt

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Suburb Troy 15 Kilometer north of Detroit (A. McLean, 2004, Fig.1)

## DETROIT FACTS

1815 Detroit, a French fort founded in 1701, gains city right.

1896 Henry Ford builds his first automobile. In 1903 the Ford Motor Company is founded and General Motors is founded in 1908.

1909 Woodward Avenue is being planned -- the first street in America

1911 Hudson's Department Store opens in a skyscraper with 50 escalators and elevators.

1913 Ford introduces the assembly line.

1921 GM opens the biggest office building in the world on Grand Boulevard.

1925-1929 The 5000 seat Michigan Theater and other cinemas are being build along Grand Circus Park, a central tram and street intersection

1932-1941 The auto workers go on strike, founding the first trade unions and the highest wages in the US industry.

1941-1945 Detroit becomes the biggest war producer in the US. 300 000 people from the south arrive.

1953 The city reaches it's highest number of inhabitants and instantly starts to shrink. In the Fifties and Sixties mostly black Americans from the South move to Detroit. White people flee to the suburbs.

1954 Northland Mall opens - the first suburban shopping mall in the US.

1956 The Detroit tram system is shut down; at the same time the US starts building 41.000 miles of motorway with 90% state funding.

1959 Motown Records first single is released.

1963 "I have a dream ..." Martin Luther King addresses his famous speech in Detroit for the first time .

1967 The Detroit riots of 1967 stem from a vice squad raid on an after-hours drinking club in a predominantly black neighborhood.

1972 Berry Gordy decamps Motown Records to Los Angeles.

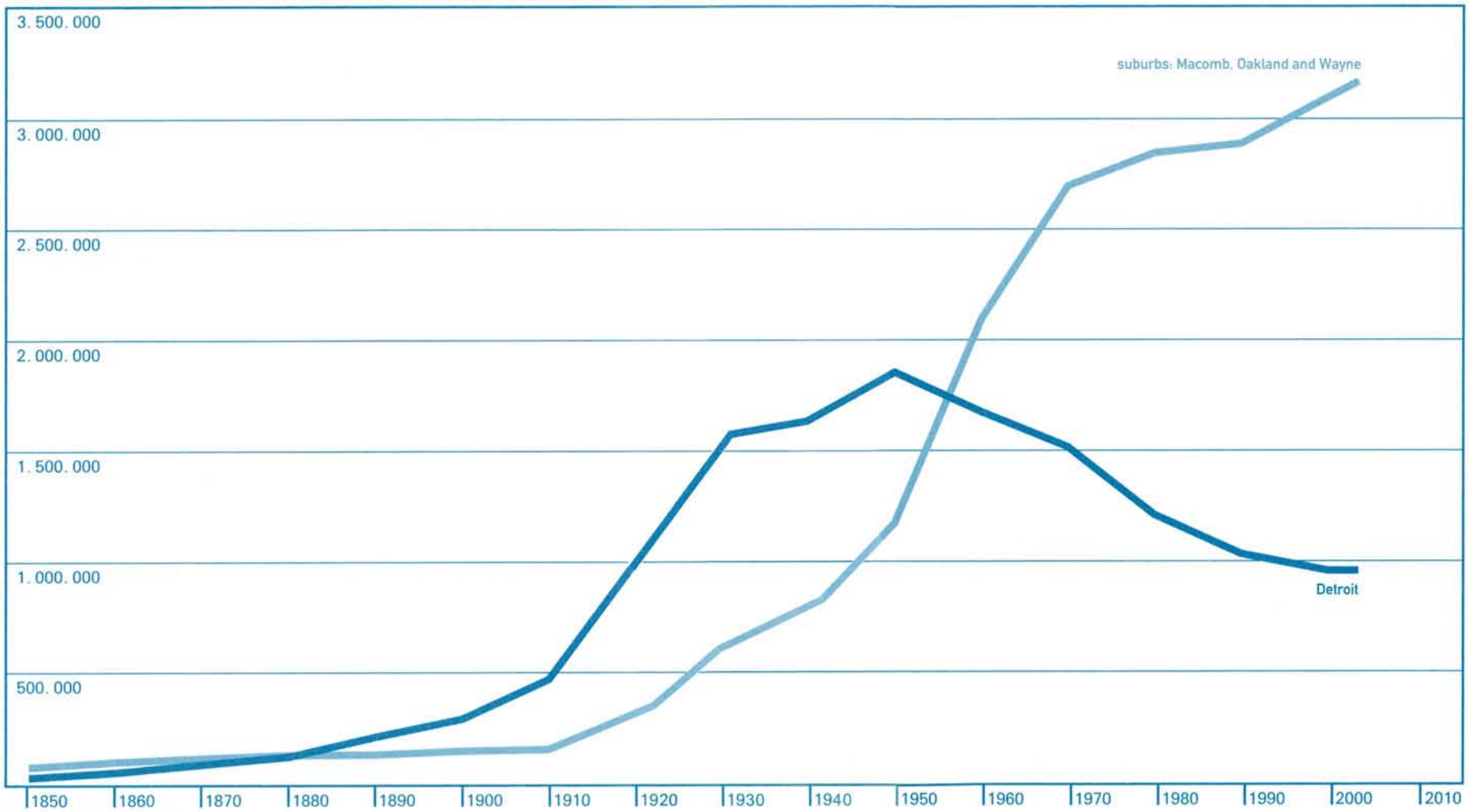
1974 Coleman Young becomes first black mayor of Detroit.

1970-1977 The Renaissance Center (a shopping, leisure and office building) is built in the city center of Detroit for $340 million. The supposed subsequent revitalisation of the Detroit city center never happens.

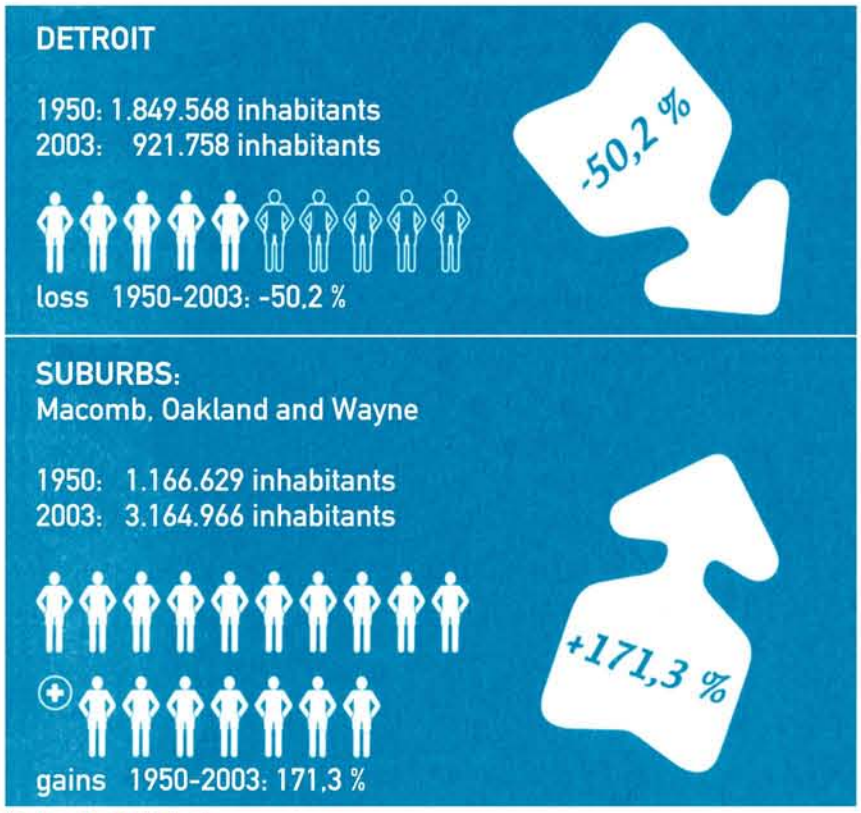
1980 The last shopping center in downtown Detroit closes.

1996 GM buys the Renaissance Center for $73 million and uses it as its headquarter.

### NUMBER OF INHABITANTS OF DETROIT AND OF THE SUBURBS

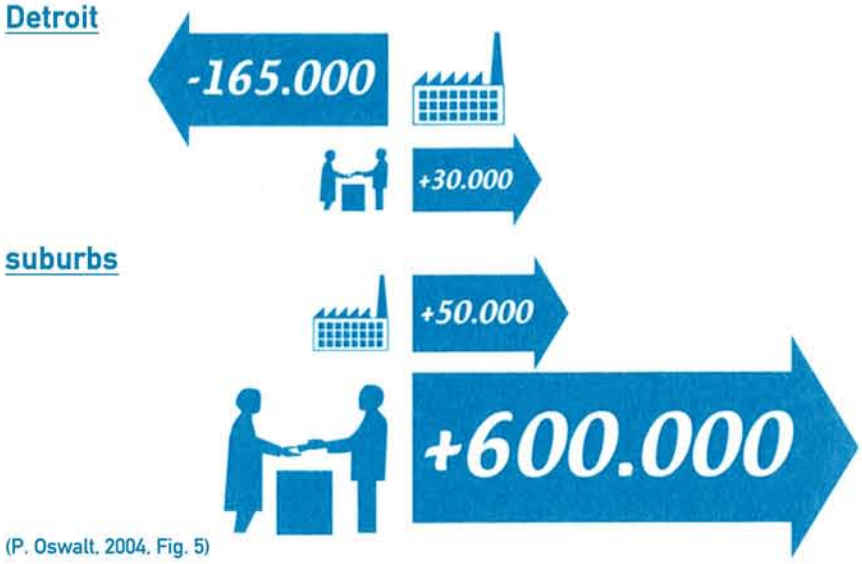



(P. Oswalt, 2004, Fig. 2)



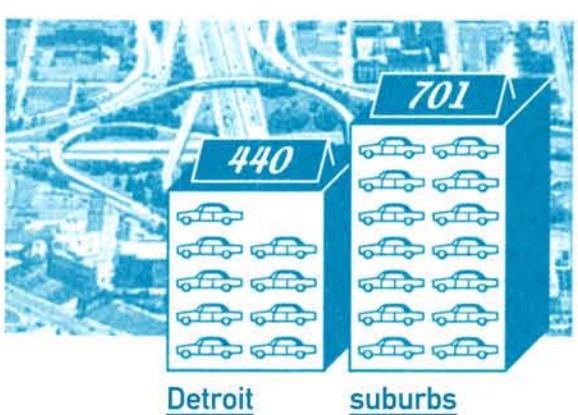

(P. Oswalt, 2004, Fig. 3)

Since 1960 Detroit lost about 165.000 of former 230.000 work-places in the industry and gained about 30.000 new service jobs. The suburbs gained since 1960 50.000 workplaces in the industry and 600.000 service jobs.




(P. Oswalt, 2004, Fig. 5)

in the year 2000 there were 440 cars per 1.000 inhabitants in Detroit and 701 in the suburbs

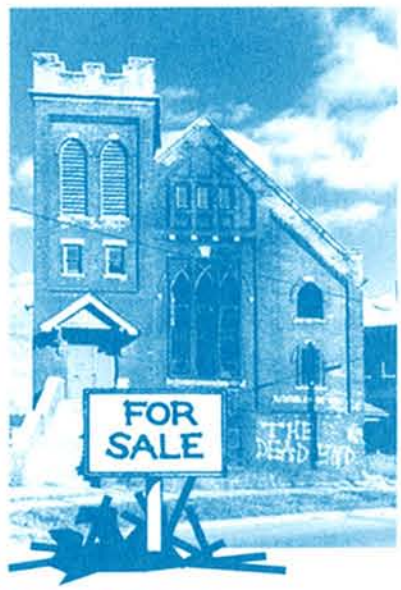



(P. Oswalt, 2004, Fig. 7)

147.000 living units disappeared in the city center between 1950 and 2000 because of demolition and arson. During the same time period about 1.000.000 new houses were built in the suburbs.

(P. Oswalt, 2004., Fig. 4)

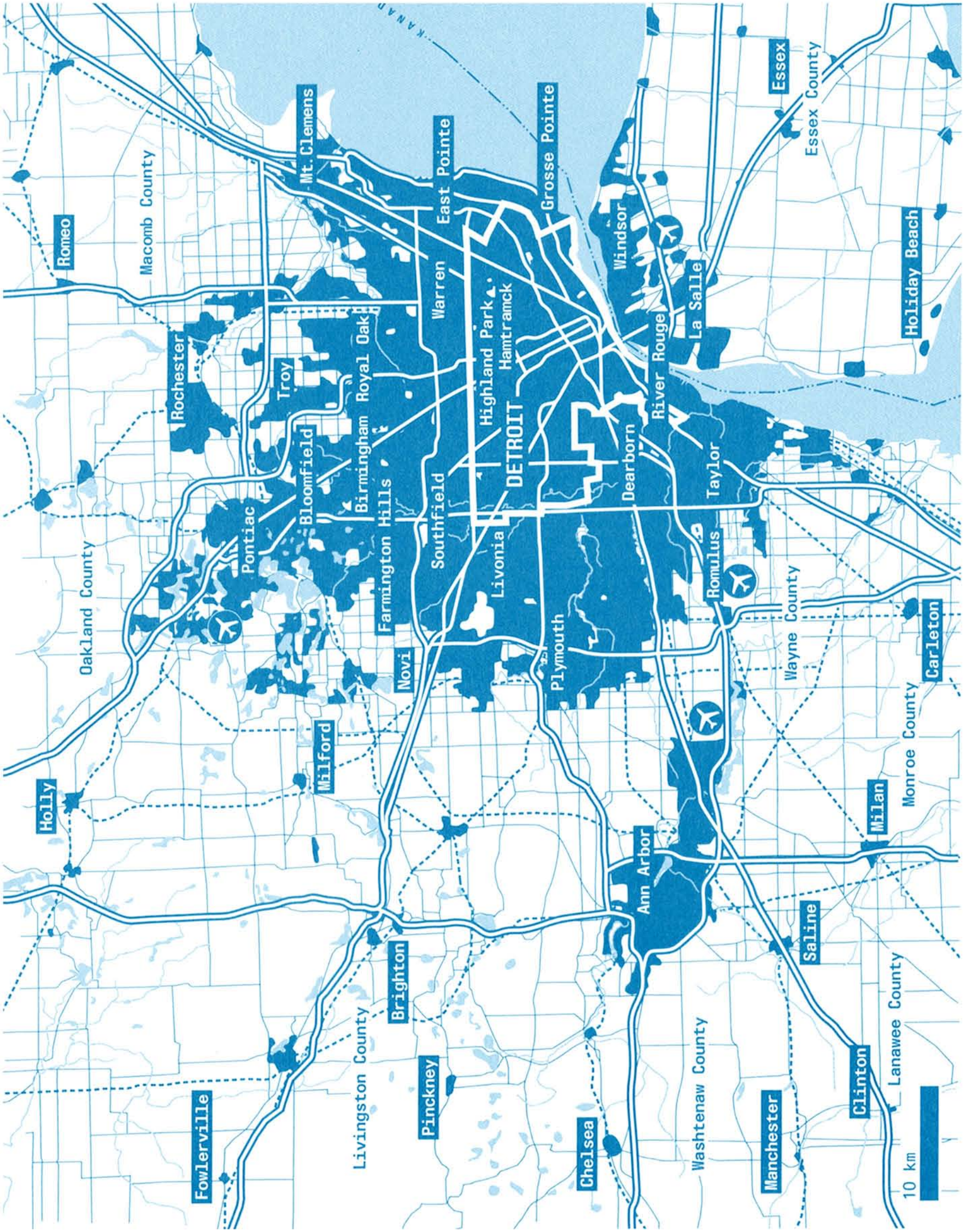
in 2000 about 38.700 apartments were vacant - 10,3 %. About 50. 000 estates were vacant.




(P. Oswalt, 2004, Fig. 6)

Since 1969 there have been 167.130 demolitions permitted and 3.540 permits to build. (state 2002)

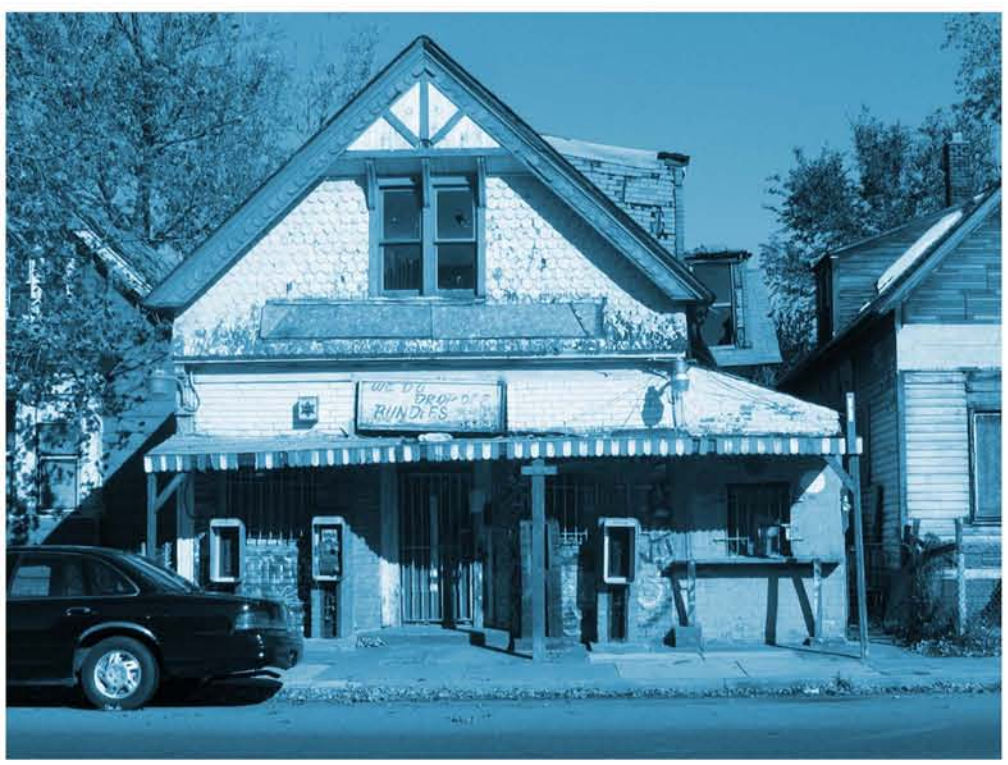
(P. Oswalt, 2004, Fig. 8)



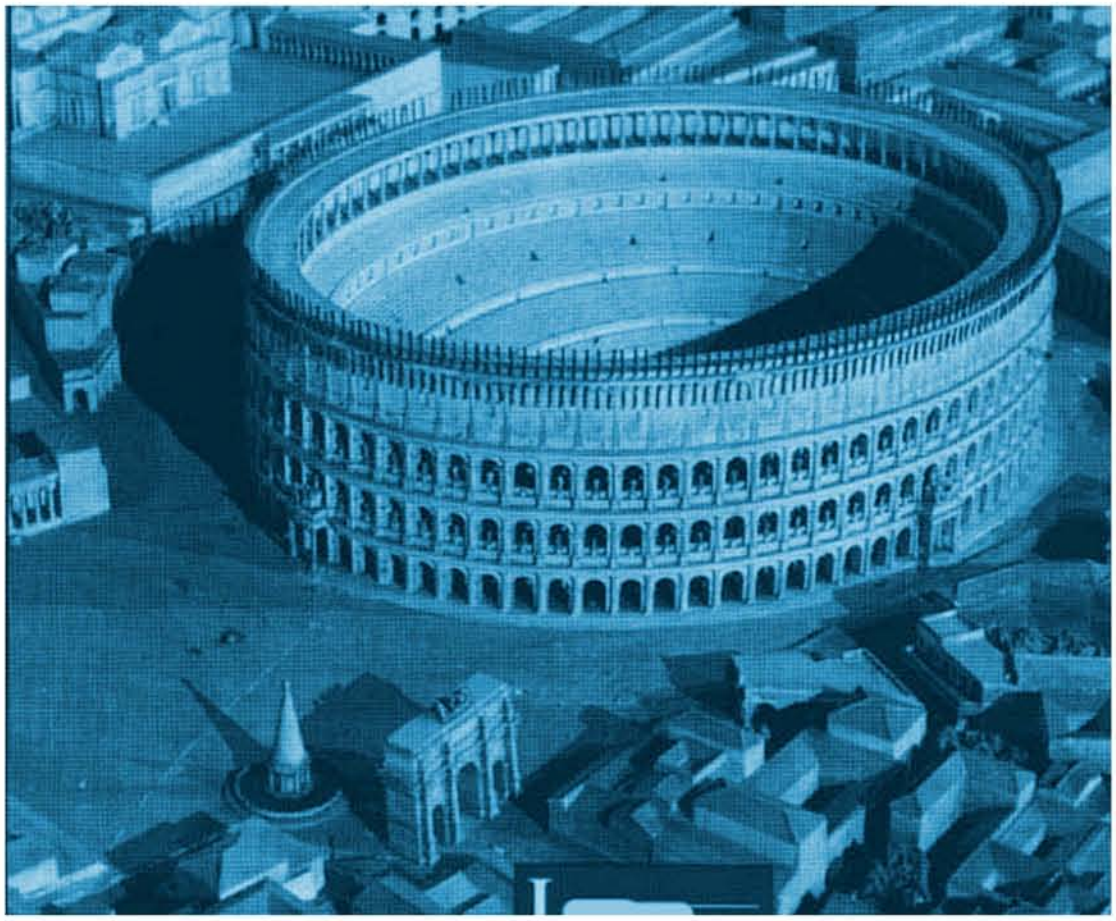

Detroit and it's suburbs, 2003 (P. Oswalt, 2004, Fig. 9)

U.S. DISTRICT COURT
JURORS
300
DO NOT ENTER

PACKARD


BUNDLES

TNT
SEWER
75



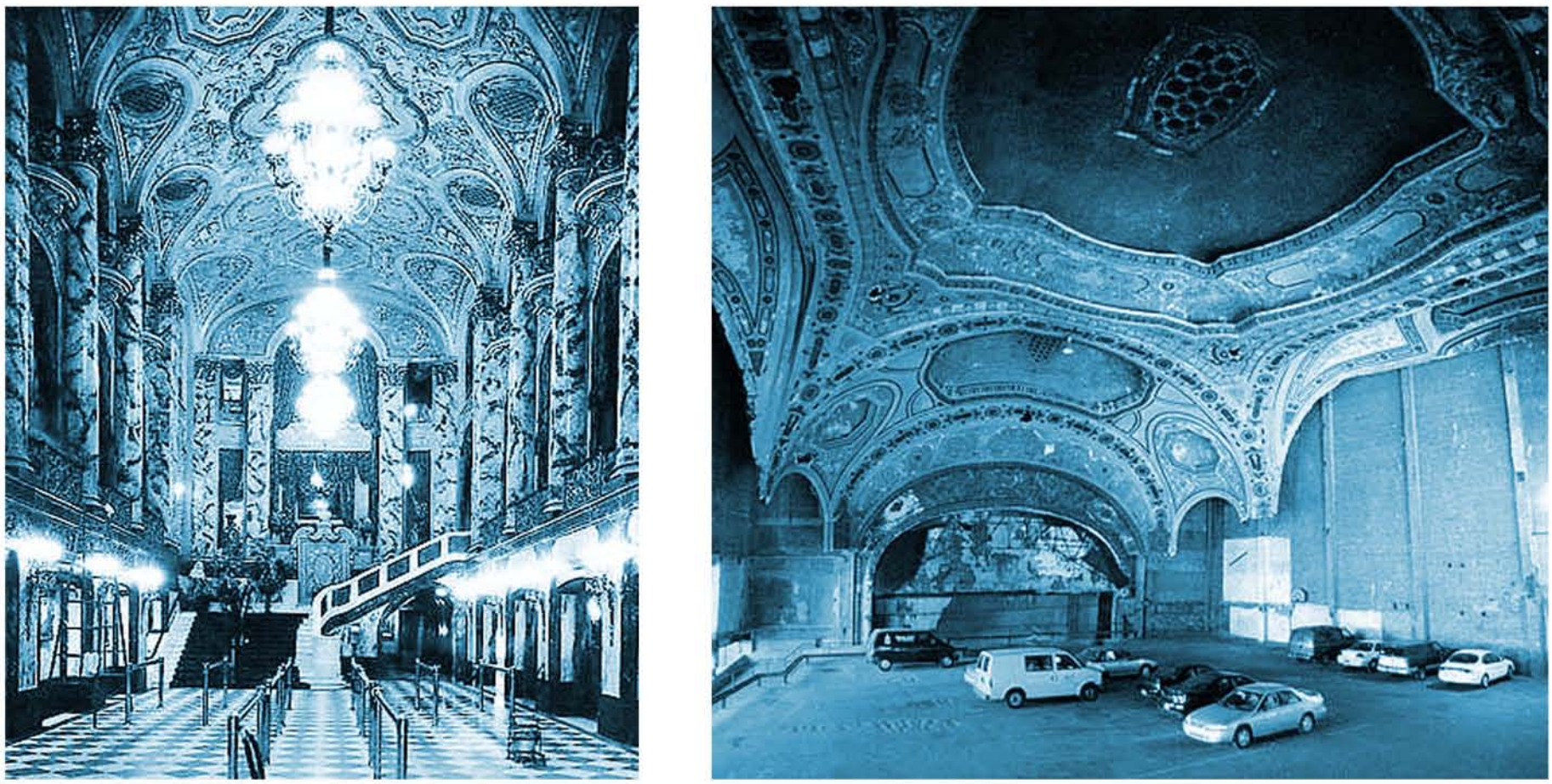
left: Colosseum finished in 80 AD (G. W. Metz, 2005, Fig. 10) right: 1.927 years later (Il Sogno, 1997, Fig. 11)

At the high point in the Fifties there were almost two million people living in Detroit. Current population is about 800 000. With the people moving away, also the houses disappeared. Between 1950 and 2000 147 000 houses have been demolished. In 2000 there were 38 700 empty apartments and 50 000 empty properties. Amongst the abandoned or demolished buildings are not only private houses but also hotels (Cadillac Hotel 1925), high rises (Michigan Central Station 1913), industrial buildings (Ford Model T Plant 1909), theaters (Michigan Theater 1926). A whole webpage is devoted to the 'fabulous ruins of Detroit' (www.Detroityes.com/home.htm).

A building doesn't become useless just because time changes and the original usage is no longer needed anymore. The first answer should not be to demolish the old and build a new structure. Buildings can be easily reused; in Europe we have many examples of this. The Colosseum in Rome is one of the best. It was built as a giant amphitheatre. However, during the centuries it was reused for varied purposes such as a church, housing, workshops, quarters for a religious order, a fortress and castle, a quarry and a Christian shrine. Pope Sixtus V (1585-1590) even planned to turn the building into a wool factory to provide employment for Rome's prostitutes. No-one would suggest today to demolish the Colosseum - it is a witness and also proof of time and events. It tells us a lot today how people used to live and think in 80 AD, but also during later times, when it was reused. The almost 90 year old Tiger Stadium in Detroit is scheduled for demolition during Fall this year. No evidence of the Tiger Stadium will remain except some $15 plastic replicas. Tiger Stadium itself, or it's demolition, is not the problem. The disappearance of so many buildings around it, the vanishing of a whole city, is a problem.

I would like to preserve Detroit and it's history - American history. But, how can I save the city from disappearing entirely and still make new use of it?

But what is so special about City? I grew up in the city of Dresden and later on moved to Berlin. And by that I mean really lived in the city, 15 minutes by bike to the city center. When you ask someone in America where they are from, it becomes habit to say New York or Seattle or San Francisco. Usually I ask further: do you mean in the city or do you mean in the suburbs? You can ask yourself. What would your answer be?



left: Michigan theater finished 1924 (G. George, 2005, Fig. 12) right: 83 years later (G. George, 2005, Fig. 13)

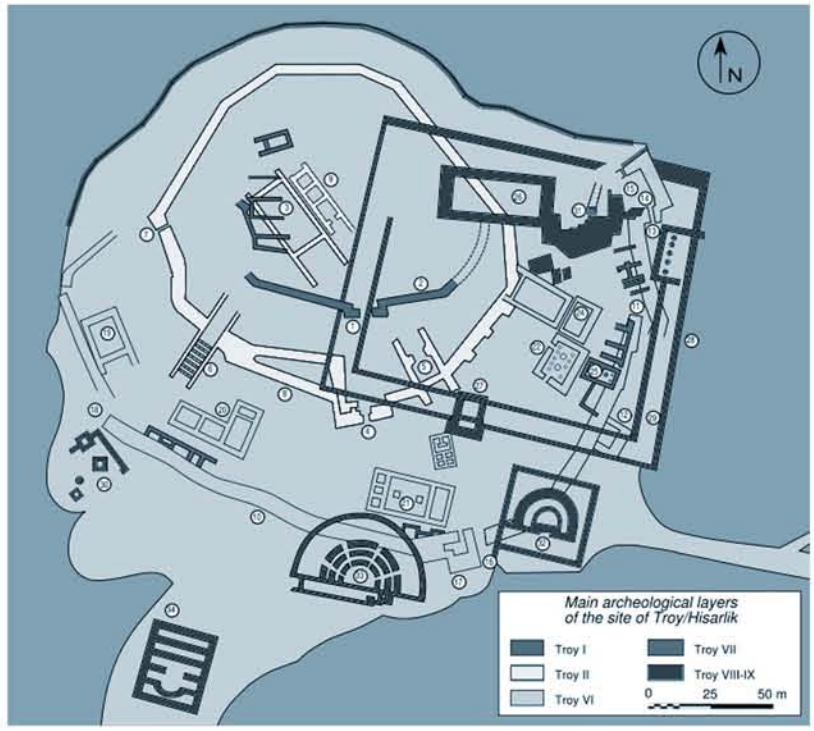
Some time ago I read this passage in the novel 'Wittgenstein's Neffe' in which the Austrian Author Thomas Bernhard wrote about city. It perfectly describes my feelings, experiences and understanding of city and country:

*'For in the country the mind is drained just as fast as it is recharged in Vienna - faster, in fact, since the country always treats the mind more cruelly than the city ever can. The country robs a thinking person of everything and gives him virtually nothing, whereas the city is perpetually giving. One has simply to see this, and of course feel it, but very few either see it or feel it, with the result that most people are sentimentally drawn to the country, where in no time they are inevitably sucked dry, deflated, and destroyed. The mind cannot develop in the country; it can develop only in the city, yet today everyone flees from the city to the country because people are basically too indolent to use their minds, on which the city makes the greatest demands, and so they choose to perish surrounded by nature, admiring it without knowing it, instead of seizing upon all the benefits the city has to offer, which have increased and multiplied quite miraculously over the years, and never more so than in recent years. I know how deadly the country is, and whenever possible I flee from it to some big city - no matter what it is called or how ugly it is - which always does me a hundred times more good than the country.'*

From: Thomas Bernhard, *Wittgenstein's nephew: a friendship*, transl: by David Mc Lintock, Alfred A. Knopf Inc., New York, 1989

A very famous example for a constantly moving city is Rome. In the 3rd century AD it became an empire with about 1 million inhabitants. With the collapse of the Roman Empire the city started decaying. Rome lost it's importance with the relocation of the capital to Constantinople in the 4th century. The West Roman Empire shrank to a province and then to just a city quarter. People started growing vegtables again between the ruins. At times only 1000 people lived in Rome. The real downpoint came in the 14th century when the popes had to leave for Avignon. Even though Rome used to be the center of the Catholic Church, it was still considered a small, remote, poor city during the 15th century. There have been several plans to rebuild Rome as it used to be during the antiquity; however, they were never imple-

Hubert Robert's design for Grande Galerie pictured as a ruin, 1796 (H. Robert, 1796 Fig. 14)




Troy I - IX, Turkey (Bibi Saint-Pol, 2006, Fig. 15)

mented. By the Baroque period the city architects like Lorenzo Bernini accepted the huge ruins. A new understanding of ruins emerged. During the 18th century the architect Giovanni Battista Piranesi had a big impact on that new understanding. During his life Rome had become stronger but was still small and not comparable with the antique Rome. His engravings picture true buidings as well as imagined ruins. By this Piranesi combined past and present.

***Detroit has never been the capital of any country nor have any popes had ever to leave the city. However, Detroit is the birthplace of the car. It used to be the capital of car manufacturing and in the Fifties the car manufactures emmigrated to the suburbs.***

Troy is another famous example for ruins. Throughout history, Troy was destroyed many times and rebuilt. Until now archeologists have determined 9 levels of Troy. Perhaps many other levels are still hidden in it.

The first city (Troy I-V) was founded in the 3rd millennium BC. During the Bronze Age, the site seems to have been a flourishing mercantile city. Troy VI was destroyed around 1300 BC, probably by an earthquake.

The archaeological layer known as Troy VII, late-13th century BC, is the most often-cited candidate for the Troy of Homer. It appears to have been destroyed by a war, and there are traces of a fire. Partial human remains were found in houses and in the streets, and a human skeleton. Three bronze arrowheads were found too.

*What would be found of Detroit in 2000 years?*

Troy VII (ca. 1120 BC) appears to have been destroyed by fires.

Troy IX The last city on this site, was founded by Romans and was an important trading city until the establishment of Constantinople in the fourth century as the eastern capital of the Roman Empire.

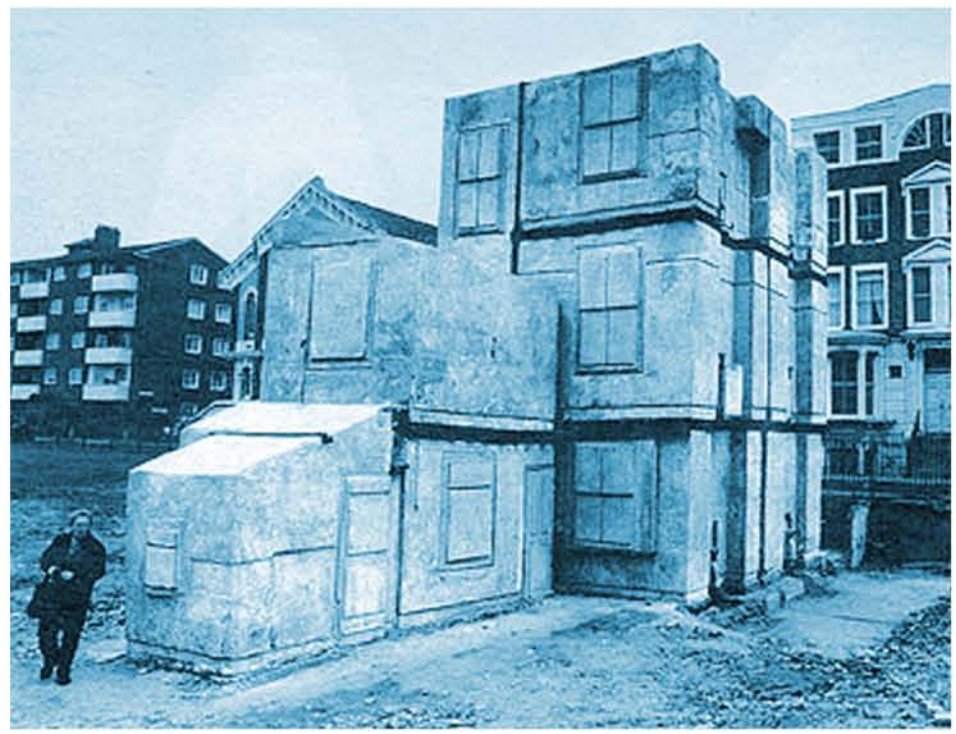
In Byzantine times the city declined gradually, and eventually disappeared.

*D e t r o i t . . . T r o y . . . D e T R O Y t*

Hubert Robert painter and designer of landscape gardens and architecture painted actual intact buildings as ruins (e.g. Villa Medici) and gave this architecture a timeless meaning.

The american artist Robert Smithson who worked during the late 1960s, was more interested in the actual decay of buidings and roads. To study that he had tons of soil poured over a wood shed until it collapsed. In his opinion the penetrating masses of soil abolish the

'Partially Buried Woodshed' (R. Smithson, 1960, Fig. 16)



'House' (Rachel Whiteread, 1993, Fig. 17)

difference between nature and civilisation.

In 1993 the British artist Rachel Whiteread used the frame of an old Victorian house as a mold for the new structure. Whiteread removed the traditional exterior materials (wood, nails, glass) to reveal a new solid concrete object in the space and shape of the old domicile's interior. Emptiness was now solid and a solid form was now empty. Whiteread revealed that nothing has always been something. This project was a monument to lost domestic space and to a whole way of life, evoking the former occupants through their very absence and through the entombment of the space.

*a c c u m u l a t i o n  a s  a r t . . . a c c u m u l a t e  D e T R O Y t*

*a c c u m u l a t e . . . D e T R O Y t*

*a c c u m u l a t e . . . D e T R O Y t*

*a c c u m u l a t e . . . D e T R O Y t*

*a c c u m u l a t e . . . D e T R O Y t*

So! There it is, I can save, preserve Detroit, I'll have to accumulate it.

I thought about water - flooding the whole city - or soil? But, actually, where to get so much water or soil from, it doesn't seem reasonable.

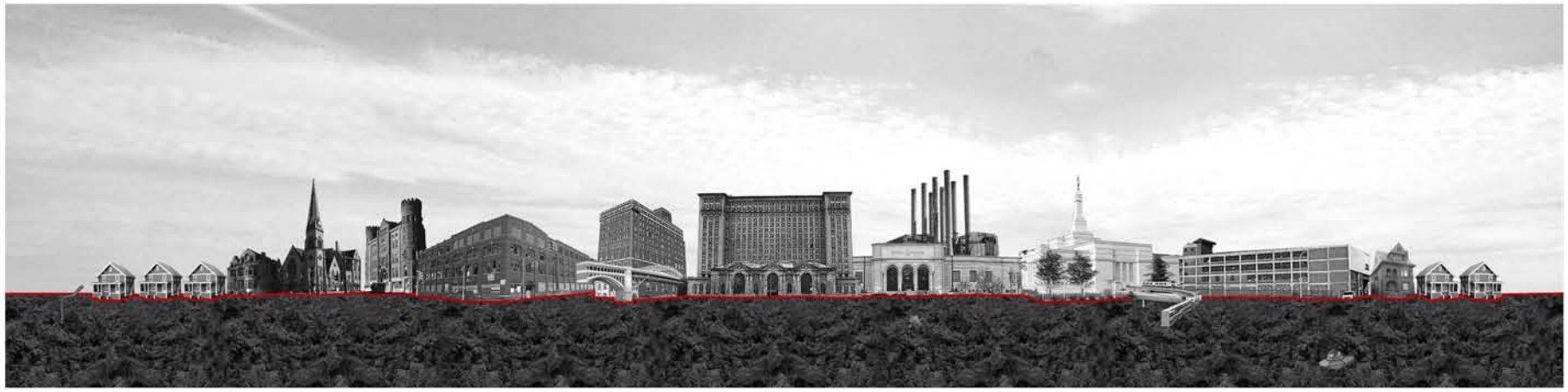
What is there that there is plenty of, not taken away from somewhere else and maybe even something people want to get rid of?

W a s t e ! T r a s h ! G a r b a g g e !

I will use trash to save Detroit. I will use the idea of a landfill in a slightly different way.

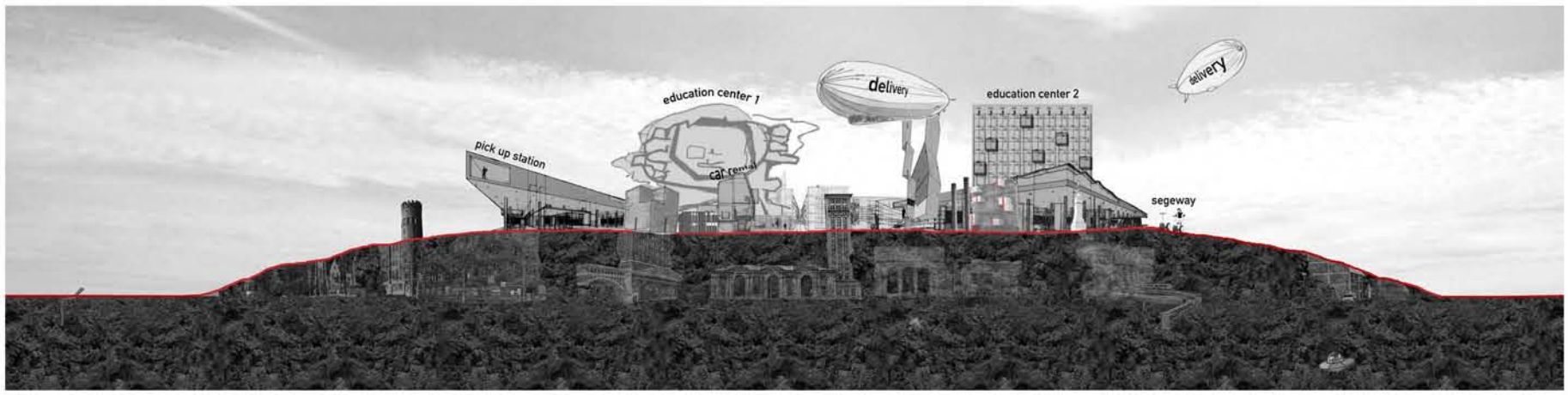
However, I also want DeTROYt to continue to develop and live, so I can't just fill it up with trash. I also have to find a new order and meaning for the city. As for that, I will describe my ideas later in the book.

Trash will be poured over DeTROYt, up to a certain height covering streets, roads, and buildings. The collages on the right I developed during my first thesis semester. They express my general idea that I developed for DeTROYt. Some parts changed later on, however, the general idea didn't change.



SITUATION NORMAL is a section through DeTROYt at the present time.

PHASE 1 trash will be poured over DeTROYT and old city parts will be reused now sticking out of the trash.




PHASE 2 this trash will have turned into soil and new architecture will have joined the old.

NEW ORDER

Detroit is the birthplace for the car. The car was invented here and the Ford Motor Company was founded here. Back than it was the driving motor for Detroit. The car was the reason for Detroit to become a rich and flourishing city in the 1930s and 1940s with a big job market in the car industry. However, the car also became Detroits murderer in the 1950s. Since then Detroit has become a deserted, poor and empty place. Before facturies and workplaces were located within the city in reach of the people who worked there. With the mass production of the car and the possibility for even middle class and working class Americans of owning a car the factories moved to the suburbs and with it it's employers.

The car provides a big job pool, but it is also the killer of American cities, general knowledge, social life and environment. It allows American people to live far away from their workplace, shopping, rec centers, theaters, museums, cinemas, and libraries. In order for everyone to reach those places an incredible network of streets and roads have been built in suburbia expressly for moving cars often with only one person in it from place to place.

positive aspects of cars: JOB POOL (there are about 1.1 million people currently employed in the American car industry, with a 9% loss since 1990)

negative aspects of cars: WASTE OF TIME (nothing else can be done while driving or sitting in a traffic jam. The average annual traffic delay per person in the United States was 47 hours in 2003)

WASTE OF SPACE (1000 of miles of road and streets that can't be used for anything other than driving)

WASTE OF KNOWLEDGE (just imagine if all that knowledge that went into developing bigger, faster more comfortable cars were used to improve building materials or other ways of transportation)

WASTE OF MONEY (car, gas, insurance and accidents are expensive and don't allow the owner to spend on something else)

WASTE OF THE ENVIRONMENT (sealed surfaces, air pollution, materials used in a car are highly toxic and environmentally unfriendly)

WASTE OF BODY (people have two legs that are not moved very much anymore because of the car, and an incredible amount of money is spend to fix people's obesity and it's consequences for the body)

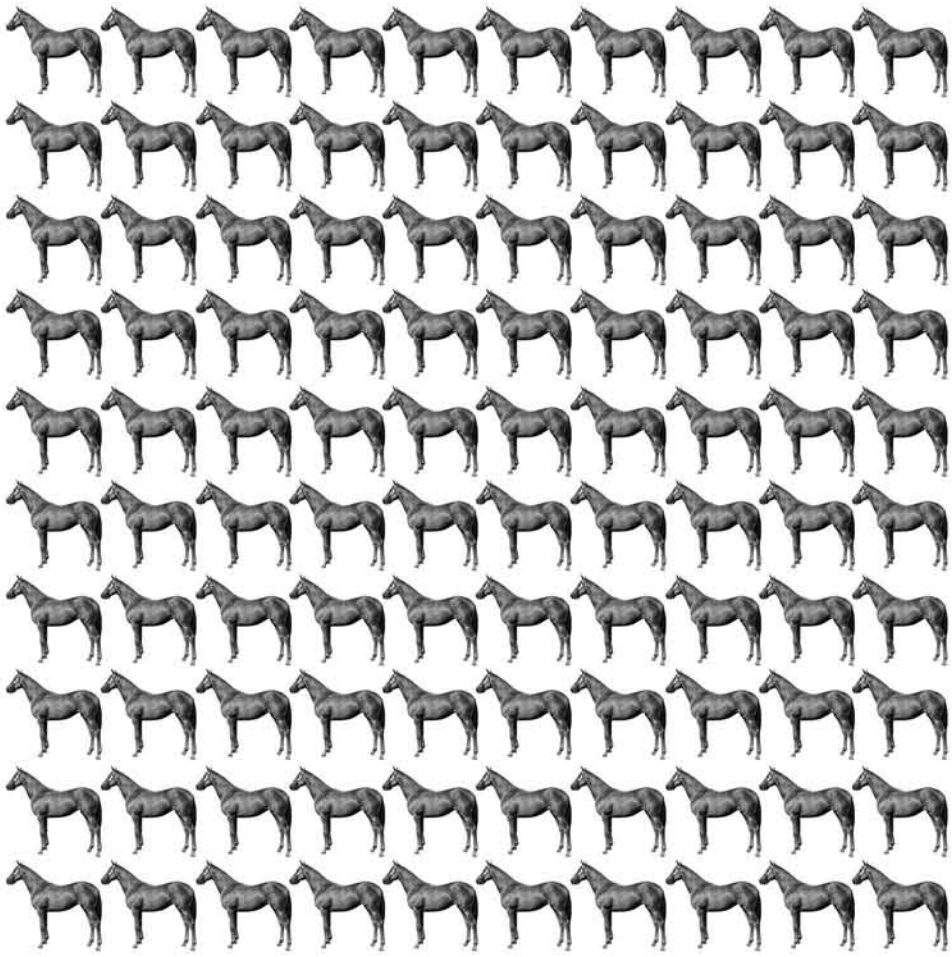
WASTE OF CITY (city should be a diverse place with multiple parts - living, shopping, working, leisure - close by, because of the car it is possible to spread everything out and no density is needed anymore)

To me there seems to be too many negative aspects of the car. In my thesis I imagine DeTROYt without cars. People's everyday life depends on the car, so it would be a challenge to think of a city that doesn't include cars anymore. Even though I named so many negative aspects of cars I won't demolish and rip out everything connected to cars just because I won't need it anymore. The invention of the car is an important part of American history; it had and still has a huge impact on American society, no matter if good or bad. Maybe in a couple hundred years someone is digging in DeTROYt and unearths a whole grid of paved roads and streets as well as big parking lots and parking garages -- telling the people in the future about our last century, Detroit's preferences and way of life.

Currently, people need a car for the following:

getting to work, getting kids to school, shopping, getting to the cinema, theater, library etc, postman, trash collecter, fire engine, ambulance, shipment by trucks, vacation.....

For all those activities I will have to find a substitute that doesn't need roads or streets to function. There are smaller and lighter constructions that can move people around: bike, segway, walking, scooter, roller blades etc. They also don't need wide heavily sealed surfaces.



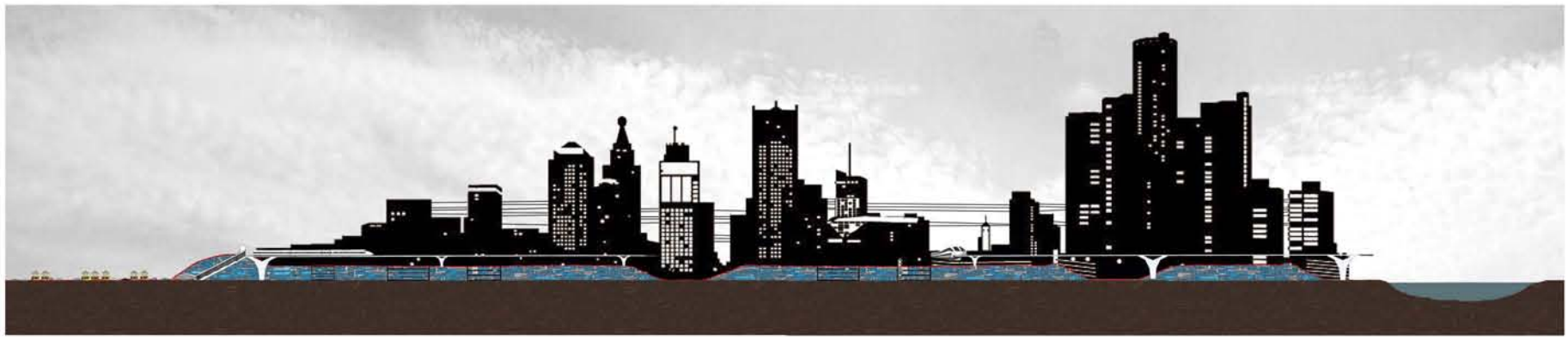
:

relation: a 100 horse powered car moving one person
a 1 horse powered Segway moving one person

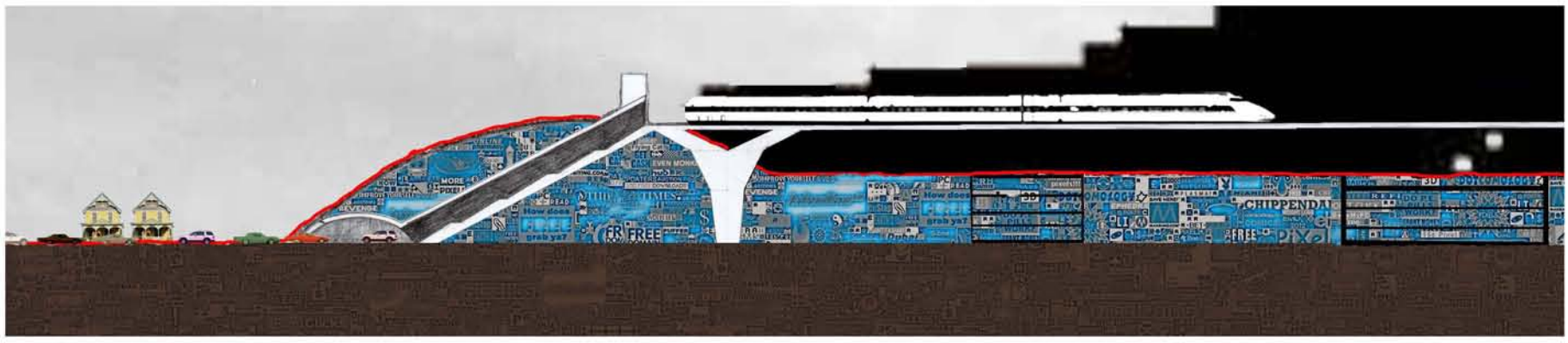
Picture A on the right shows a section through DeTROYt. Blue is the trash that will be poured over the city. Around some buildings the trash bows down to keep the whole building for future usage (the Fisher Building is an example for this method and I will describe it in more detail later in the book). The collage also shows the importance of mass transportation, which connects all parts of the city.

The edge of the city is defined by the DeTROYt River on one side and a Trash Mountain surrounding the city on all other sides. This trash mountain is to prevent cars to sneak into the city, but also prevents the city from growing and sprawling into the surounding neighborhoods. As time passes, suburbia will diminish as people will find a prospering, exciting and also green DeTROYt. As there won't be any cars, and no need for roads, it will be also cheaper for people to live in DeTROYt. New jobs will be mainly created in the building industry, recycling/garbage industry as well as the environmental/green industry.

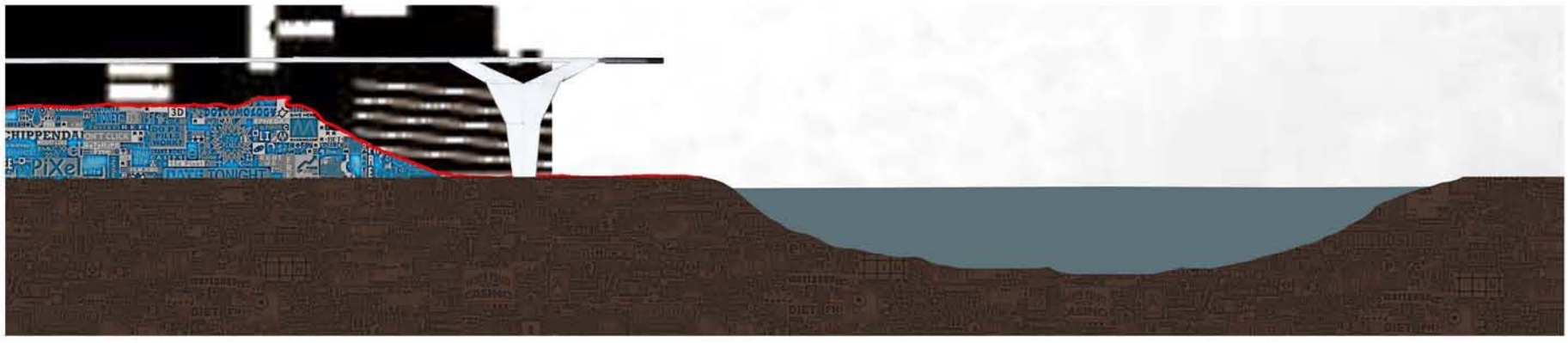
Picture B shows the trash mountain in more detail. People arriving by car from suburbia or other cities can park their car below the trash mountain and use escalators and stairs to get on top of the mountain, where people can board public transportation to take them to any place within the city.



picture A section through DeTROYt



picture B close up on trash mountain surrounding DeTROYt



picture C close up on DeTROYt river - forming a border on one side of the city

## DETROYT PRINCIPLES

*Preamble:*

WE THE PEOPLE of DeTROYt do bury our old city in garbage in order to form a new city on the ideal that education is the center of the community and must be available to everyone. This emphasis on education allows us, the citizens of DeTROYt, to be innovative and symbiotic with our environment.

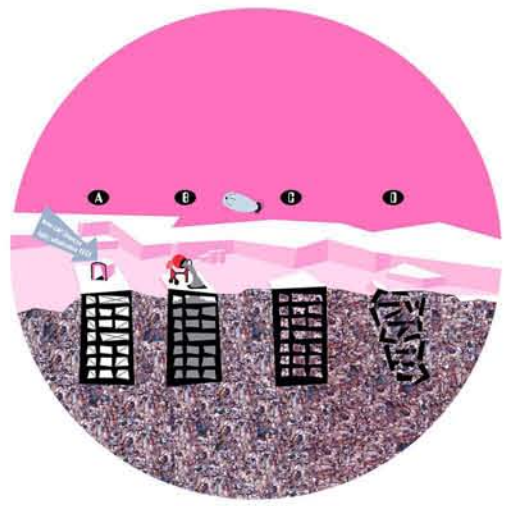
Existing urban and suburban development and outmoded methods of growth and redevelopment have left DeTROYt paralyzed. We find ourselves unable to fix the congestion and air pollution resulting from our increased dependence on automobiles, the loss of precious open space, the need for costly improvements to roads and public services, the inequitable distribution of economic resources, and the loss of a sense of community. Using readily-available waste from neighboring cities, we will start fresh, on new soil, and plan new communities that will more successfully serve the needs of those who live and work within them. Such planning should adhere to certain fundamental principles.

*City and Community Principles*

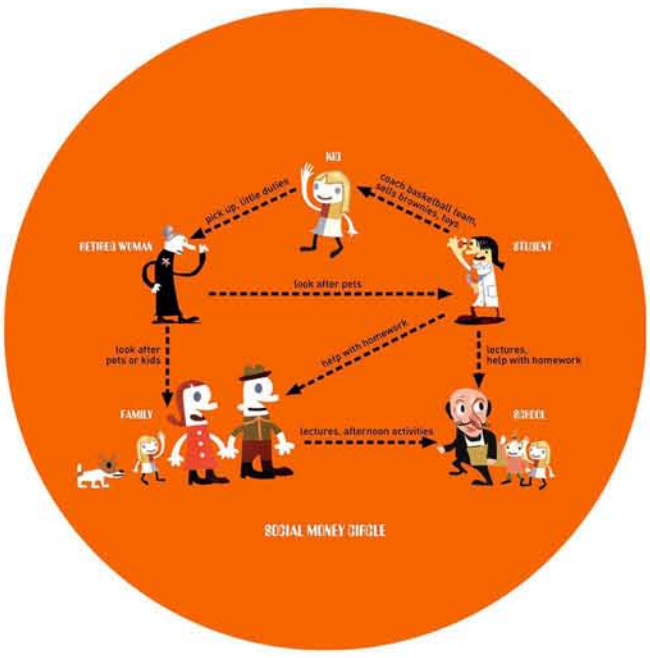
1. The city of DeTROYt is organized by a network of communities, each with a main work and education station at its center. The size of the community is defined by each building's functional connection to the work/ education stations.
2. Each community in DeTROYt is a complete and integrated community containing housing, shops, and one work/ education station. This station must include each of the following facilities: (university, school, work places, green space, civic facilities, kindergarten, transportation (train stop) and governmental facilities all essential to the daily life of the residents.
3. Each work/ research station should specialize in a particular area of interest, unique from the other community education centers, allowing for the greatest educational opportunity across the many neighborhoods of the city.
4. Businesses within the community should provide a range of job types for all of the community's residents.
5. Each community should introduce social money, different currency in each community, to encourage community life and intercon nection and strengthen existing social and economic mechanisms within the neighborhood.
6. Community size should be designed so that housing, jobs, daily needs and other activities are within easy walking distance of each other, and of urban and regional transit stops.
7. The location, orientation, and order of the community should be consistent with a larger urban and regional train network.
8. The buried buildings of old DeTROYt should be used as storage space, train infrastructure as well as excursion trails. Private invest ment and public/ private partnership in the reuse of buried space is encouraged.
9. The authority to plan and develop neighborhoods falls on the leaders of that community. This should not encourage autonomous iso lation of each community, but rather capitalize on unique possibilities within each neighborhood.
10. All communities should be close together. Sprawl should not be encouraged.
11. Plans should be developed through a process of citizen involvement, and participants in the process should be provided an opportu nity to weigh in on all planning proposals. Also encouraged are large public meetings where local residents and businesses together envision what they want.
12. City government, community leaders, and the private sector should develop award programs and research grants to recognize and reward environmentally sound practices, involvement with the local communities, modern architectural design, as well as other exemplary innovations.

A

B




C




D

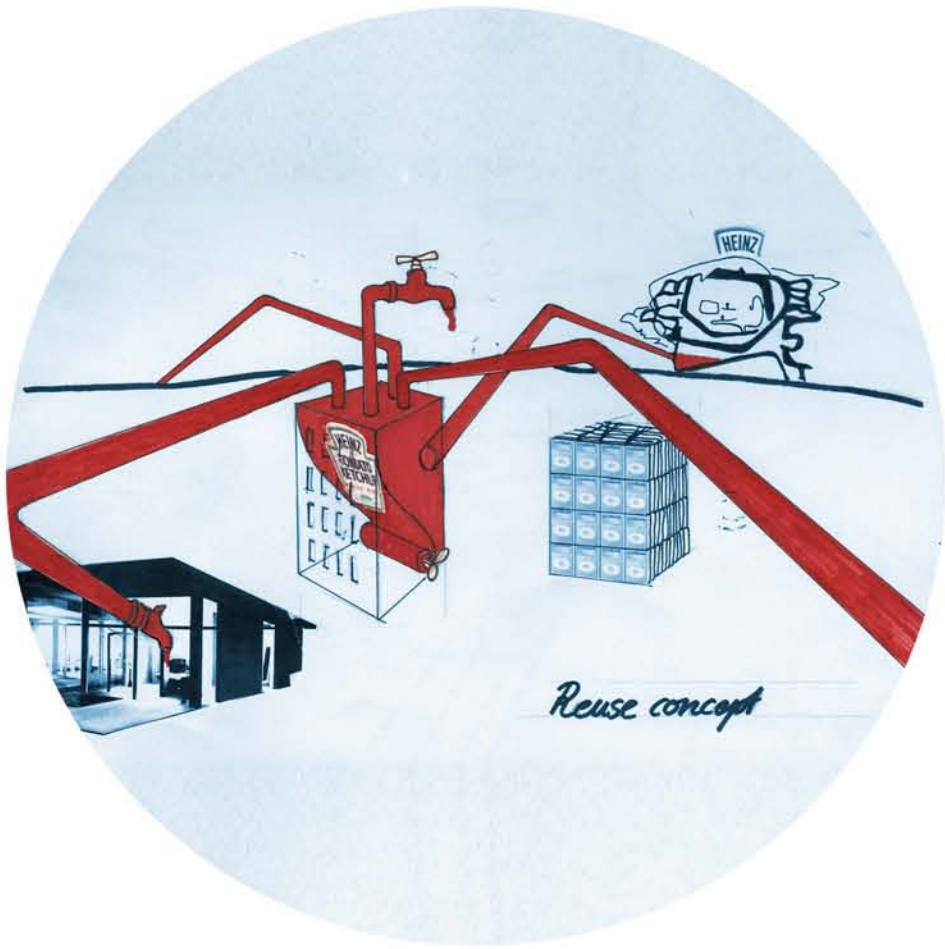
A The different work/ research/ education stations, which are connected by an extensive train system, connect people quickly from one place to the other within DeTROYt

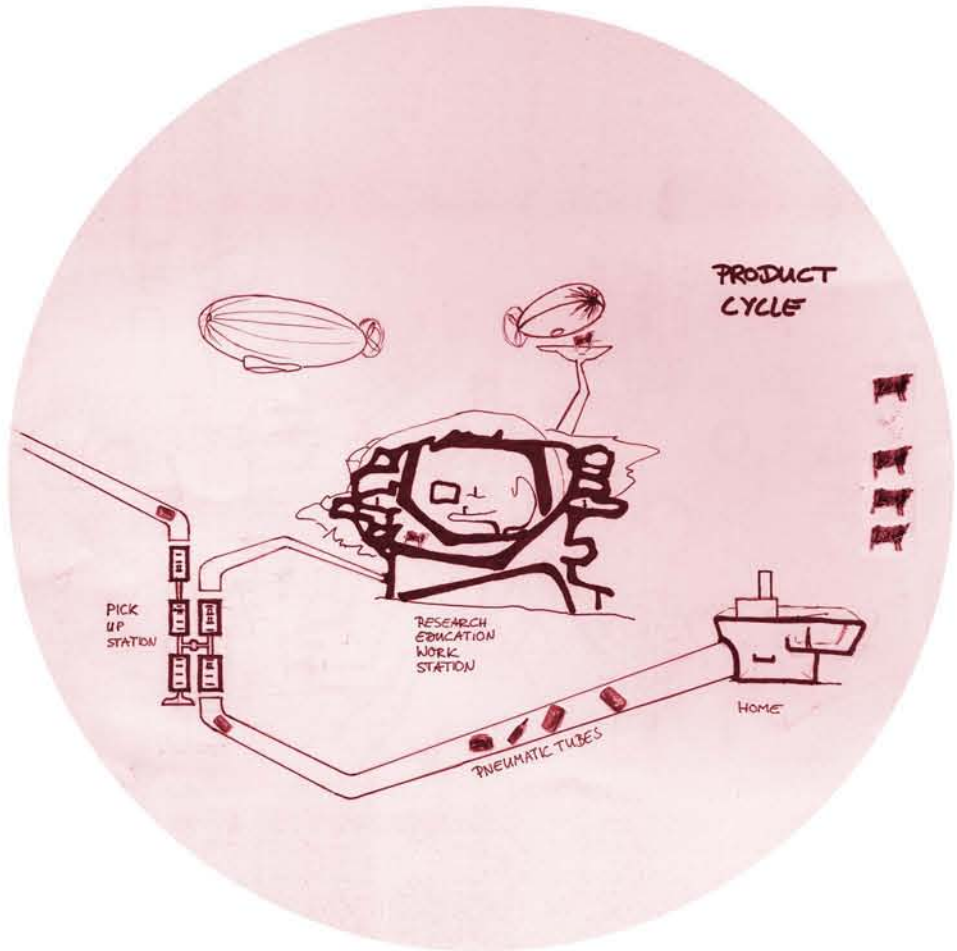
B Concepts for the reuse of the old Detroit buildings once trash has been poured over them.

C Social money should be introduced in every neighborhood of DeTROYt and can only be used within each neighborhood. It will encourage community spirit and social life.

D New ownership regulations of the different parts of DeTROYt (car rental stations will be outside of the city - people don't use cars anymore, but occasionally need them for vacation or business outside of DeTROYt.

13. Prior to any development, a specific plan should be prepared based on these planning principles.
14. No shopping malls or supermarkets bigger than ___ are allowed to be built. Things needed for everyday life will be ordered online and delivered to the community pick-up station by zeppelin via air mail. Each neighborhood should have a pick-up station as well as a car rental station.
15. No office buildings bigger than ___ are allowed to be built. Mixed housing should be encouraged.
16. Each community should have a pick-up station, centrally located, as well as a car rental station at its outer edge.
17. Mixed-usage housing (shops + residential + small offices) should be encouraged; mono-usage should be avoided.
18. A community should contain a diversity of housing types to enable citizens from a wide range of economic levels and age groups to live within its boundaries.
19. Public spaces should be designed to encourage the attention and presence of people at all hours of the day and night.
20. All streets, pathways etc are public and are allowed to be used by everybody.
21. Each community work/education station should provide places where people can easily meet face to face.
22. Parking should not be permitted on streets within the community. The community should provide limited space for compact, long-term garaging of automobiles. Private garages must not be built, nor private parking, e.g. driveways or carports.
23. The height of each building depends on the height of the neighbouring buildings. Enough sunlight should be available for every building.
24. Agricultural functions and facilities should not be prohibited from community spaces, e.g. harvesting orchard fruits from trees on public streets, cultivating flowers in public greens, or cow pastures integrated into work/ education stations.
25. Because the new DeTROYt will be a very large construction project developers should be able to employ a very effective building-waste recycling system. Hard waste (such as timber, concrete and broken bricks) and soft waste (such as insulation material) should be recycled within the site.
26. One work/ research station should have a learning center for sustainable development.
27. The community should contain an ample supply of specialized open space in the form of squares, greens and parks whose frequent use is encouraged through placement and design.
28. The homeowner association should own the household commons, greenbelt commons, agricultural lands and the work/ research center.
29. Green spaces should be equipped with benches, chairs, picnic tables, playgrounds, vine covered arbors, ping-pong tables, and barbecues.
30. New work/ education stations strive for the most efficient use of finite resources through maximum reuse and recycling of materi als, sharing of infrastructure and service.
31. The community design should help conserve resources and minimize waste.
32. The street orientation, the placement of buildings and the use of shading should contribute to the energy efficiency of the community.
33. Street design and landscaping should allow winter sun to warm houses, while offering shade during the summer months.
34. Streets, walkways and paths should not be sealed. Pervious concrete should be used for walkways, and open-celled pavers for emergency vehicles driving in grass-planted slow lanes.
35. Each building will get its electrical power from sustainable energy sources, such as PV cells or community wind farms, as well as hot water from gas boosted solar hot water systems. Energy surplus should be exported to the local electricity grid and result in a net negative energy drain.




Because I decided to get rid of the car in DeTROYt I had to think of how people would get around without it. One major activity people need cars for nowadays is shopping. Shopping will be done differently in DeTROYt. Pneumatic pipes will deliver ordered goods to the houses.

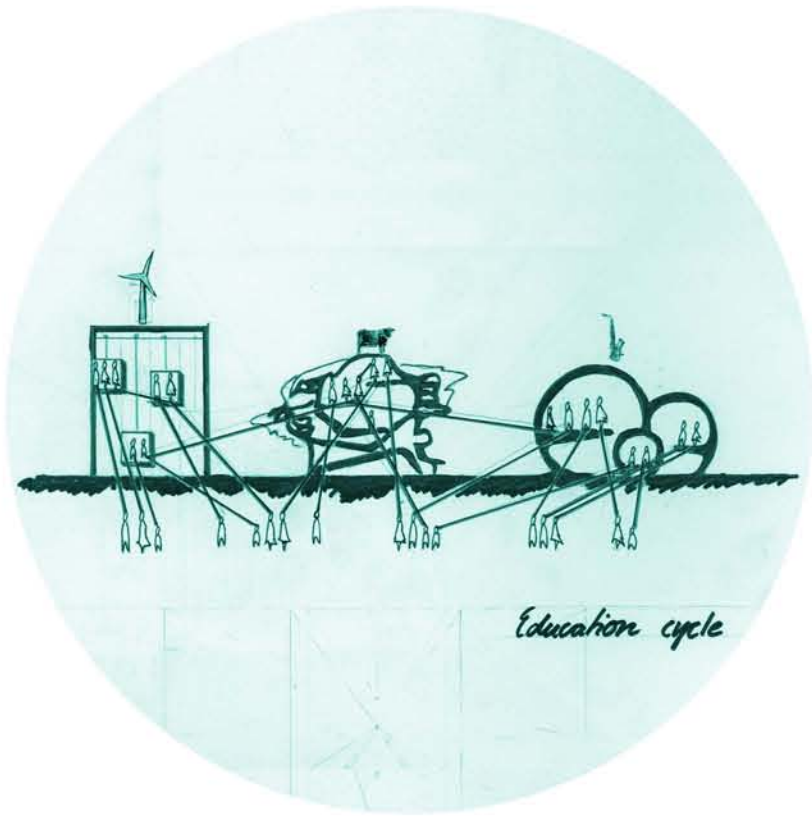
36. Methane production should be controlled by passive venting which allows methane to escape the landfill. At these vents, the methane production should be harnessed for generating power.
37. Each community must provide space for shared energy collectors, water filtration, and other public utilities, especially in cases where shared community utilities result in more efficient use of resources.
38. Phytoremediating plants should be used extensively to clean shallow water contamination.
39. Communities should provide for the efficient use of water through the use of natural drainage, drought tolerant landscaping and recycling.
40. A dual water supply system should be incorporated - after water has been used in kitchens, bathrooms or laundries, it should be directed to an on-site filtration station. Solar power should be used to separated and filtered.

*Detroyt Citizens Rights and Responsibities*

1. Everyone has the right to work, to free choice of employment, to just and favourable conditions of work and to protection against unemployment.
2. Everyone, without any discrimination, has the right to equal pay for equal work.
3. Everyone who works has the right to just and favourable remuneration ensuring for himself and his family an existence worthy of human dignity, and supplemented, if necessary, by other means of social protection.
4. Everyone has the right to rest and leisure, including reasonable limitation of working hours and periodic holidays with pay. Everyone has the right to have breaks at work and space to relax
5. Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.
6. Everyone has the right to equal access to public services.
7. An effective primary health care system accessible to all should be available.
8. Everyone has the right to freedom of opinion and expression; this includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.
9. Everyone has the right to freedom of peaceful assembly and association.
10. No one may be compelled to belong to an association.
11. Everyone has the right to take part in the governments that represent them, directly or through freely chosen representatives.
12. The will of the people shall be the basis of the authority of government; this will shall be expressed in periodic and genuine elections which shall be by universal and equal suffrage and shall be held by secret vote or by equivalent free voting procedures.
13. Everyone has the right to be involved in decision making during the development and planning of DeTROYt in order that every citizen's voice is heard.
14. All are equal before the law and are entitled without any discrimination to equal protection of the law. All are entitled to equal pro tection against any discrimination.
15. Everyone has the right to freedom of thought, conscience and religion; this right includes freedom to change his religion or belief, and freedom, either alone or in community with others and in public or private, to manifest his religion or belief in teaching, practice, worship and observance.

16. Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit.
17. Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the maintenance of peace.
18. Each work/ research station should establish exchange programs with other schools, universities and companies outside of the US.
19. Parents have a prior right to choose the kind of education that shall be given to their children.
20. Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.
21. Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.
22. Everyone has duties to the community in which alone the free and full development of his personality is possible.
23. Sharing of experience and knowledge between communities should be encouraged.
24. A regional network of firms should cooperate to build common markets, exchange by-products and other materials, or share human resources, information, transportation, and administrative services.
25. The only gated building or facility allowed in a community should be the prison. Building elements of exclusion, such as fences, gates, hedgerows, moats, and Cretan labyrinths, should not be allowed in any other place.
26. Prisons should hold no more that ten inmates, and should not be isolated from other community facilities (unless dictated by state laws, federal laws, and/ or common sense).

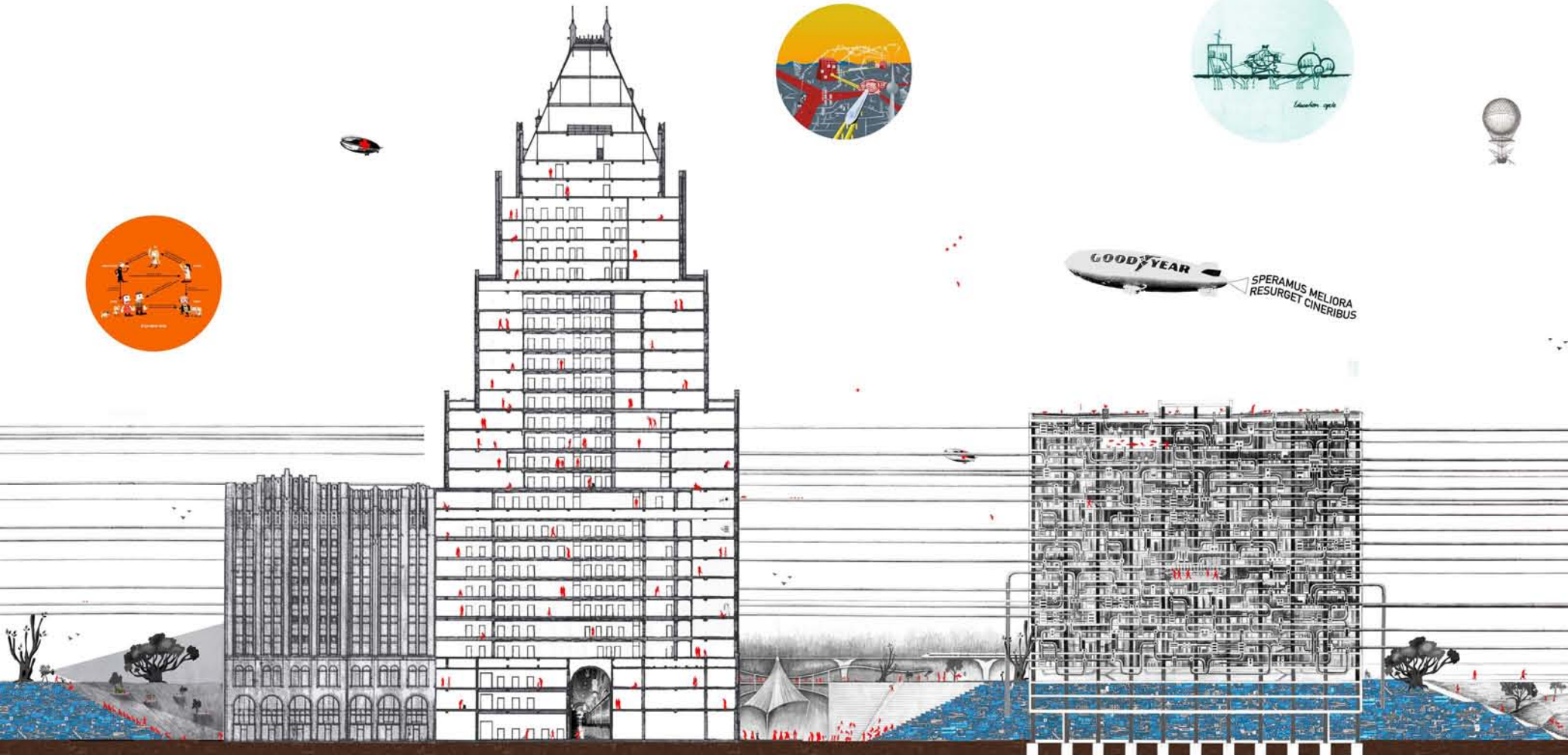
note: some principles were adapted from the European Constitution and the Ahwahnee Principles




Each work/ research station should specialize in a particular area of interest, unique from the other community education centers, allowing for the greatest educational opportunity across the many neighborhoods of the city. A child can attend primary school at a center that is specialized on wind power, but visit High School at a center that specialized on music, and maybe work as a grown up as a cheese manufacturer in a center that specializes in veterinary medicine.

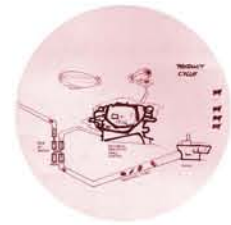
DETROYT IN SECTION

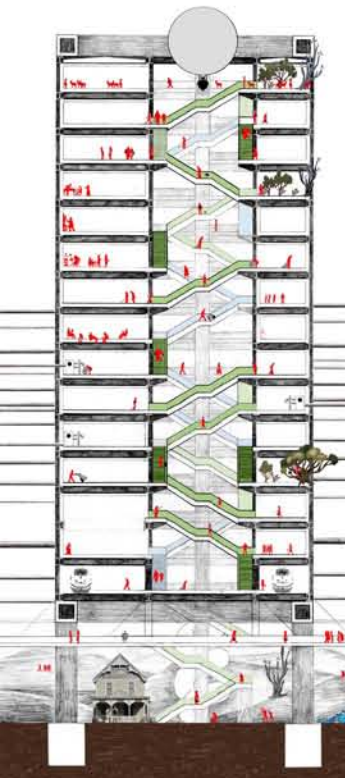
I chose 3 existing buildings as examples to show the diversity of Detroit right now, and also the different possible answers to the shrinking city problem. In reality, the buildings are not next to each other, but in the circle of downtown Detroit.



fisher building
architect: albert kahn
former usage: office
new usage: kahndos

la fayette tower
architect: mies van der rohe
former usage: living
new usage: tube router





phoenix center
architect: ramona sonntag
former usage: parking lot and abandoned houses
new usage: work/ education/ research/ retail center

tiger stadium
architect: osborne engineering
former usage: baseball stadium
new usage: freight receiving and storage facility

PIPES

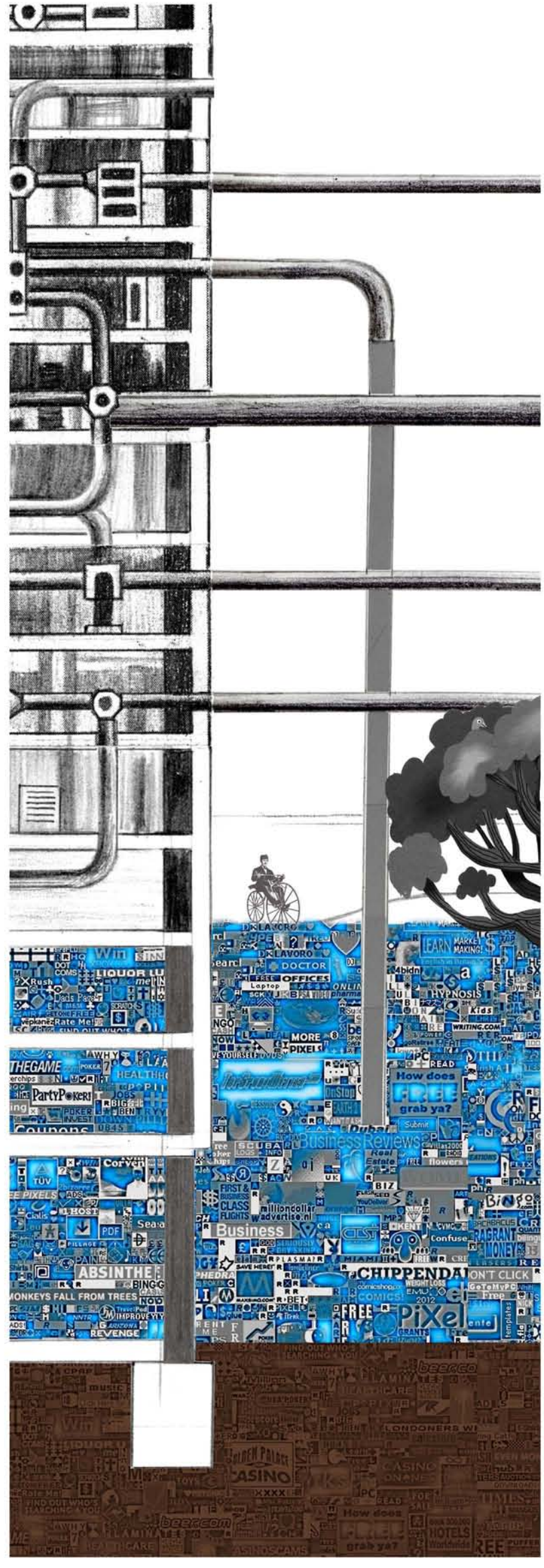
As I wrote earlier - pneumatic pipes will be used to deliver goods all over the city.

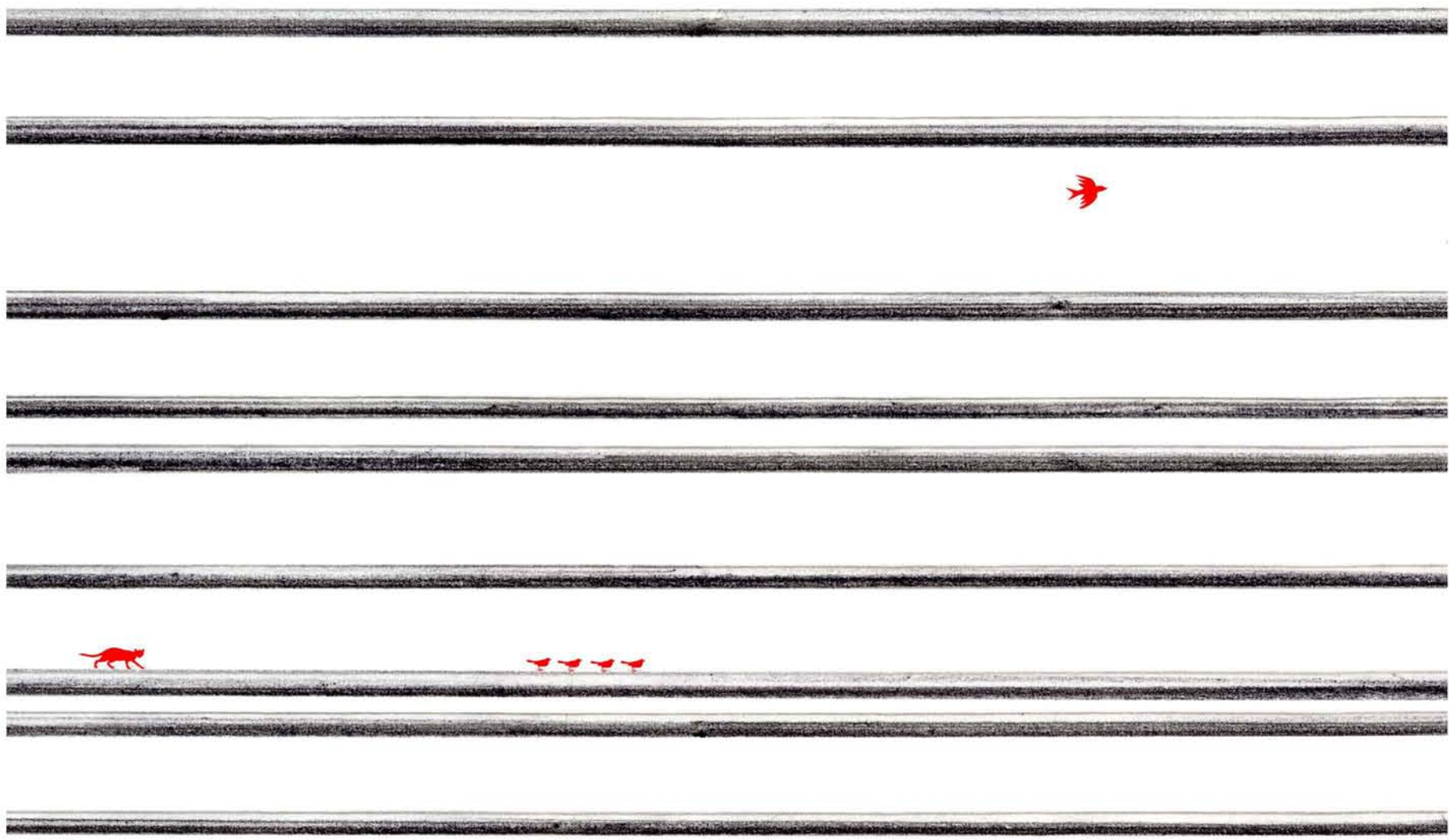
If a citizen wants it, he or she can have a tube system being connected right to their house. The item can be ordered online via internet and will then be send through the pipe right to the customers home.

There are also pick-up stations near houses and offices, as people might want to avoid spam and internet identity theft in their own home. The pick-up station works like an internet cafe, where people can order goods, pay cash and then the goods will be delivered to the pick-up station via pipe and people can take it home from there.

If the item is bigger than the normal tube to your building, the item will be brought near your house via blimp where you can pick it up.

Other pipes have another use. Methane gas, evolving from the trash, is a problem but usually solved by using ventilator pipes sticking out of the garbage and it will be collected and used for energy production.



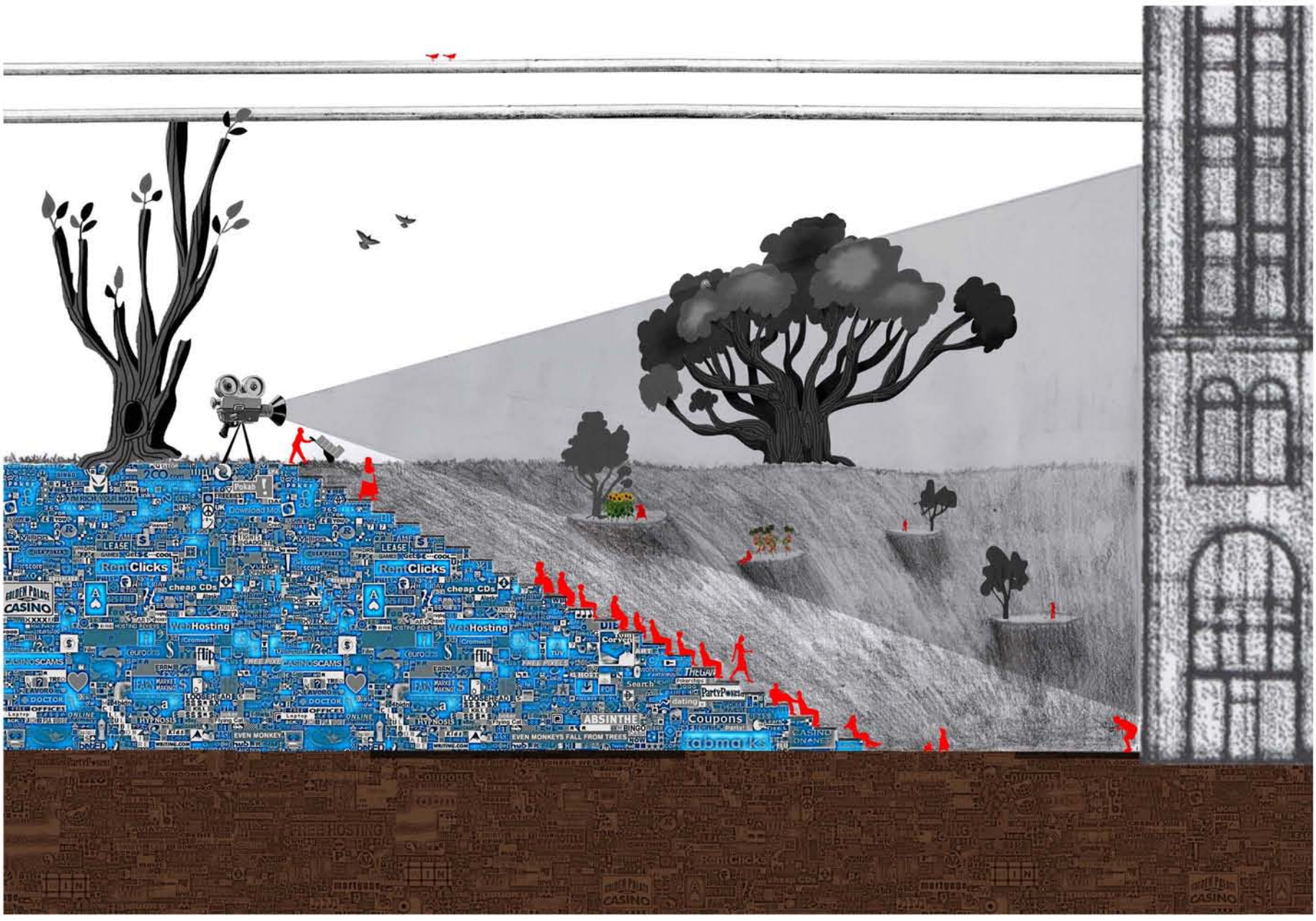


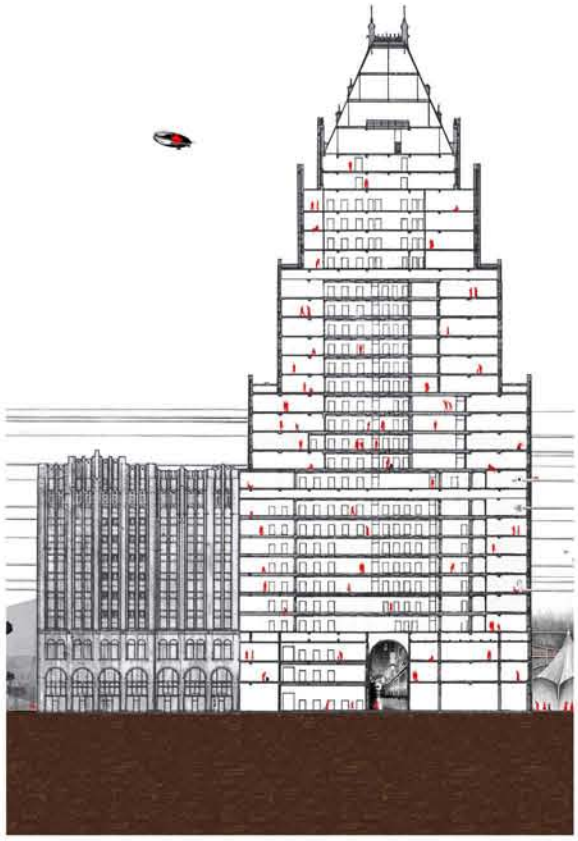
(R. Hamarneh-Vawter, 2005, Fig. 18)

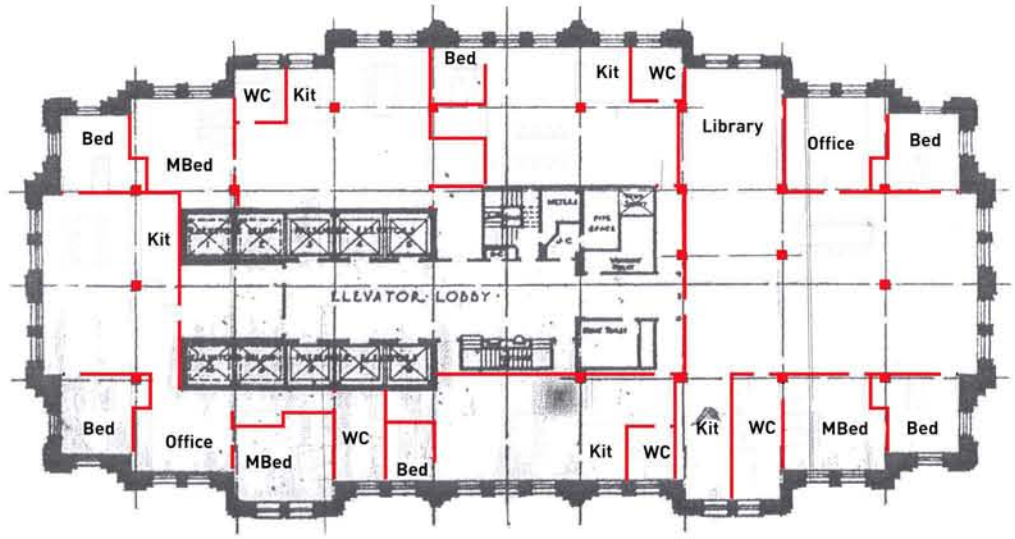
FISHER BUILDING

When the seven Fisher Brothers hired architect Albert Kahn in 1927 to design a building that would bear their name, they gave him a blank check and the instructions to build "the most beautiful building in the world." For me it definitely is one of the most beautiful buildings I've ever seen. It's interior decoration is very rich and detailed. It is an office building, but also houses shops and a theater. Unfortunatelly, it is currently not fully occupied. Some floors remain completely empty.  The big atrium lined with shops doesn't attract many people.

My idea is to turn the Fisher building into an apartment building, as all floors are strictly divided and no interaction is possible. The apartments will range from studio size to 3 bedroom apartments. The ground floor atrium is beautiful and should be kept as it is and should be further used for shops and the theater. The trash bows down in front of it and offers a perfect possibility for an amphitheater right in front of the entrance. Outdoor concerts and plays can take place here. On the other side an outdoor cinema is created by the topography of the trash. Movies will be projected on the plain side of the Fisher building. The other parts of the trash landscape around the Fisher building will be used for terraces where people can plant their own trees, flowers and vegetables.



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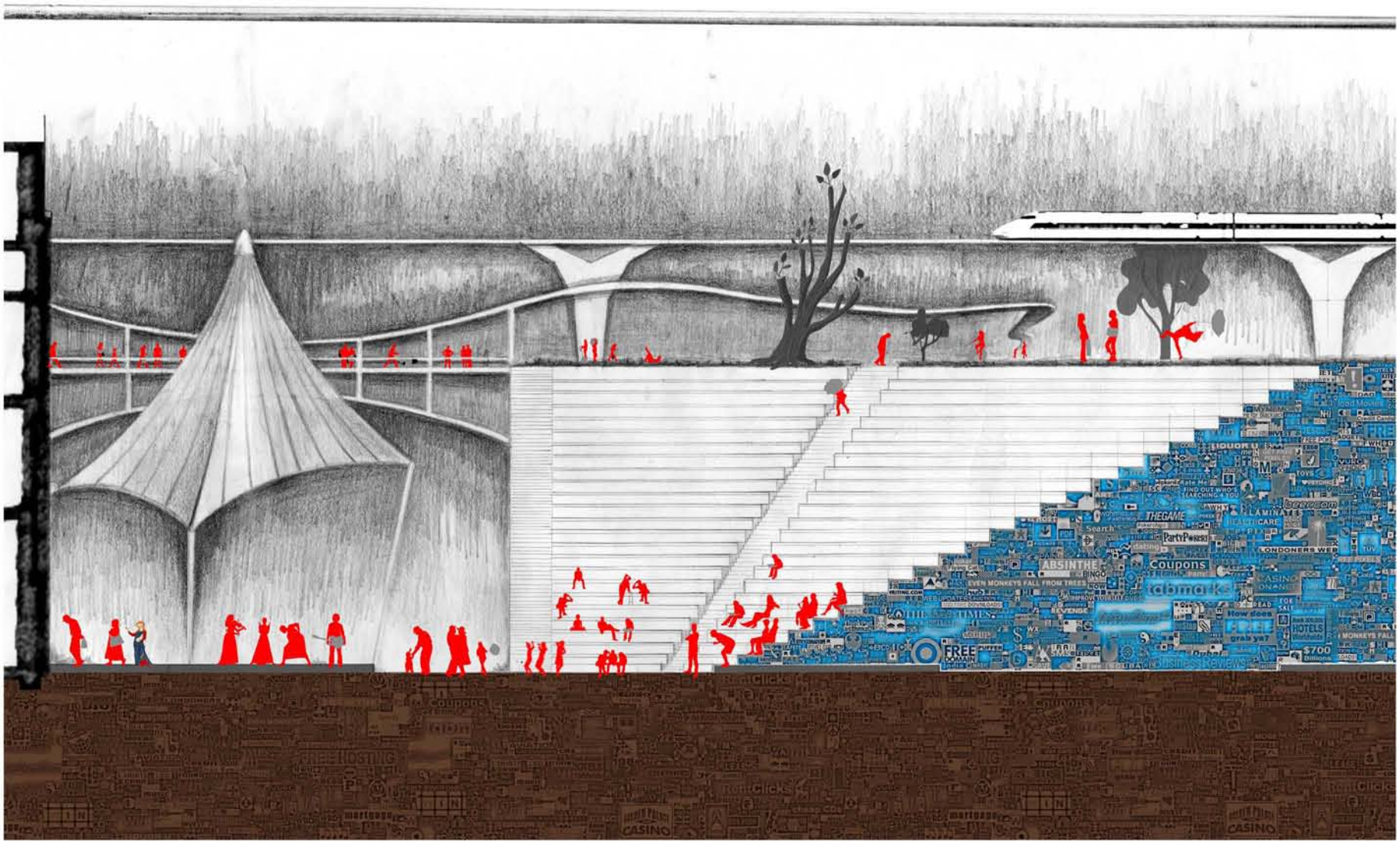


(M. Smith, 1999, Fig. 19)

(FPG, 1935, Fig. 20)

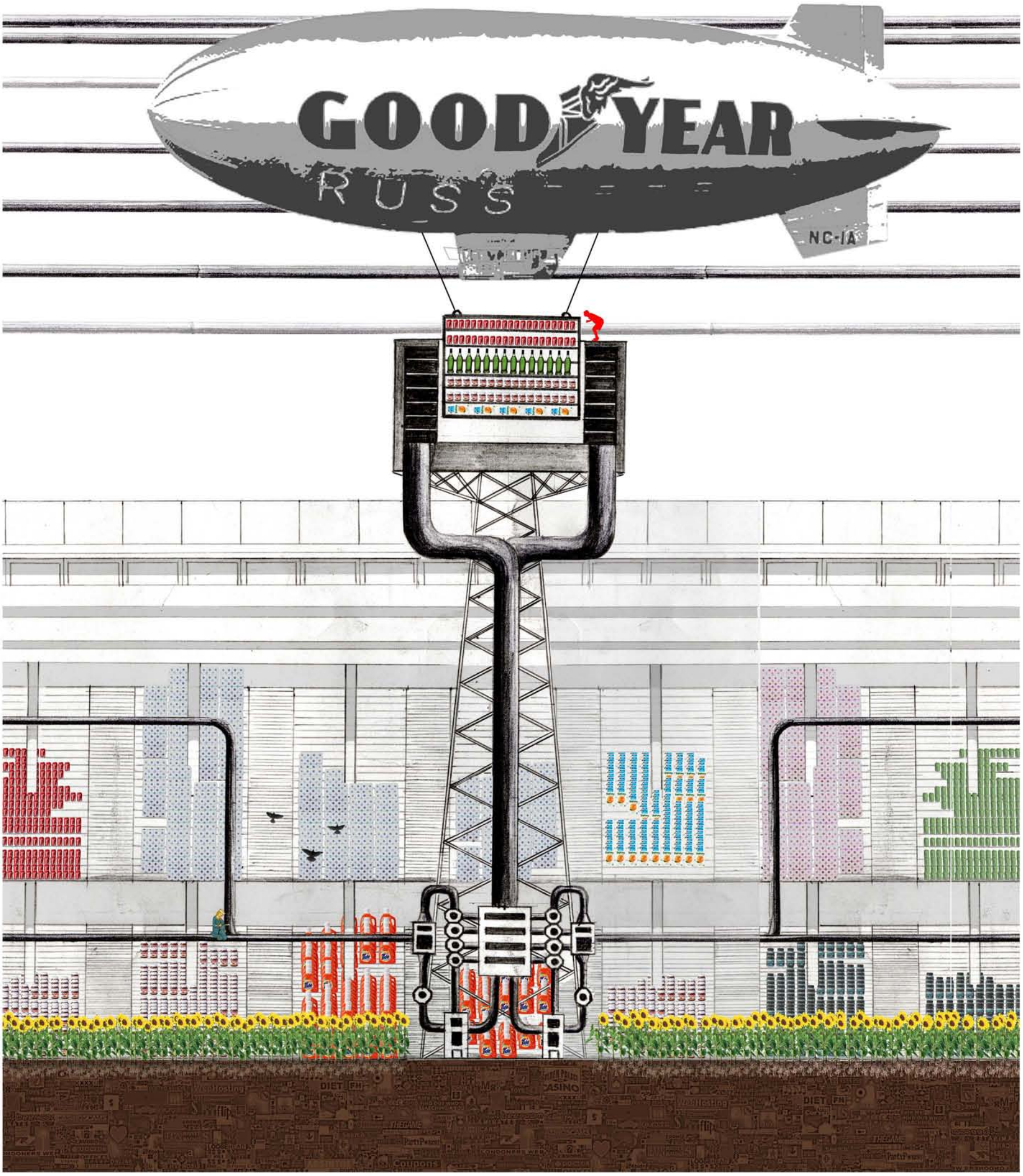
(Brian Merzbach, 1995, Fig. 21)

TIGER STADIUM

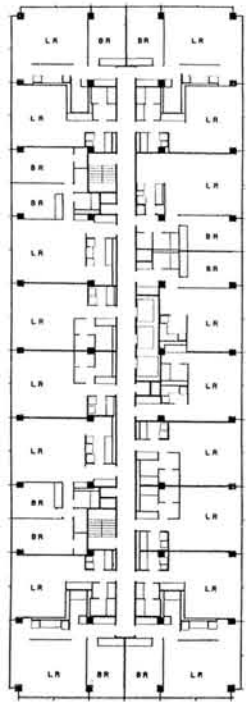
was built in 1912 by Osborne Engineers. Perhaps one of the most beloved stadiums in baseball, Tiger Stadium was the home of the Detroit Tigers for nearly a century. There have been a few modifications over the years to meet new demands. However, last year the mayor of Detroit decided to demolish Tiger Stadium this fall, as there is already a new stadium and no new usage has been found for the old one.

My new proposed usage for it would be a freight receiving and sorting facility for all the goods that will be sent through the pipes. The goods will be delivered to the stadium via blimp and stored there until ordered by a citizen. There is outside storage space for things that don't need cooling (like toilet paper, pens or crackers) and there is indoor space for things that need cooling (like coke, ice cream or butter). A robo-machine picks the item and releases it into a main pipe, and from there the ordered good is delivered to a pick-up station or individual home via pneumatic pipe.

The thin outer walls of Tiger Stadium will be protected from collapsing (under the weight of the trash) by stabilizing them with old crushed cars - they will function like condensed steel walls.


GOOD YEAR
RUSS
NC-1A
DIET
CASINO
Coupons

(Architectural Forum, 1960, Fig. 22)



(Architectural Forum, 1960, Fig. 23)

(Architectural Forum, 1960, Fig. 24)

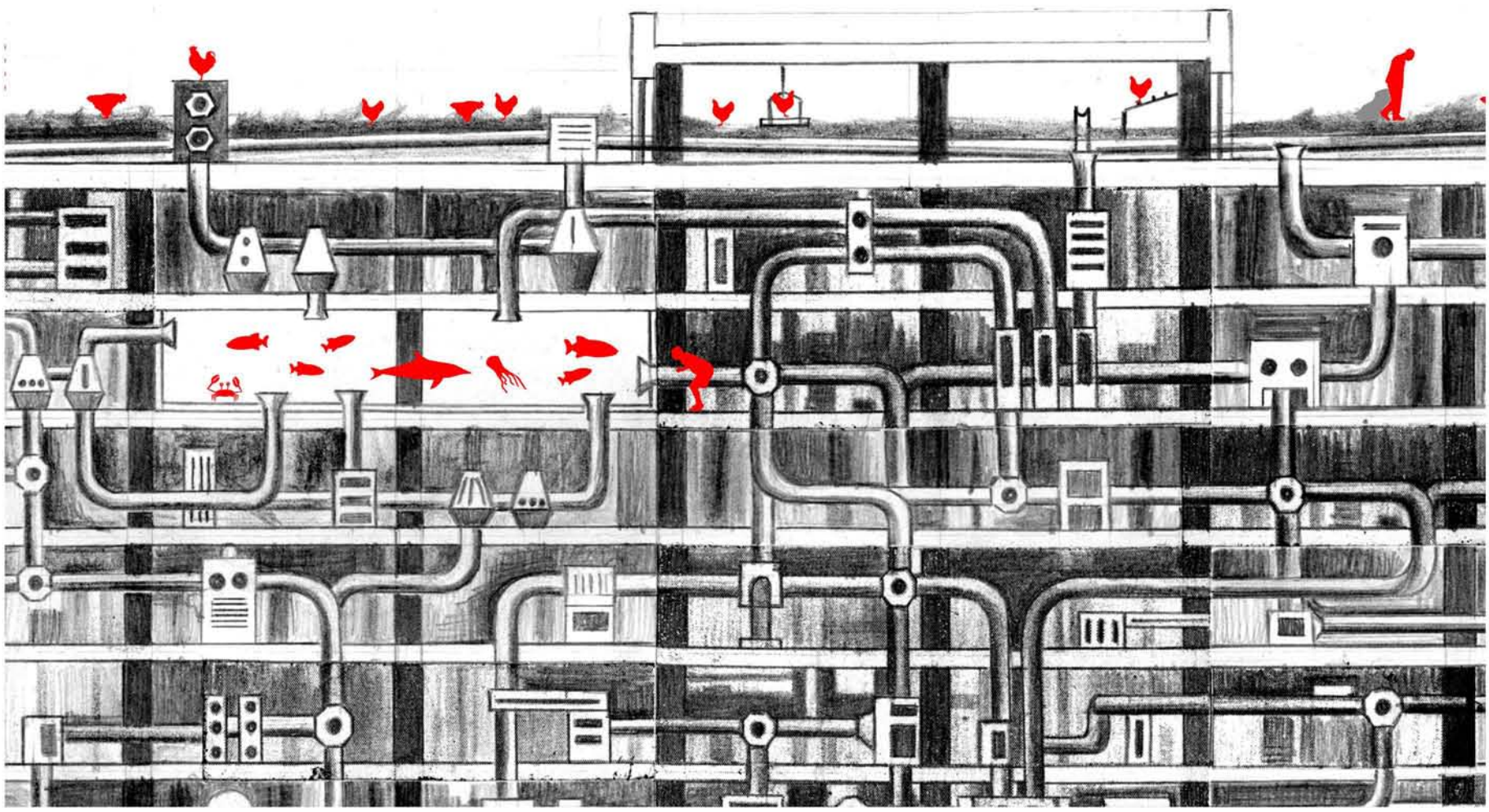
LAFAYETTE TOWER

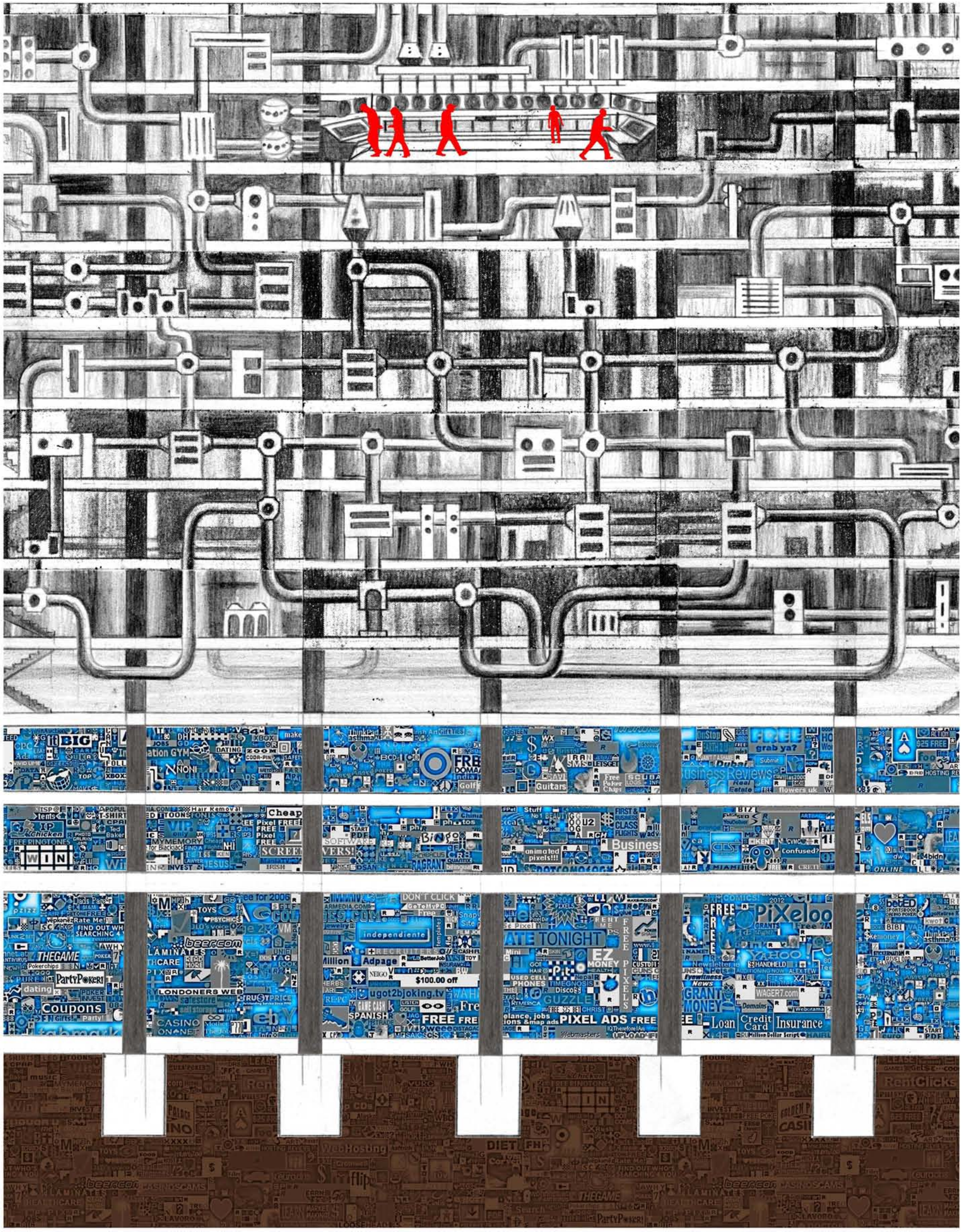
built by Mies van der Rohe in 1963. There are actually three towers. However, I just picked one to show in section. The Tower is situated in the Lafayette Park which is a large park and complex of apartment buildings. There are a lot of empty apartments. The apartment buildings of Lafayette Park are classic examples of Mies' International Style, with their simplicity and clean proportions.

It‘s structure is perfect for a tube router. The goods coming from the Tiger Stadium have to be sorted and routed by huge machines to the right receiving person. In the center of the building the command station is located.

Instead of demolishing the grand entrance I lay the saving trash over it to save it for your offspring or maybe some day in the future the La Fayette tower would get another usage and could be excavated from the trash again.

It will also house a aquarium so that fresh fish can be send out to customers via pipe. The roof will be used as a chicken farm, so that people can order fresh eggs for breakfast.

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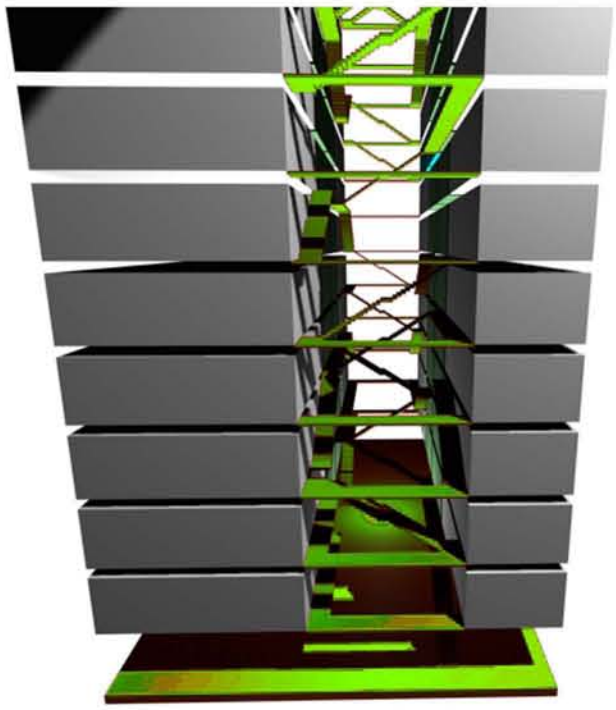
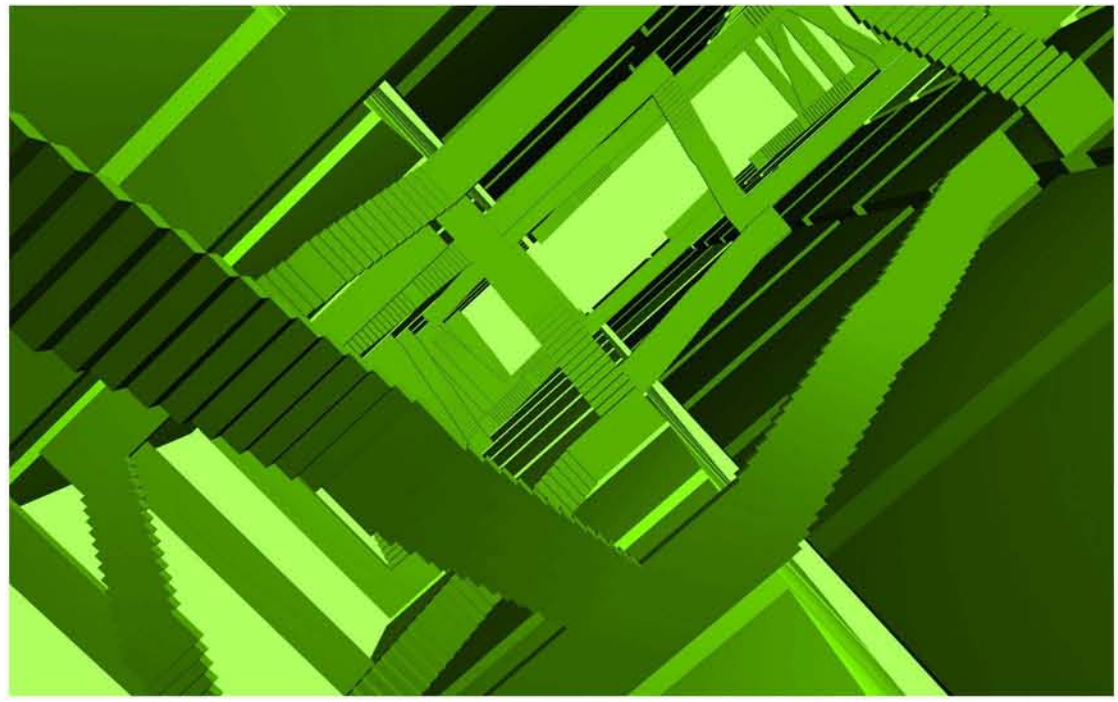
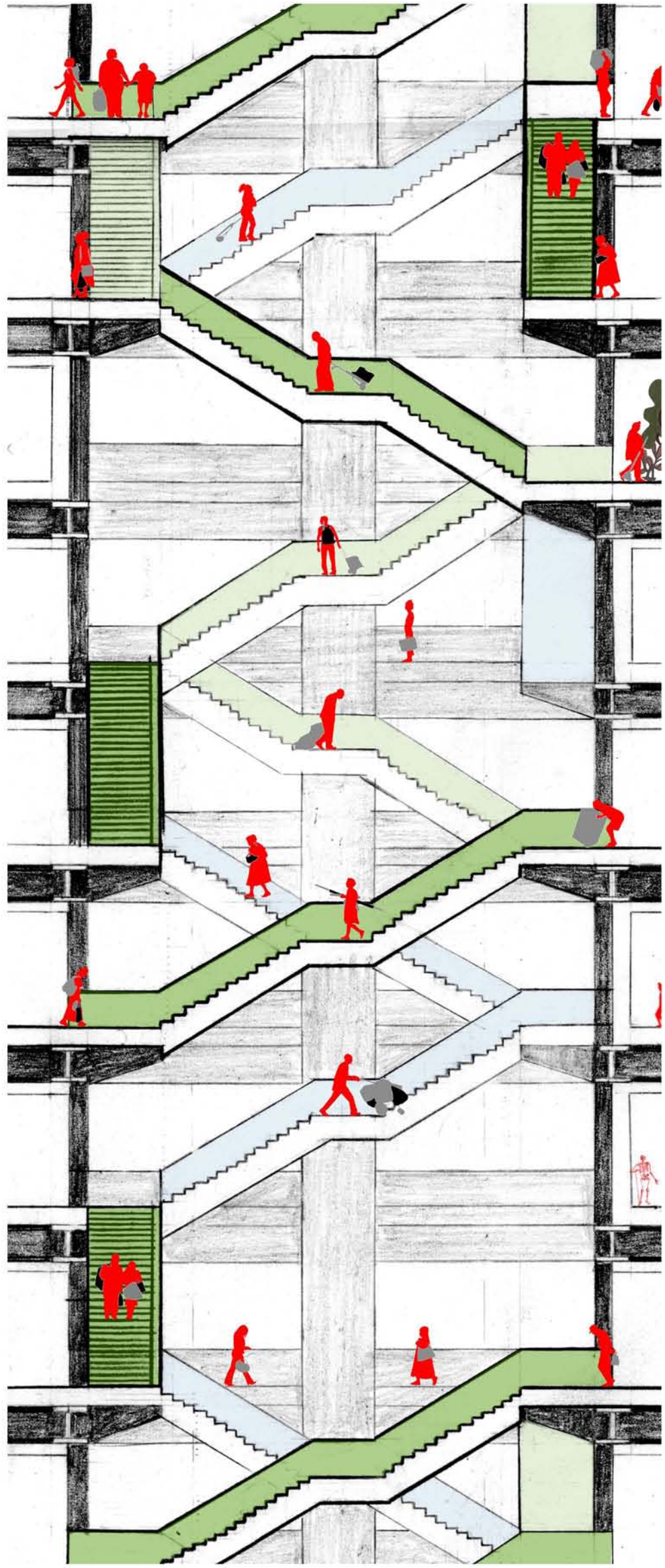




RESEARCH/ EDUCATION/ WORK STATION

What is left in this section?...a place where you work. Detroit has a lot of empty spaces. Where houses used to be have turned into parking lots or parking garages afterwards. Abandoned houses line many streets.  There needs to be redevelopment.

Most of the modern office towers are monofunctional and are working machines that only allow workers to function, but not to interact or relax, discover or create. The tower's appearance, the everything-is-possible structure became more important than the person working behind those facades. Architecture lost it's meaning. Huge crazy structural frames and freaky sloped walls and roofs hold the same idea of an office space as Henry Ford's car factories 100 years ago.

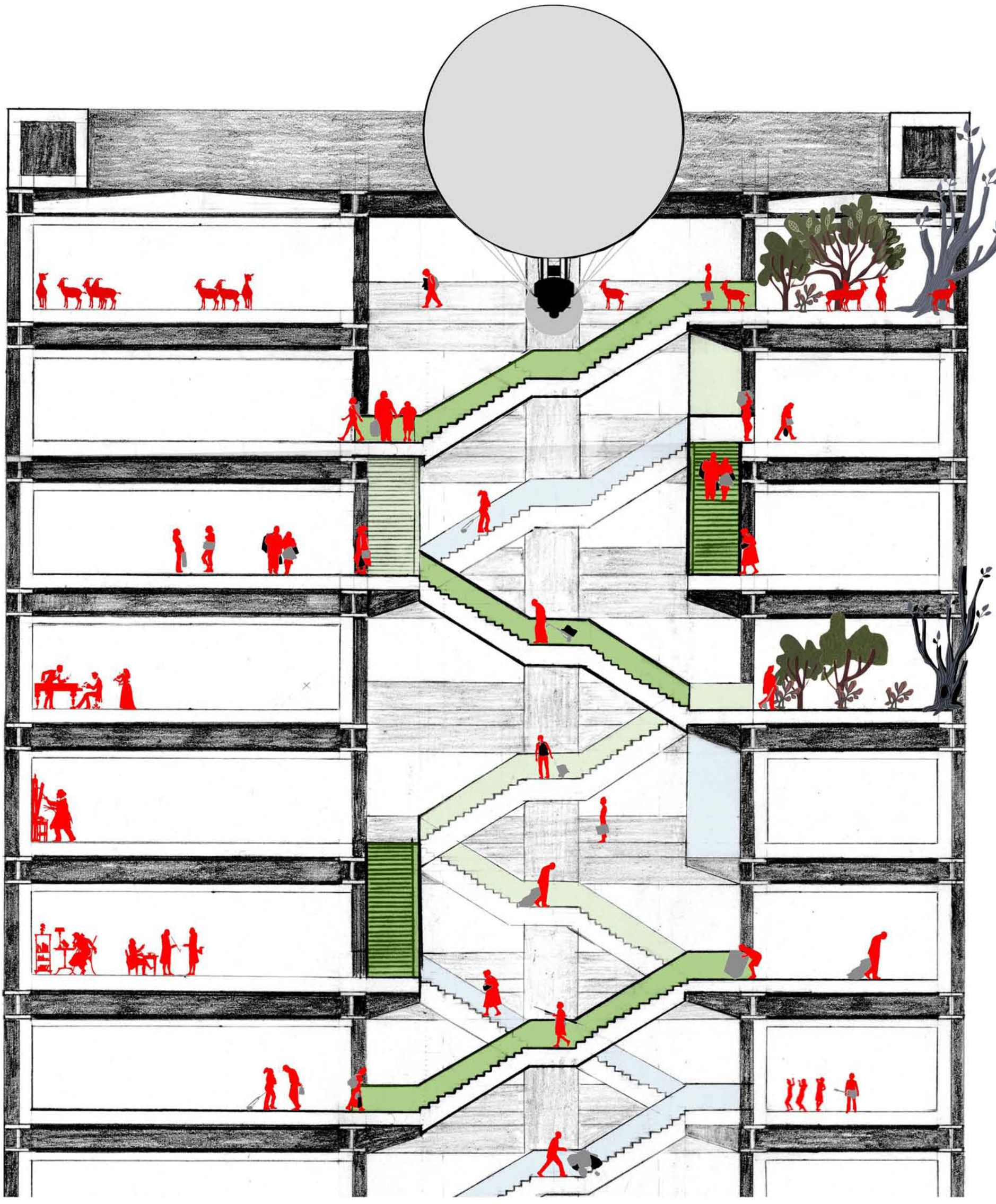


Building Principles

Each of the Detroit neighborhoods will have one or two research/ education/ work stations. There are no pure office towers allowed to be built. It needs to be mixed use.

The main principles are the following:

- Each center should have a main theme e.g.: agriculture, solar energy, jazz music and so on. The university department will set the theme and should automatically attract similar offices, stores and library facilities. For this example, it's veterinary medicine a goat farm moved into the top level. The library focuses on veterinary medicine, however, other offices will move in an architecture office or musicians.
- Each center must house a school class, a university department, office space, kindergarten, city management, train station, a blimp dock station, green space, retail facilities, shower rooms, assembly room and a branch library.
- Each space needs to lead to the fire slides on each side of the building.
- Each office, classroom etc. has a assigned utility/ storage place on the other side. However, it has to be on a floor above or below it's own position. (there are only some exceptions for example: library, restaurant they are allowed to occupy a utility space on the same level) This space has to be shared with another office, school or library etc.
- Certain rooms are open to everyone: e.g. the assembly hall can be used by the university department, city council office, band, library, architecture office and whoever has to perform or say something.
- Each floor is connected with stairs. The position is determined by the need of the rooms and the connected spaces. As for that, there shouldn't be one straight path going up. Also, multiple stairs leading to one floor are possible. There is no dead end. In some cases in order to get to a floor people have to move over and up. Some of the connections are on the inside via catwalk or sometimes people will have to move through a room to get to the next stair. Those spaces could be a restaurant, library or shop.
- There is a small, slow elevator on each side of the building. This should prevent people from using it instead of the stairs.



Resources

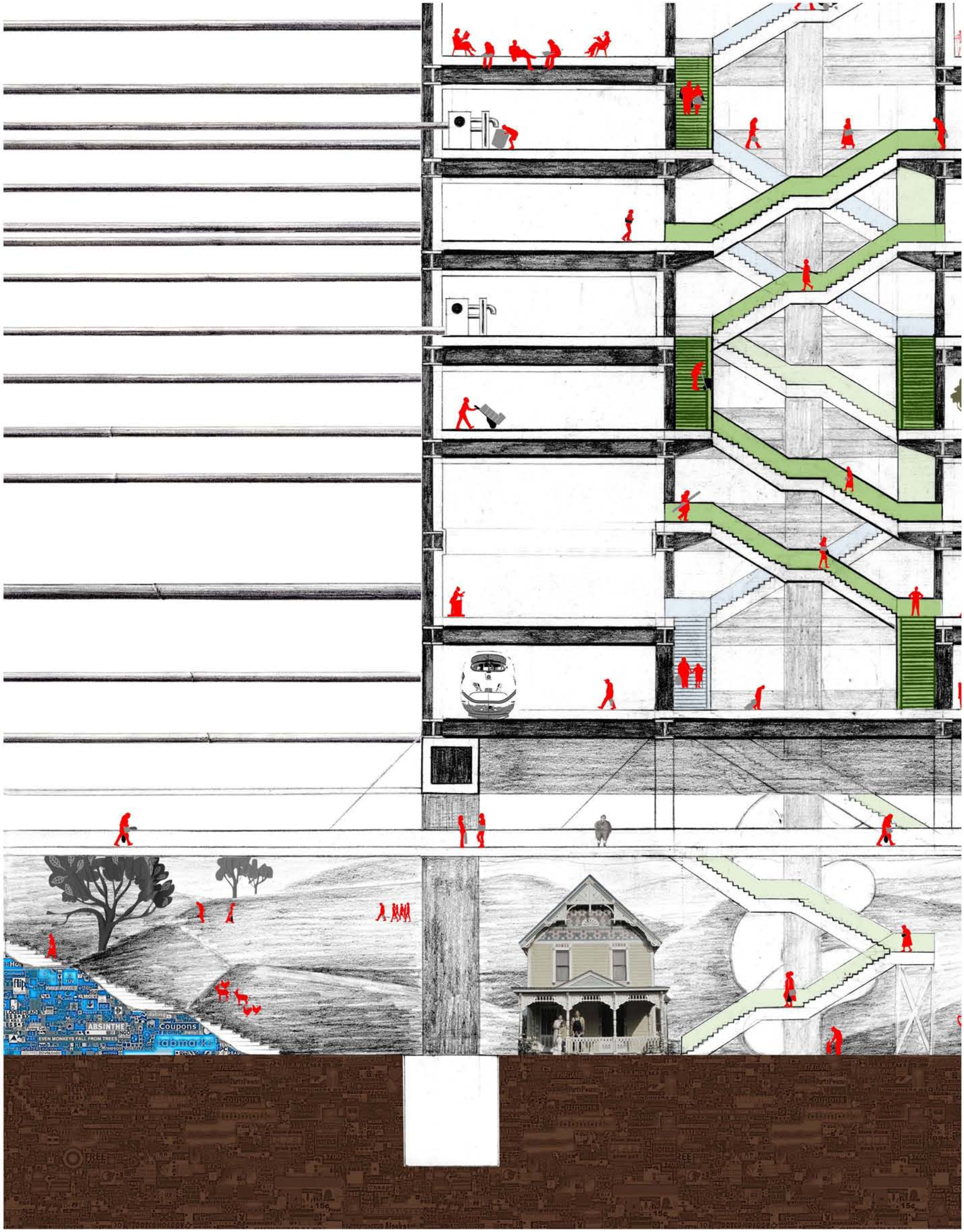
There are two buildings sitting on a big frame. One for a bigger open space and another smaller space which is for enclosed storage space, utility space or open green space.

The structure is a Vierendeel Frame, like Louis Kahn's Salk Institute as well as in Norman Foster's Kommerzbank tower in Frankfurt. Because of it's shape it can take horizontal and vertical stress.

The wall panels, floor and ceiling parts sit within the frame. The wall panels are facade parts from old Detroit, cut out and contained in a frame.  They are used again like in old Troy to protect the new rooms from rain and wind. By this act the old walls are protected from being demolished and reused in almost the same way.

Trash will approach the building in different ways, always depending on the need for the center as well as of the things below it.

Enclosed from three sides, with one big entrance. A parking lot from old Detroit finds life as a big assembly hall. If there are still buildings beneath, the whole space could be used as an exhibition space or hotel -- live in old Detroit, underneath the new one.


ABSINTHE
Coupons
EVEN MONKEYS FALL FROM TREES

Why all this?

Imaging a workplace where you share space - after a while you will share ideas!

This building might house the veterinary department of the University of Michigan, and a goat farm moves onto the top floor providing fresh milk every day for the kids playing on the same floor and also providing goats for the university department - there is also a little cheese factory producing goat-cheese - and still an architecture office, musicians and a city councillor in the same building - we would suddenly understand and see things we couldn't - weren't able to see or understand before.

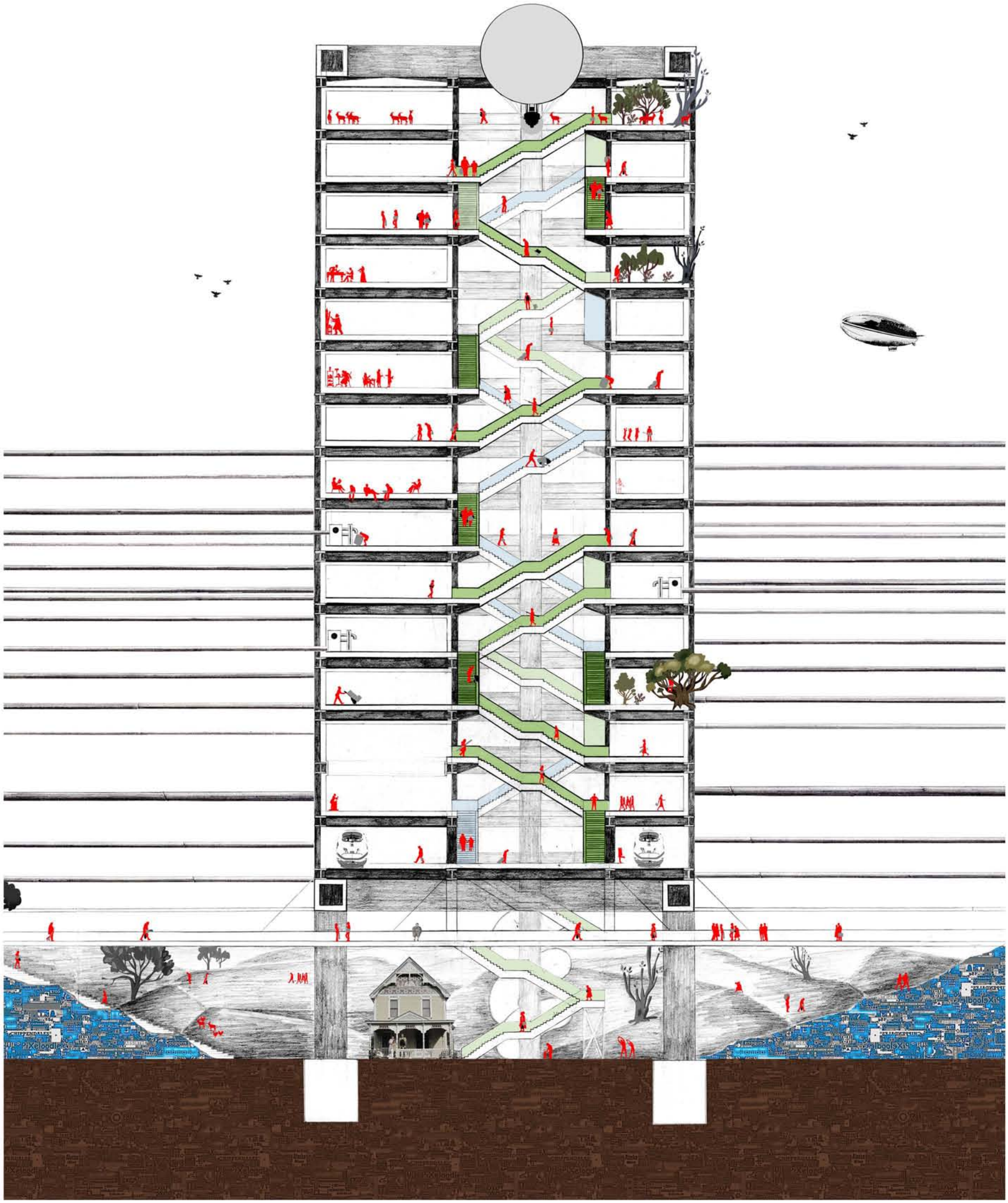
And the stairs

Body is our human resource; it's not being moved very much anymore. I want to force people to move their own human resource, their body again by forcing them to walk in-between buildings and also walk up the stairs to get to their office.

There will be several paths to your destination - you can try a different one each day and find different surprises on your way - maybe a bookstore, an architecture office or a chocolate factory.

We as architects have a responsibility, not just for the structure or appearance of a building but also for the people eventually living, working behind that structure. We might not have realized but we are determining how and where people will spend 8 or 9 hours of their day working or sleeping, reading books experiencing an exhibition.  Form follows function and function follows the architect.

If, we as architects do not rethink and change the current development there won't be anything left of the city of Detroit and also not of other shrinking cities in the US?.we will have to declare the US city dead and the conqueror will be the car.



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CURRICULUM VITAE

education

| | |
|---|---|
| Fall 07 | Master of Architecture Degree at WAAC/ VT |
| 08/ 05 - 02/ 07 | M.Arch. Program in Architecture at WAAC/ VT |
| 02/ 04 | University Degree 'graduate in civil engineering' |
| 10/ 99 - 02/ 04 | University of Applied Sciences Dresden - subject: Architecture |
| 12/ 98 | Cambridge Advanced English Exam |
| 02/ 98 - 12/ 98 | Cambridge University, Evening school in Cobham, UK |
| 10/ 96 - 07/ 99 | University of Dresden, studying English literature, Sociology |
| 09/ 92 - 07/ 96 | High School, Dresden, Abitur |

work experience

| | |
|---|---|
| 02/ 06 - current | staff architect at PGAL; Alexandria, USA |
| 07/ 04 - 01/ 05 | architectural intern at yellow too; Berlin, Germany |
| 03/ 04 - 04/ 04 | initial examiner for competition at Kaulfersch Architekten; Dresden, Germany |
| 08/ 03 - 11/ 03 | site manager's assistant at cornelsen+seelinger architekten; Dresden, Germany |
| 11/ 01 - 03/ 02 | architectural intern at Wheeler/Kearns; Chicago, USA |
| 07/ 00 - 09/ 00 | builder's assistant at Paul Cooper construction site; Guildford, UK |
| 08/ 99 - 10/ 99 | builder's assistant at Paul Cooper construction site; Guildford, UK |

competitions/ scholarships

| | |
|---|---|
| 2005 - current | Fulbright Scholarship |
| 2007 | LEED USGBC, The Greening of Greenbelt, with co-author Henrike Gaenss, 3rd place |
| 2006 | VIrginia Society AIA price, with co-author Bjoern Steudte, 1st place |
| 2005 | AIA Northern Virginia Annual Student Scholarship |
| 2003 | Europan 7 |