

MASTER

The gastronomic quarter a gastronomic development in Parkstad Heerlen

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THE

GASTRONOMIC QUARTER

THE GASTRONOMIC QUARTER

a gastronomic development in Parkstad Heerlen

Daniek Reijnders 2014-2015

Graduation studio IBA 2020 Parkstad

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SUMMARY

Times when social relationships were centered on the growing, processing, selling, cooking and eating of good food have changed. Food production happens on the edge of the city, food exchange at (super)markets and food consumption within the built fabric. The distance between producer and consumer has become larger over time, to a point where we don't know where our food comes from anymore. However, a countermovement can be noticed: the upcoming trend of biological food, local markets and urban agriculture. Farming vegetables close to the place where it is being used and eaten. In the region of Parkstad, urban agriculture is a concept which is being actively embraced as an integral part of urban development in a shrinking region. It is not only an alternative form of greenery, it also delivers social, ecological, economic and spatial benefits to this shrinking region.

The Gastronomic Quarter, located in Heerlen - the core of Parkstad, aims to connect city design and food relationships to create more sustainable, convivial places. Through three interventions the project aims to reanimate a part of the city center of Heerlen. Firstly, exposure to urban agriculture is given by using the rooftops of the four existing Ungers pavilions as places for growing fruit and vegetables. Secondly, the existing market square is reinterpreted in a way that it connects to the third intervention: a redeveloped (vacant) building that combines the complete food system. This place not only displays the process of growing, harvesting, processing, cooking, dining and selling of good food, it is also a place of education by giving people the opportunity to join a cooking class, pick their own vegetables in the greenhouse or just learn about food from wandering through the building. The contemporary urban agriculture initiatives in Parkstad are coordinated from this place as well. Local (city)farmers can sell their products to the supermarket, or can rent a stand on the market floor having direct contact with the consumers. A meal always tastes better when you've seen how it is made.

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PREFACE

It wasn't until the start of this graduation studio that I had ever been in Heerlen. Moreover, the only site I had seen in the whole Parkstad region was during a music festival, of which it is questionable whether I was here because of the place or the line-up of the festival. There was nothing in that region that tempted me to visit places. I chose this graduation studio that built around the German concept of IBA purely out of curiosity. It is because this region always appeared to me as unappealing, the region raised my architecturally related interests. What is it that makes this region unattractive for outsiders and more importantly, how can this perception be adapted? I realized that a region which can be identified as shrinking (population-wise), post-industrial, cross-border should have hidden potential and that I, as an architecture student, had the opportunity to contribute to solutions by means of the of IBA.

A second interest, which didn't seems not directly related to the Parkstad region at first, is that of food. I am no bio-activist nor do I plea for biological superfoods, but my concerns are grounded in the future perspective of our worldwide food system. Food is the most devalued item in the industrialized Western world, because we have forgotten what it means. It is not uncommon that I am standing in front of the vegetable stand in the supermarket and think "Wow, I can get two hamburgers for the same price as this vegetable". It makes me wonder how the system developed into this system is nowadays where we can indeed buy meat that is twice as cheap as an apple.

The IBA 2020 Parkstad studio has surprised not only my understanding of the Parkstad region and the worldwide food system, it also taught me about pitching a vision to the public. Instead of just doing a project inside the disciplinary of academic walls, I experienced the excitement of convincing people to believe in your ideas, and together actually do things that could make a difference.

READING GUIDE

This graduation report is divided into two parts: A (theory) and B (design).

Part A describes the development of the worldwide food system, and how it links to the IBA 2020 Parkstad graduation studio. It gives a description of the contemporary challenges and trends within the food system, the challenges of the shrinking region of Parkstad and how it relates to each other. This part is divided into the various processes related to our food system – growing, harvesting, processing, educating, cooking, dining, selling – and serve as a guideline to introduce the various themes.

Part B describes how the theory became design. It explains how the two themes – food and urban shrinkage – result in a proposal for the landscape of Parkstad. From a large scale solution of the design of the 'Gastronomic Quarter' to the small scale interior of the 'De Markt'.

Using literature review as a research methodology has given me a broader understanding of how the Parkstad region developed through time in terms of economy, society, religion and morphology. Learning from the process of the IBA open call proposal, I experienced that testing your idea outside the interdisciplinary way of academic walls is necessary to make it viable. I went into the field and talked to (city) farmers, biological wholesalers and local salesmen in Heerlen and its surroundings to gain a better understanding of the phenomenon of urban agriculture and people's values and needs within the region.

INTRODUCTION

The Gastronomic Quarter is the result of a yearlong graduation at the Eindhoven University of Technology, faculty of Architecture, Building and Planning. This year of graduation started with participation in the open call for IBA Parkstad. IBA (Internationale Bauausstellung) is an innovative planning strategy that has been applied successfully in Germany for over a century. Parkstad is an administrative region and partnership of the eight municipalities in the southeast of Limburg. With nearly 250.000 inhabitants the region of Parkstad Limburg is the former Eastern Mining Region of the Netherlands, with Heerlen as its central city. At the peak of the mining period (1955) the municipalities of Heerlen, Kerkrade, Brunssum, and Landgraaf were among the municipalities with the highest national average income. Barely a decade later (1965 onwards) the region faced brain drain, high unemployment rates, negative demographic growth, vacancies (Deen, 2003). IBA has proven to be successfully implemented in other shrinking and post-industrial regions like Sachsen-Anhalt. The open call for IBA Parkstad provided the opportunity to explore various challenges that such regions face, and develop innovative solutions and approaches to the same. As an architecture studio, we connected our knowledge as architecture students with innovative, fresh ideas of local partners in Parkstad. This way possibilities were found in the redevelopment of the region as a cross-border network of bicycle infrastructure with temporary urban initiatives. The idea builds on an existing proposal for a bicycle highway that connects the centers of Aachen and Heerlen, by creating a larger regional network of collaborations with local partners. Our proposal is rewarded with the title 'attention project', and has the potential to be further developed for the IBA presentation year 2020.

This report is the result of my individual development after the joint part of our studio. It builds further on preliminary research and knowledge obtained during the creation of the IBA open call proposal. A new subject is broached, the theme of 'food', and linked to the contemporary landscape of Parkstad.

The spaces and domains of food are all around us, and food-related activities occur in various places. It shapes our environment indoors and outdoors: restaurants, cafés, barns, the kitchen table and low walls along the street pavements of the city to enjoy a lunch in the sun. The city of Heerlen is chosen as preferred site for architectural intervention. With the design of the Gastronomic Quarter, a solution is sought after which builds on results of the preliminary research on local identities of the place. Possibilities are found in the link between shrinkage and the rise of attention for good food.

PART A THEORY

"If you can grow a chicken in 49 days, why would you want one which grows in three months?"

_

Troy Roush
Vice President of the
American Corn Growers
Association



GROWING

HOW FOOD SHAPES OUR CITIES

This chapter focusses on the first step of the production of food, that of growing food. This is not literally about planting seeds but, on the one hand, about the growth of the (global) food system leading to my contemporary concerns, and on the other hand about the development of Parkstad - Heerlen in particular - that resulted in the state it is in today. In order to adopt an attitude in these topics it is, in my opinion, of importance to understand the development of how the current situation has been established.

Eating and drinking are natural preconditions for human survival and constitute a regular ingredient in our daily lives. Food systems emerged with the dawn of civilization when agriculture set the stage for permanent settlements. The term 'food system' includes all processes and infrastructure involved in feeding a population. It includes the governance and economic of food production, its sustainability, the degree to which we waste food and how food production affects the natural environment (OFPC, 2015). Inhabitants could grow more crops and raise more animals than necessary to feed those who tended them, which changed human culture: a communal economy erected based on food storage, allowing other people to specialize in crafts or trading instead of agriculture (Hueston & McLeod, 2012). Food systems have constantly evolved since agriculture began, bringing new advantages and challenges together with ever-greater diversity and complexity with each change.

The small settlements of the early days evolved into the large cities they are today, occupying only two percent of the earth's surface, but seize seventy-five percent of all resources (UNEP, 2015). How these cities developed into the eating monsters they are today

is described in the book 'The Hungry City' by architect Carolyn Steel. Steel (2013) elucidates how food shaped the (European) cities we live in; about food as the eternal engine driving civilization. Electricity and other energy sources could be likened to the nervous system of a city nowadays, but the lifeblood of the city is and always has been the flow of food coming from the countryside to the city. As arteries bring nourishment to the human body, the city has a complex network of filtering, removal and disposal that brings food to citizens. From the earliest settlements onwards pre-industrial era cities were formed though delivery routes of food, by water through ports as well over land via country roads. Markets were positioned at the edge of the city, to further distribute food into the center of the city. The reminiscent of these periods can still be found in street names such as 'bread street' and 'haymarket'.

Since the Middle Ages it was considered normal to keep pigs and chickens inside a city dwelling, and grain was often stored in the yard. Many houses looked like farms in the city – a phenomenon that not everyone liked. This way the countryside was brought to the city, resulting in city-dwellers going to the countryside to escape from the filthy

and busy city life. Rich townfolks often had country estates from which they kept themselves supplied with their own grain, poultry and vegetables, while the less fortunate owned smallholdings that they farmed periodically. From the seventeenth century onwards, the distinction between countryside and city became larger as cities grew and the perception of the countryside changed (Vansintjan, 2014). The rural life was considered as boorish where city life was considered as civilized. Any form of farming activity moved outside the city, changing the way food was brought to the people. Cattle was slaughtered in the fringe, and the product 'meat' was brought to the markets. Slowly the physical distance between producer and consumer grew. However the physical and moral distance between city-dwellers and farmers grew, the interconnectedness between city and countryside and its constant task of feeding as part of the landscape was not unnoticed.

As the 1630 ditty 'The Poor Man Paies For All' suggests (Palmer, 1979): "The King he governs all. The Parsons pray for all. The Lawyer plead for all. The Ploughman pay for all. And feed them all."

With the onset of industrial farming starting from the eighteenth century onwards the distance between consumers and producers was widening. Horse-drawn drills and reapers drastically reduced the number of people needed to work on the land, and various industrial byproducts allowed the manufacture of artificial fertilizers that could double farmers' yields (Steel, 2013). With the depopulation of the countryside, land reform and the economies of scale the agricultural revolution paved the way for modern industrial agriculture. Worldwide rural communities transformed from traditional companies into large-scale monocultures, the result of where we are today. Industrialization has made food production invisible, increasing the scale of our disillusion of food that started in the seventeenth century with the distinction rural life and the city. Industrialization also increases, so could say, the scale of our destruction. Food is what connects the city to the countryside, and it is of global importance to see that both are vitally connected. You can't have one without the other.



THE PARKSTAD CONFLUENCE

The location of focus of the graduation studio is the region of Parkstad Limburg. The region is located in the southeast of Limburg, the southernmost province of the Netherlands and is one of the eight metropolitan regions in the Netherlands. Parkstad consists of eight municipalities: Kerkrade, Brunssum, Landgraaf, Simpelveld, Nuth, Onderbanken, Voerendaal and Heerlen as its core. It has a large amount of open green space that is closely linked to the countryside, making it a genuine "urban parkland" (Stadsregio Parkstad Limburg, 2012). Parkstad as a whole houses nearly 250.000 inhabitants. Heerlen finds itself in the privileged position of the in 1976 founded Euregion Meuse-Rhine together with the larger cities Maastricht (NL), Hasselt (BE), Liège (BE), and Aachen (DE). Distances between those cities don't seem to be that large, but by a lack of sufficient connections larger in time, as the infrastructural network is solely organized on the level of individual countries.

From the Middle Ages onwards, the region was known as the Eastern Mining Region of the Netherlands. The history can be traced from an agricultural and rural economy in the early twentieth century to a region of prosperity in

the mid twentieth century driven by mining, industrialization and export of coal. The region had a flourishing period with the highlight in 1955 when the four largest municipalities had a place in the top25 municipalities with the highest national average income (Pijnenburg et al., 2011). Almost 38.000 people found a job in this industry and the overall population of the mining area grew from 70.000 to almost 250.000 people (Deen, 2003). Heerlen had at this time the largest 'fur coat density' (Gottschalk, 2012) and large department stores like Schunck and Hollenkamp attracted many people from the whole province. The region became a melting pot of national and international migrant workers that all brought their different believes; resulting in a large diversity of churches and a high density of local associations (Langeweg, 2011).

The Catholic church tried to spread the population over multiple mining colonies to prevent a large agglomeration of people in one city. Through planning attempts the mining population was spread over a larger area rather than concentrated in a city, following the theory of garden cities by E. Howard; self-contained, planned communities surrounded by greenbelts, containing proportionate areas of



The location of Parkstad in an international context

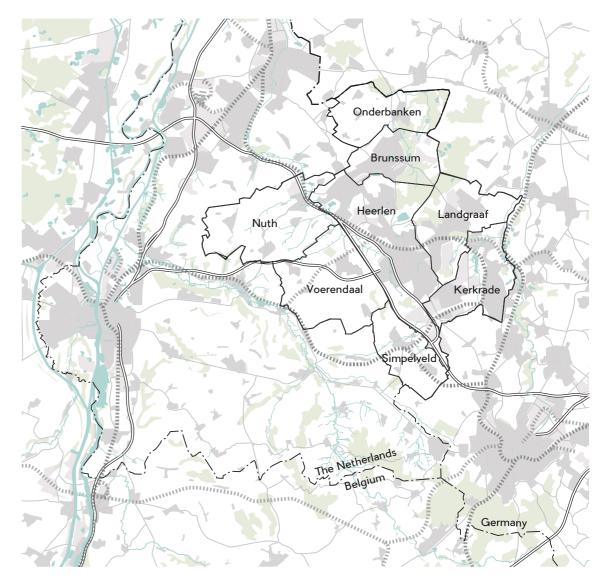
residences, industry and agriculture (Howard, 1902). The aim was to create living quarters around the mine to avoid commute of workers, and save on investments for new roads.

In 1958 the coal crisis started; the demand for Limburg coal decreased sharply because of cheap import prices of coal, oil and natural gas. The share of solid fuels decreased at this time from 51 percent to 16 percent (Raedts, 1974). The intent to close Dutch coalmines was announced in 1965, and in 1874 the last coal was mined. At

the time of the announcement of the closing approximately 45.000 people worked in the mines; almost 60.000 people, including the supplying small businesses, risked losing their jobs (Kaspar et al, 2013). Many companies were encouraged with state subsidies to settle in the region like car producer car producer DAF, chemistry company DSM and the Central Bureau for Statistics. This created new infrastructural momentum for the region, while spatial and social structures were not adequately renewed. The new industries caused an explosive growth

of roads and residential areas near the main arteries, contributing to further polycentrism and fragmentation of the region. However, the result of the establishment of new companies in the Parkstad region detained from expectations, and an enormous depopulation took place; many higher educated people moved away from the region between 1960 and 1970. By the end of 1970's the unemployment rate was more than double the national average (Kasper et al., 2013). Under the strategy named 'from black to green', all traces of the once thriving mining industry were demolished, changing the region spatially. Conservation and transformation of industrial heritage was a sparingly used strategy, something that according to many people today regret (Claessens, 2012). The region still suffered from a shortfall in prosperity and welfare in the 1990s, even after investments in retail, offices and the development of the cross-border Avantis industrial site. Merely twenty years after the peak of its mining industry, Parkstad has turned from the region with the highest average income, into the region with the lowest (CBS, 2006).

Since 1998, the former Eastern Mining region collaborates under the umbrella of the current 'Parkstad', a name based on the interdependence between the countryside (park) and the city (stad), promoting a vision of a coherent region in terms of society, economy and infrastructure. Several initiatives like 'Operatie Hartslag' (operation heartbeat) were introduced as an attempt to change the course of the region's downward spiral. However, Parkstad as well as Heerlen lack in an overarching urban vision to challenge past and present. Nowadays, the fragmented region is a jigsaw puzzle without cohesion. It has become apparent that the region of Parkstad and its cities are unlikely to return to their industrial past and need to find new ways to move forward.



The location of Parkstad in a provincial context

HEERLEN

The reputation of Heerlen as a popular shopping city disappeared in the 1960s and 1970s as the population gradually declined. The region and the city was at that time predominantly auto-orented with ring roads binding together different municipalities. The presence of these existing ring roads in the land-scape made it convenient to create highly accessible large-scale developments in the open environment next to it. Shopping center 't Loon (1) and the Woonboulevard (2) are two examples of touristic developments directly connected with the main roads of Parkstad. People moved away from visiting the city centers as they could enjoy a day out at one of those easily accessible attractions. However, Heerlen is currently experiencing an upgrade of its center linked to economic, spatial and social necessities. In a short time great impules were given to the quality of the city center. Monumental and cultural buildings like the 'Glaspaleis', the mining museum and the Heerlen theater are being upgraded (Gottschalk, 2012). One of the latest developments is the construction of the 'Maankwartier' (3), a five-hectare-large area on top of the current train station combining infrastructure with housing and retail. This new infrastructural development should function as a fresh entrance for

Heerlen, or even as the new reconizable heart of Parkstad (van de Spek, 2013). The need of the Maankwartier in a region which is fighting housing and retail vacancy is a frequently discussed topic among residents and city planners. The need of the Maankwartier on the edge of the city center as an upgrade of the inner city of Heerlen in terms of tourism is, in contrast, a less discussed issue. Where the car passes the city center of Heerlen while driving the highway towards attractions like the Woonboulevard (large scale), the Maankwartier (medium scale) receives the people by train who in all likelihood will not continue to move into the city center. The answer on the question why people would stop their car, walk into the center from the station, or park their bike in the city remains unclear. As daily social traffic on a local scale tends to be more multifunctional, the need for shopping shifted from purely retail towards a demand for social meeting points like a pub, terrace or a market.

Architect and professor Karen Franck argues in her book Food + Architecture (2004) that "being able to visit a public place of refreshment regularly, to linger and socialize, gives people an alternative to home and work – 'a third place' which generate a sense of community and offer an opportunity for political discourse".

The city center of Heerlen needs new formulas on the smallest scale that give an answer to those demands and that way, build up the identity of the place.



The inner city of Heerlen

"I, for the life of me, cannot understand why the terrorists have not attacked our food supply, because it would be so easy to do"

Tommy Thompson former secretary of the U.S. Department of Health and Human Services.



HARVESTING AND PROCESSING

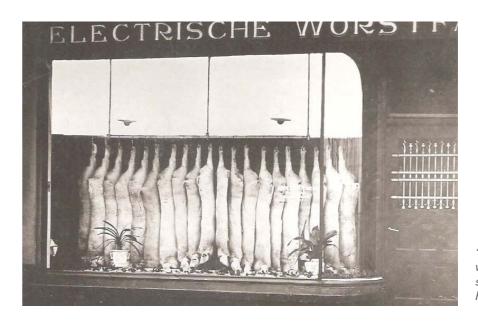
The contemporary situation is the harvest of its past. This chapter describes the current situation of the food system, and introduces the notion of IBA Parkstad which is, so to say, also the harvest of its economic, cultural, social and spatial developments through time.

CONTEMPORARY DEVELOPMENTS OF THE FOOD SYSTEM

With the arrival of industrialization, modern technologies and rising globalization the supply of foods and goods is larger than ever before (Hueston & McLeod, 2012; Lowe et al., 2008) Since the start of the 21st century, people primarily rely on intensive and genetically modified food production, intensive processing and long-distance transportation, with enormous wholesaling facilities to serve very large-scale car-dependent industrialized food retailing. Contemporary food companies seek for vertical integration from farm to plate, as far as possible, to externalize environmental and social costs. These costs are substantial, including diminishing consumers' taste, impoverishing producers and creating

unacceptable food miles though profit maximizing spatial practices. Today, supply has no longer any clear relation to its demand. The output, together with the complex international infrastructure that supports it, is controlled exclusively by profit. Chronic overconsumption with its attendant ills keeps pace in one part of the world with starvation in others.

The numbers that support this information are worrisome (Econexus, 2013). There are five companies that control 90 percent of the global grain supply, of which one third of this world's grain harvest is fed to livestock. The world tea market is in the hands of three, and 81 percent of American



'Electrische worstfabriek' (electric sausage factory) in Heerlen, 1923.

THE NOTION OF IBA PARKSTAD

beef belongs to four giant processing companies. None of these companies is answerable for what they do to anyone but themselves. They are ruthlessly anti-competitive, largely above the law, and more than able to impose their own, often ruinous conditions on the countries that supply them. A good example of a particular company that is supporting this profit-driven culture is shown in 'Food Inc', by Robbert Kenner (2008). In this documentary film, the soy bean story of the Americabased wholesale company Monsanto is illustrated. In 1996, Monsanto began selling their patented 'Roundup Ready Soybeans', covering about two percent of the soybean market. By 2008, the company owned 90 percent. The company has a staff of 75 employees devoted to investigate and prosecute farmers as much as possible, resulting in the ownership of most intellectual property of food in America.

The development towards this technology driven, globalized, privately regulated and supply-oriented food system has met resistance from several social movements. This countermovement include food campaigners, farmers, the healthy lobby, the anti-globalization lobby and rural interest (Lowe et al., 2008). Part of this movement is the Holland-based

company Udea, importer and exporter of organic food and franchisor of the national organic supermarket Ekoplaza. Via a mutual friend I came in contact with Steven Ijzerman, quality employee at Udea. I met him for dinner at his home where he cooked me a biological meal, and we talked about being biological. Steven told me that the term 'biological' is the only European regulated term within the food industry, and therefore the only label they work with. A product is considered biological when it is produced on solid earth, without chemical fertilizers. Although Udea is a relatively large company, they are committed to the social welfare of local farmers, act fair trade, and support local biological entrepreneurship. They purchase their products from local producers and visit their farms, whether they have three of thirty fields. This long-time loyalty towards clients is part of their success, and is what distinguishes their apples from the apples from an ordinary supermarket. Steven's function as a quality employee also includes the testing of new products, to decide whether specific products are suitable for EkoPlaza or not. (Not) by coincidence, he needed to test some biological beers that evening. It's nice to say I had a little bit of influence on the assortment of this organic supermarket.

The Parkstad region of today is with nearly 250.000 inhabitants the fifth largest 'city' of the Netherlands, with Heerlen as its city center (Stadsregio Parkstad Limburg, 2015). However, the number of inhabitants within the Parkstad region continues to decline. In 2014, the region lost on balance more than 1,500 inhabitants, or 0.6 percent of its total population. The mortality surplus is easily traceable by the percentage of older population living in the Parkstad region compared to the Netherlands: 21 percent against 17 percent respectively. Meanwhile, young people are represented with only 18 percent, where in the Netherlands this number is 23 percent. The population decline results in changes in terms of economy, society, culture and the built environment. The brain drain of the 1970's, when 1500 highly educated and wealthy families left the region, is still visible today. Only 25 percent of the population is highly educated (higher professional education and university), where 34 percent of the Netherlands is. The unemployment rate is with almost 10 percent the highest of the Netherlands as well. As population decline goes together with decline in retail demands, the retail vacancy rate rose in 2014 to almost 14 percent

(against 6 percent in the Netherlands), resulting in unattractive city centers (CBS, 2105).

The region of Parkstad cannot solve the large-scale structural problems the city is facing by itself. Various bottom-up initiatives are emerging in the region which take matters into their own hands. One of the examples is the emergence of urban agriculture on derelict plots within the region. The municipality has responded to this seemingly querilla farming by embracing and supporting it, creating a more sustainable and inclusive urban environment. This example of a cocreative initiative to counteract the problems of a shrinking region can be summarized by the approach of IBA (Internationale Bauaustellung). The IBA is an innovative planning strategy used as a social, cultural and economic instrument when other, more common, planning strategies are considered hopeless (Seltman, 2007). The open call collected projects, concepts and ideas for the Parkstad region, combining both bottom-up and top-down strategies. Collaboration between civilians, entrepreneurs, architects, urban planners, governments, universities and companies contribute to a new future for Parkstad.

"Like pornography, junkfood might be tough to define but you know it when you see it."

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Mark Bittman food journalist



EDUCATING

THE IGNORANCE OF THE UNKNOWN

Educating is not a direct part of the food system, but food education plays an indispensable role in the consciousness of the food system. Food-awareness is not a matter of course. This chapter elucidates the ignorance of people about food, but also describes the upcoming movement of urban agriculture within the region of Parkstad as a first step towards well food-educated people.

Somehow it is not that strange that people nowadays have lost their knowledge on how their food is made, as in the since the mid nineteenth century the detachment was something that farmers deliberately aspired. Agriculture had always been aimed at producing with the least possible risks the cheapest possible food, an endeavor in which the vagaries of nature were the greatest enemy. It was no longer the question whether cities could be fed, but how much it cost to feed them. Like Steel (2013) argues: city dwellers had become more than ever detached from the country, and increasingly began to lose the connection between food and nature. We like to feel civilized that we over sanitize our food to the degree we no longer know what it is, or where it comes from; we like to eat meat, but we don't like to think it is actually a dead cow we are eating. BBC's spaghettitree hoax on April Fool's Day 1957 exemplifies this ignorance, as viewers of the hoax report afterwards contacted the television channel for advice on growing their own spaghetti bushes.

Various worldwide initiatives are trying to educate people on food, like

the Michelle Obama's "Let's Move" campaign (2015) dedicated to solve the problem of childhood obesity within a generation. Or Jamie Oliver's Food Revolution (2015), where the chef pleas for compulsory practical food education on the school's curriculum. The urge of this education becomes evident in a video Oliver shot in 2013, where he taught elementary school children how fast food chicken nuggets are made. He chopped up a raw chicken, removed all the "good meat" and held up the carcass. The children all squalled in disgust, and their disgust seemed to increase when Oliver put the carcass into the food processor and strained the pink goop through a sieve. After mixing it with chemicals and flavor boosters, the cookie cutter popped out two 'nuggets' which he dusted with bread crumbs and fried in oil. This is where he lost them. When Oliver was pointing to the abomination that was turning a golden brown he said "who would still eat this?", every hand shot into the air.

Food scandals have undermined consumers' trust in the safety of food systems, due to the fact that people have more information every day



Spaghetti harvest in Ticino, Switzerland, 1957.

through television, newspapers and the internet. A good example of foodrelated confusing information is the Dutch horsemeat scandal in 2012, when a large meat processing company deliberately mixed thousands kilograms of horse meat with beef and sold it as pure beef. The gravity of the matter became evident when the director was sentenced by court to two and a half years in prison unconditionally (NOS, 2015a).

UPCOMING URBAN AGRICULTURE

As described before, urban agriculture is one of the co-creative initiatives occurring in Parkstad to support a stronger, more sustainable and inclusive urban environment. From 2011 onwards several urban agriculture initiatives are started by local residents with approval of the municipality. The growing, processing, distribution of (non)food plants and crops, and the raising of livestock both within and on the fringe of an urban area (Mougeot, 2006) have taken root both in the city and the region. I decided to go into the field and meet several (city) farmers in Heerlen and its region to see this development with my own eyes.

Ton Griekspoor – cityfarmer communal garden Limburgialaan, Heerlen (March 11, 2015)

In 2011, a communal garden erected in the middle of the neighborhood 'Meezenbroek'. I spoke with Ton as he and a friend were preparing the garden for the annual opening of the spring season. The exact place where we stood was formerly occupied by seven flats which were torn down, resulting in a large vacant area. It was the municipality of Heerlen who proposed a communal garden to fill up this vacant space. Moreover, they sponsored in sheds, tools, a fence, water and electricity. Today, it has become the

success story of the neighborhood which was once labeled as a Voqelaarswijk (VROM, 2007). Ton tells me that this garden is not solely about growing your own (biological) food, it is about creating community as well. The garden is divided in small plots that can be rented 'for free', making it easy to be part of it. There are rules set for having a plot, with the most important one: take care of your own garden. Today, forty plots are filled by people from nine nationalities from all layers of society. Having a plot stimulates a sense of ownership and pride of the local environment. Ton tells me a story about a neighbor who grew artichokes. The man always threw the leaves away, when a new participant of the garden taught him to cook the leaves and make tea of them - knowledge is being shared between the various cultures. When I ask Ton about expanding the garden because of its success, he answers that the relatively small scale of the garden is part of its success. However, this communal garden has developed into an example of urban agriculture as several other municipalities came along to learn from this story.

Peter Erkens – agricultural entrepreneur, Heerlen (April 19, 2015) Peter is one of the only five farmers of Heerlen. I visited his farm on a sunny

Saturday morning, a 30 minute walk from the station through the beautiful hilly landscape of the region. I wanted to talk to him as he is presented as one of the initiators of the MSP fields in Heerlen. MSP is a bottom-up collaboration of local residents coming from three neighborhoods around the center of Heerlen, supporting local initiatives to upgrade their neighborhoods on various levels. The day before we met was the presentation of the IBA results, in which his project 'Het Stadse Platteland' (freely translated: The Urban Countryside) received a Candidate project status from IBA. As I congratulated him, he told me his submission was about bringing agriculture into the urban landscape. An initiative that he started with in collaboration with the municipality of Heerlen to give substance to the vacant spaces in the city. In the beginning of 2014, the municipality of Heerlen donated a vacant football field for this initiative. As the concept is commendable, it seems that the enthusiasm of the community to participate in this project is reticent. Last year, only two persons showed up at the, by the municipality supported, 'potato harvest day'. Moreover, only six people are voluntarily keeping the field. Peter told me he struggles with finding a way to involve more people in urban

agriculture. It already took him already two years to convince the municipality to support urban agriculture, as he showed me some e-mails. That the initiative is now picked up by the IBA is one step forward, although the concept is already present in Heerlen for years.

Mark Franck – gardener of the Tapijntuin, Maastricht (June 06, 2015) As part of the 'national day of urban agriculture' I visited the 'Tapijntuin' (Tapijngarden). When entering the garden, I get the impression of a very organized place. There is a young boy collecting stones, and his father working on the ground; it feels like a friendly, communal environment. I spoke with Mark, one of the volunteers working on the garden. He tells me that the place is run by twenty-five volunteers that take care of the fruits and vegetables. It is built on the grounds of the former Tapijn barracks, next to the city center of Maastricht. The city garden functions as a natural educational link within the Tapijn area that exists of a city park, restaurant, and spaces for the creative industry, education and research. In September 2014 the Tapijntuin started to develop, after the municipality officially owned the Tapijn barracks since 2013. In the future they want to develop a business model, but now it is still in its infancy and solely focused on

growing food.

Local resident – Communal garden 'Old Hickery Plein' (June o6, 2015) The sound of a guitar playing gypsy music welcomed me in this communal garden, hidden behind a row of houses. It seems like partition walls between several backyards are torn down to create one large, a little bit messylooking, garden, which exists of several paths en allotments with fruit and vegetables meandering through the space, and a greenhouse in the middle. Small stands are selling plants, drinks and a coffee bar is placed on the edge. I get to talk with one of the people involved in the communal garden. She tells me that the municipality initially wanted to demolish the buildings surrounding the garden. Squatters made sure this plan didn't go through. Instead, in 2009, one of them started to build up this communal garden from his backyard, creating a place where friends could gather, socialize, and build up community. Today the garden is sponsored by various institutions, by donating for example the woodchips for the creation of the paths. Every Wednesday, three volunteers are working on maintenance and taking care of the fruits and vegetables that are grown. The communal garden also gives space for experiments, like

the creation of a bee city. The whole atmosphere felt bohemian; a very enjoyable place to be.

Volunteer - school garden 'Lange Grachtje', Maastricht (June 06, 2015) Via a former powder house in the city wall, I entered a green oasis of which the calmness raided me a little. Large flowers, vegetables and other plants are growing arbitrary enclosed by the heavy stones of the city wall. In the corner of the garden an old man is reading the newspaper. He voluntary keeps an eye on the garden, and enjoys its silence. He tells me this school garden already exists for about 30 years, and was one of the many in around the center of Maastricht. Unfortunately, it is one of the few examples that are left today. We talk about the change of elementary education in which going to a school garden and learn about vegetables and fruit by working in the garden itself has changed into a system whereby the modern elements like the digital world are taking over. Today, elementary schools come by rarely, resulting in the need of more volunteers to retain and maintain the garden.



School garden 't Lange Grachtje', Maastricht (June 06, 2015)



Tapijntuin, Maastricht (June 06, 2015)



Communal garden 'Old Hickery square', Maastricht (June 06, 2015)



Communal garden 'Limburgialaan, Heerlen (March 13, 2015)



Communal garden 'Limburgialaan, Heerlen (March 13, 2015)

"I'm just addicted to food"

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Wout Bru Belgian star chef



COOKING AND DINING

EXPERIMENTAL DEVELOPMENTS

Knowing that we are facing a future with a growing population, urbanization, where the availability of water will not be a matter of course and food safety and accessibility are at stake, it is uncertain how and what kind of food will be cooked and eaten in the near future. This chapter describes contemporary experimental developments dealing with these issues, and introduces the urge of urban agriculture as boiling strategy against vacancy within the region of Parkstad.

On March 1st, the art space MU Eindhoven organized a 'Food Phreaking' afternoon to celebrate the closing of their exposition 'Matter of Life'. The afternoon was filled in with lectures of BioArt & Design Award winners. I was deeply impressed by the lecture of Julia Kaisinger, one of the founders of Fungi Mutarium. The project responds to "the urgent need to revolutionize food production in the next decades to feed a growing and wealthier population while avoiding environmental ruin." They propose developing a technology that could transform the 280 millions tons of plastic waste we produce annually into edible food. Their scientific research has shown that fungi can degrade toxins while remaining safe for consumption.

On May 21st I went to the "Provocative Seminar on Food: Challenging our Current Food System" in the Natlab, organized in the context of Age of Wonderland, a social innovation program which is jointly developed by Hivos, Baltan Laboratories and the Dutch Design Week. Several experts from around the world reflected on the issues at stake and gave their perspectives on the food system in 2020. Two of the speakers grabbed my attention most. Firstly, Gus van der Feltz, Global Director City Farming



Fungi Mutarium 01, 'Food Phreaking' exposition MU Eindhoven

at Philips, who reflected on their City Farming concept of indoor farms to grow vegetables locally in a sustainable way. The plants grow by the light and warmth of led lamps and water of a hydraulic system without any use of pesticides. "For the plants, it is always a sunny warm day with enough food; the perfect world". Secondly, Koen van Mensvoort, Dutch artist, philosopher and curator of the Dutch Design Week 2015, who wrote the book 'In Vitro Meat Cookbook'. "Hello meat lovers, hello vegetarians. We need to talk about the future of meat. With the world's population expected to reach nine billion people by 2050, it becomes impossible to produce and consume meat like we do today." In Vitro Meat,

grown from cells in a laboratory, could provide a sustainable and animal-friendly alternative. The book presents 45 recipes that explore and visualize what In Vito Meat products might be on our plate one day.

These contemporary technological developments seem to be a 'far from my bed show', but provide abundant food for thought and discussion. I believe that these developments cannot be described as 'bad' or 'unethical'. I'm aware that regarding the future it is impossible to only produce food in a biological manner worldwide, and therefore support these research based initiatives.



Fungi Mutarium 02, 'Food Phreaking' exposition MU Eindhoven



Philips City Farming

KNITTED MEAT

The length of a muscle fiber was once limited by the size of the animal it was growing in. Now, freed from the constraints of the body, it's possible to culture 'thread' made from continuing strands of muscle tissue. Colorful spools of meat yarn, from the light pink of chicken to the vibrant red of beef, can be woven into eyecatching patterns.

Supermarkets could install knitting machines with pre-set patterns, making it easy to knit a package of burgers or a meaty scarf. A portable model could come with easy-to-use design software for home knitters. Knitting enthusiasts could enjoy gathering in walk-in refrigerators to swap techniques. Over the holidays, many families could replaced the traditional turkey or ham with a festive centerpiece of Knitted Meat.

SHEPHERD'S KNITTED PIE

- 1 kilo knitted meat
- 1 kilo potatoes
- 100 milliliters milk
- 60 grams butter
- 1 large onion, diced
- 2 carrots, peeled and diced
- 2 celery stalks, diced
- 2 garlic cloves, minced
- 1 can of diced tomatoes
- 250 milliliters stock
- 1 teaspoon Worcestershire sauce

① Preheat the oven to 160° C. Boil the potatoes until cooked through. Drain and mash the potatoes with the butter and milk. Season to taste,

② While the potatoes are boiling, heat oil in a skillet and sauté the onion, garlic, celery and carrots until softened. Add the tomatoes, stock and Worchestershire sauce and simmer for 10 minutes.

③ Spread the potato mixture in a baking dish. Top with the vegetable mixture, followed by the meat. Trim the meat to fit, and season to taste. Cover the dish with tinfoil and bake for 25 minutes, Remove the tinfoil and bake another 10 minutes or until the meat is browned.

URBAN AGRICULTURE AS A STRATEGY AGAINST VACANCY

In growing cities, urban agriculture typically occurs at the periphery of the metropolitan area. In shrinking cities, agricultural uses can permeate more deeply into urban neighborhoods, returning surplus and derelict land to productive use (Wartzman, 2007). Urban agriculture is deployed as a (temporary) solution for the open and vacant spaces that emerge within the region of Parkstad, as there are few resources to carry out maintenance and management in these spaces. By creating smart collaborations between land owners, residents and entrepreneurs these fields can be redesigned and contribute to a varied landscape. The urban agriculture initiatives that are rising in the region are the witness of the growing success of this strategy.

Urban agriculture is not a trend. The municipality of Heerlen is just one example of cities are that embracing the concept rather than attempting to stifle it. Cooperation and control rather than opposition and restriction can maximize the benefits of urban agriculture. International donor agencies are more

willing to fund research to better understand the phenomenon and find ways to make urban agriculture more effective, safer, and more responsive to the needs of the urban population (Mougeot, 2006). Furthermore, there is a need to develop methodology for relating research and policy to further exploit the comparative advantages of the countryside and the city.

Food operates as an entrepreneurial, educational, nutritional and social mechanism. Urban agriculture stimulates a sense of ownership and pride of the local environment, and galvanizes people to cooperate on other issues of social cohesion. The benefit lies not in its ability to feed the city, but rather in its ability to educate consumers about fresh, healthy food and the efforts it takes to produce it. The availability of affordable and fresh food comes both end in itself and means of reaching other goals like increasing economic and social vitality. It offers vibrant green spaces, helps building community and can potentially serve as a new source of modest economic development.

"It's more useful to have knowledge about cuts of meat than a lot of money."

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Jacques Pepin Internationally recognized French chef, television personality, and author



SELLING

THE LOCAL MARKET

Selling is marked as the last step of the food system; where produce is brought to people. This chapter conducts research on the role of the local market within cities, and explores the identity of a market hall as centers formed around food. Last, the upcoming local attention for food in the Netherlands and within the city of Heerlen is exemplified.

Until the mid-20th century, markets provided a continuous urban function in cities. The market figured as a central element in a publicly accessible set of spaces were key cultural relationships between state, society and religion were closely connected. They were practically and symbolically important to the public life of the city, and often located in or next to the main place for ritual, government, feast days or other public ceremonies (Petruccioli et al., 2003). The two best-known examples are the Forum Romanum in Rome and the Agora in Athens. They are both originally designed for the commercial, but the market has been increasingly used for political affairs as both cities grew. The design typology has been a long-surviving urban presence that attests to the fundamental urban importance of our relation with food.

It is therefore confusing that, when looking at the morphology of Heerlen, the traditional market square (A) seems to be 'lost' within the urban fabric. It is closely connected to the church (B, religion), but away from the town hall (C, political) or social activity (D, society). Still, this square functions two days a week as open market. On others days the place is an abandoned open space. The current situation of Heerlen is the result of the lacking overarching

urban vision for the city in the past. The separation of market, politics, religion and social activity came paired with the developments within the built fabric of its inner city, like the demolishment of dwellings near the church or the breakthrough of the Promenade in the 6o's. New open spaces were created that subverted the role of the traditional market space.

The city of Heerlen has its origin as a Roman settlement, known as Coriovalum. The foundation was based on trade, as Heerlen as a settlement was strategically placed at the crossroads of two major Roman axes: from Xanten to Aachen and Cologne to Boulogne sur Mer. Heerlen was part of the 'feeding belt' of the Roman Empire to support the Roman Legions in the north. Heerlen kept its trading character during the Middle Ages, and developed in the 18th century into a place where the more exclusive markets of the region were held annually. The market square of today - de Bongerd emerged in 1843, with the permission to hold a weekly grain and cattle market on Tuesday. Because of the popularity of the market in the region as a result of the addition of a vegetable market in 1845, the market expanded with a weekly Saturday market. A year later the free market was instituted, which

THE MARKET HALL

took place on a monthly basis (van Opdorp, 2013). The markets of Heerlen flourished simultaneously with the peak of the mining industry, but also shrunk with the depopulation of the Parkstad region after the closure of the mines. Today, de Bongerd still functions as Heerlen's central market with two times a week a goods market, and one time a week a food- and flower market.



The inner city of Heerlen in 2015



The inner city of Heerlen in 1926, with on the north the elongated market square.

To bring me to a better understanding of the object 'market hall' and extend experience, I chose to do small case studies on existing market halls by analyzing or visiting them. It seems that a concept of food tourism propagated well all over the world, driving basically all the contemporary market halls. Steel (2013) describes these markets as 'festivities markets'. In certain respects these 'festivities market' are a sham, but their liveliness they do generate is certainly real. They take place in buildings and spaces formed by food, acquiring an authentic quality transcending the shopping and restaurant chains.

The Markthal in Rotterdam (NL), designed by MVRD, is presented as a sustainable combination of food, leisure, living and parking, and envisions to "celebrate local, organic produce, with a centre to promote healthy cooking." I enjoyed wandering around, tasting various products and being surrounded by food stands. However, one of the biggest supermarket chains of the Netherlands is located in the basement and apartments are looping over the market square, sometimes peeping out of giant mango stones. This is not a market where you buy your dinner or your normal kilogram of apples. Most of the stands sell

exclusive and pricy food, or are completely equipped to sell Dutch touristic snacks: stroopwafel, herring, and pancakes. Like the Guardian (2014) rightly wonders: is it comic sans or architecture? I would say it is a playground for food lovers. It's not about buying the food, but about the honor of it. However, the Markthal generates activity that enlivens the public realm of Rotterdam Blaak. It successfully merges with the city, and enriches the surrounding public space. Similar to the Markthal seems the renewed Borough Market. This market is the largest and oldest wholesale food market of London, England, and houses a diversity of enterprises. Although opinions differ about the real purpose of the market (tourism or local), those various opinions agree all on the lively atmosphere that the building breathes like the Markthal in Rotterdam.

The Great Market of Budapest (HU), the Burton Market Hall (UK) and the Detroit Eastern Market (US) give programmatically more the impression of a local market. While walking along the stands in Budapest I saw local people, or at least Hungarian, having talks with stand owners about paprika. The conversation could also have been about the mother of the owner of the market stand, but it gave at least the

impression of being local. However, I was visiting this market hall as a tourist, together with many other tourists. I didn't need to go there to buy food, but I wanted to taste the atmosphere of the place. In that way I delivered my share to the lively atmosphere.

The eagerness to go to the market when we are abroad can be explained

by the fact that food is not embedded in our culture, our daily routine. People have always visited markets not just to buy food, but because of the social aspect. With the successful arrival of new market halls (Rotterdam) and revival of existing market halls (London), a signal is given that the need of such places where you can socialize and meet others is as great as ever.

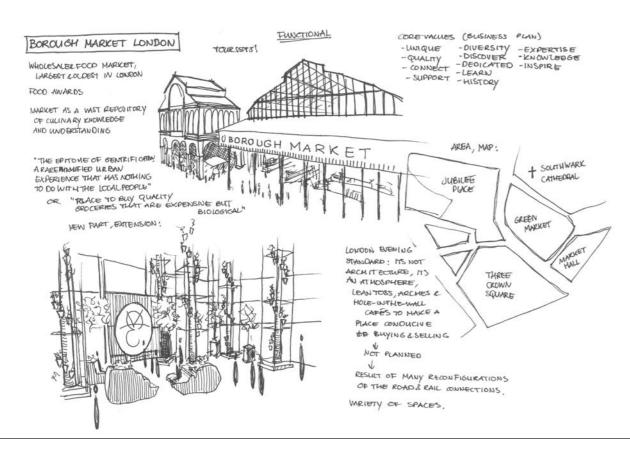


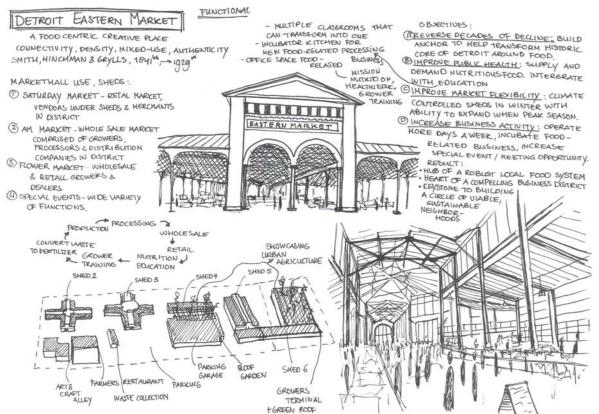
De Markthal , Rotterdam (July 15, 2015)

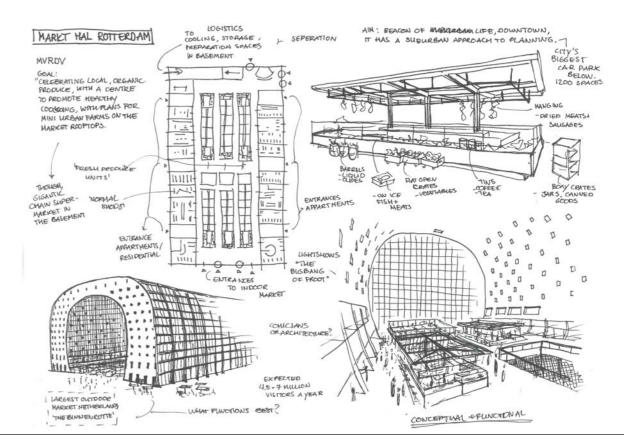


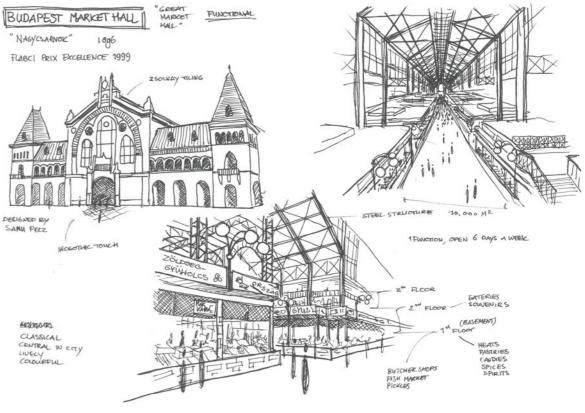
The Great Market, Budapest (November 11, 2011)

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BURTON MARKET HALL - ENGLAND

BURTON MARKET HALL - ENGLAND

OUTDOOR MARKET HALL - ENGLAND

OUTDOOR MARKET INSIDE - NEW & PAR THEFERENT CUMMONERS
THAN BEFORE.

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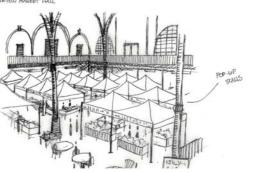
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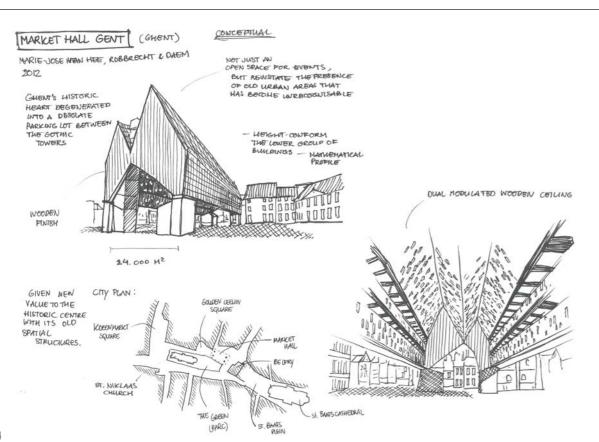
"TAKE SHOPPING INTO A NEW GENERATION'

FROM RETAIL S.NON TOOD RETAIL





£10 A DAY.



THE UPCOMING LOCAL ATTENTION FOR FOOD

Food trends come and go. Quinoa, goji berries and vegetable mash-ups are just a few of the food trends of last year. Superfoods are a so called worldwide 'hot topic', filling the plates of not only health freaks bot also your average neighbor. You can write the trend of superfoods off as ridiculous, but the idea that consumers are becoming more health conscious is a great step towards a more food aware society. This food aware society is becoming more and more visible with the demand of locally produced products. As I found various urban agriculture initiatives in the Parkstad region, I was curious about the demand of these local products among residents in the region; the ones who don't harvest their own garden but buy the local.

Thorsten - owner of 'De Eetwinkel', Heerlen (January 28, 2015)
While walking through the city center of Heerlen I bumped into 'De Eetwinkel', a small local food shop, where I had a short conversation with one of the owners: Thorsten. Together with Carlos, he initially sold vegetables and fruits on the local market. As they both had bigger aspirations than the market stall, they opened 'De Eetwinkel' about a year ago to make healthy food accessible for everyone. I asked Thorsten about the reactions of the residents of Heerlen

when the shop opened as it seems to be one of the few local food shops of Heerlen. He told me that "the shop was a shock for most people from Heerlen. However, the shop is a success. It is a select group of people who are coming to the shop, but the interest is there." The products they sell are wherever possible organic and regional. Products from the MSP fields as the described above are part of the assortment. This assortment is supplemented with regular products as organic products are often seasonal and therefore not quarantee continuity. However the consumer demands biological, it also demands a wide variety and wide range.

Another recent phenomenon on a more local scale is that of a food truck; a large vehicle equipped to cook and sell food. This kind of street food has long been popular in Asia, where all-day dining and nibble at stalls outdoors is part of the culture. During my study period in Taiwan I experienced this myself. The choice is huge, and the prices at a food truck are as low as or even cheaper than you would buy from the supermarket, so why would you put effort in cooking yourself? Cities like New York and Los Angeles became the cradle of the food truck haven. Where in Asia the food trucks are part of daily life, the reason why these food trucks became

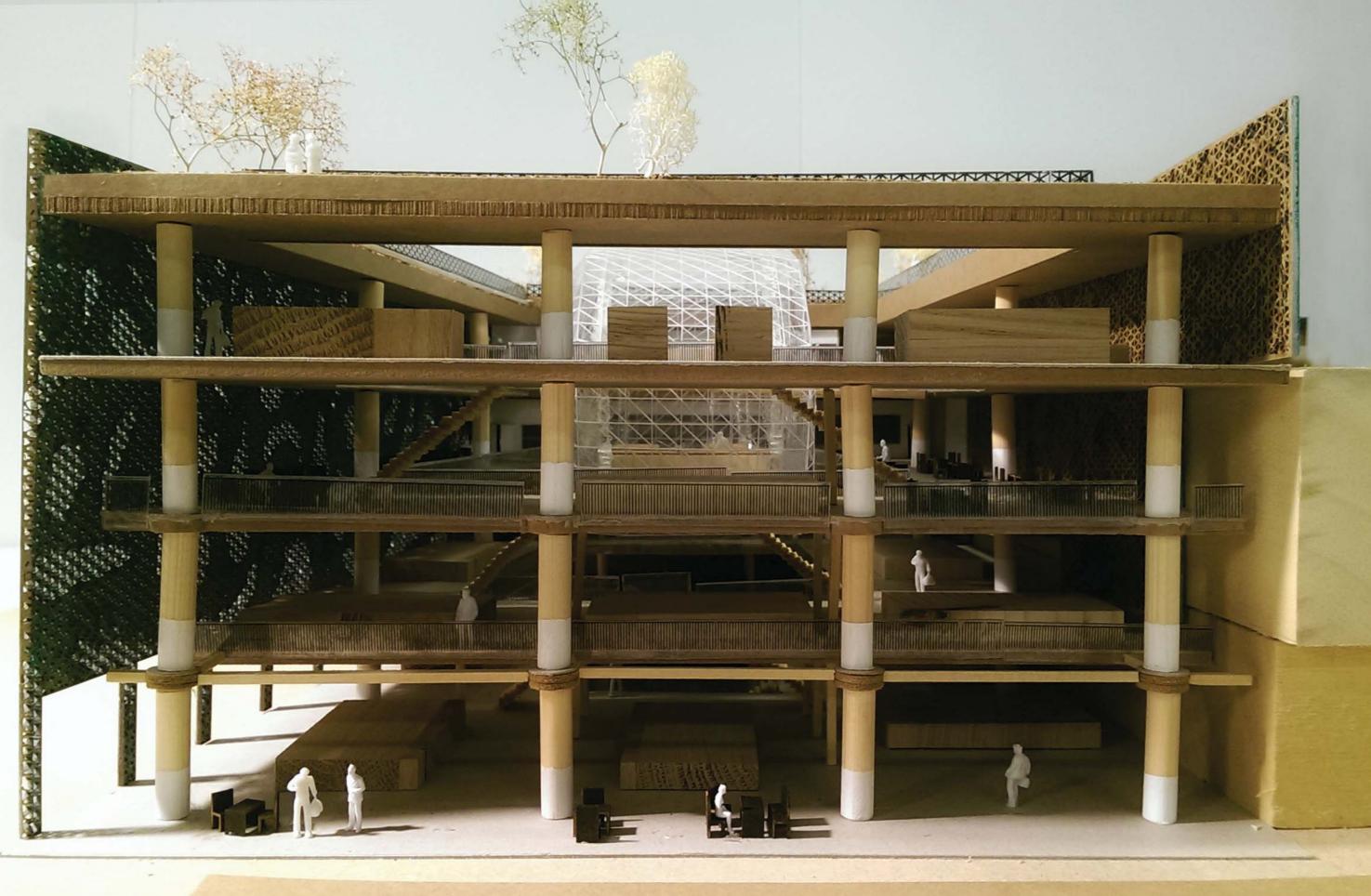
popular in America has to do more with the reason why they are also gaining popularity in the Netherlands since 2008: it's cheaper to start a food truck than a restaurant. The investment is modest and adventure lures. During my visit at the 'TREK Food Truck Festival' ('s-Hertogenbosch, July 11th) and the 'Foodstock Festival' (Eindhoven, July 26th), the festival was filled with colorful ambulatory trucks selling soja burgers, forgotten vegetables in a milkshake and roasted chestnuts wrapped in coir. However these Dutch trucks present themselves as easily approachable prices are relatively high, making these food trucks function more as an alternate form of entertainment instead of serving nutritious goods.



'TREK Food Truck Festival' in 's-Hertogenbosch (July 26, 2015)

PART B DESIGN

FROM THEORY TO DESIGN



DESIGN CHALLENGE

Part A of the report – theory - elucidates three challenges on three different scale levels: global, regional and local.

Firstly, the global food challenge: with the knowledge that society is facing a future with an ongoing population growth, further urbanization, and food accessibility and safety not being a matter of course, it is encouraging that various initiatives around the world are pleading for a more food conscious environment, from an individual level (e.g. Jamie Oliver) to larger biological companies (e.g. Udea), with even experimental high-tech developments that are responding to the issue. Today, the tendency of the demand for quality food seems larger than before. The importance of creating foodawareness and promote local food is to be stretched further by bringing the food production and distribution back into the city, and making it part of the conversation about urban life. Secondly, the challenges that the shrinking region of Parkstad is facing: the region suffers from high unemployment rates, brain drain, negative demographic growth, resulting in vacant buildings and allotments. As the region and its cities are unlikely to return to their industrial past, new ways need to be found to move forward. IBA Parkstad provides the opportunity

to develop innovative solutions and approaches, promoting co-creation. Thirdly, the challenges of the inner city of Heerlen: the city center suffers from retail vacancy resulting in an unattractive street image. Spatial changes through time made a jigsaw puzzle of the inner city. The predominantly shopping-oriented city center needs new impulses shifting from purely retail to a new formula that give answer to the demand for more social meeting points.

This raises the question: how can the shrinking region of Parkstad benefit from this growing tendency of the demand for quality food, and more in particular, how can this food-awareness contribute to the challenges the inner city of Heerlen is facing?

The convergence of these three themes is to be found in urban agriculture: the growing, processing, distribution of food plants and crops within and on the fringe of an urban area (Mougeot, 2006). By eliminating the physical distance between people and food, the gap between producer and consumer can be bridged. Urban agriculture happens around the world, and have already taken root both in the city of Heerlen and the region of Parkstad. It is embraced by the municipality of

Heerlen as a (temporary) solution for emerging vacant space in the region. Various success stories from around the region make this phenomenon viable, as it not only functions as an alternate form of greenery but also helps to build community, educate city dwellers and serves potentially as a new source of modest economic development.

THE GASTRONOMIC QUARTER

In order to guide the emergence of urban agriculture, give the region a new possible economic boost and to give identity to the city center of Heerlen, an urban market could become a potential anchor for a well-designed new development within the city. As concluded in the theory, a market functions not only as a place to buy food, but also as a place to socialize. An urban market intends to tease out some of the spatial dimensions of a more enlightened approach to food in cities (Parham, 2005; Steel, 2009; Franck, 2002). In my proposal I introduce 'the Gastronomic Quarter', located within the urban fabric of the inner city of Heerlen. This Quarter functions as the gravity center of (local) food-production, -distribution and -education within the region. The Quarter exists of three elements of which the existing market square is the first one. As an extension of this market square – the Bongerd - lies the Promenade, the second element. In 1969, the Promenade is developed as a 'breakthrough' pedestrian street, by demolishing the existing urban fabric to create a new shopping area. The long axis of the Promenade (300 x 24 m) is divided by four cubic buildings into two smaller compartments, known as the Ungers pavilions (van Mastrigt, 2013). Today, these four pavilions appear

poorly maintained and are only party filled with programs such as a phone repair shop. The spaces between these pavilions appear desolated, left-over spaces between two sub roads next to the shops. The third element of the Quarter is the former 'Grand Bazar', a large department store on junction of the Promenade and de Bongerd. Shaftoe (2008) marks in his book Convivial Urban Space exactly these three types of space as places that lean most towards gastronomic activity: open squares, enclosed and/or covered spaces and reclaimed streets.

1. The Promenade serves as a place for food exposition. The existing four Ungers pavilions are upgraded by placing grain, tomatoes, lettuce and other vegetables on the roofs. By actually showing city dwellers how food is grown, the first step of food awareness is being made. The open spaces between the Ungers pavilions function as a place for outside social interaction, where people linger, gather and eat their lunch. The pavilion located at the junction with the ring road serves as a new entrance to the city as well. 2. The department store is redeveloped into the core of the quarter: 'De Markt'. The building houses a market hall, a fresh supermarket, restaurant, and coordination point for urban agriculture,



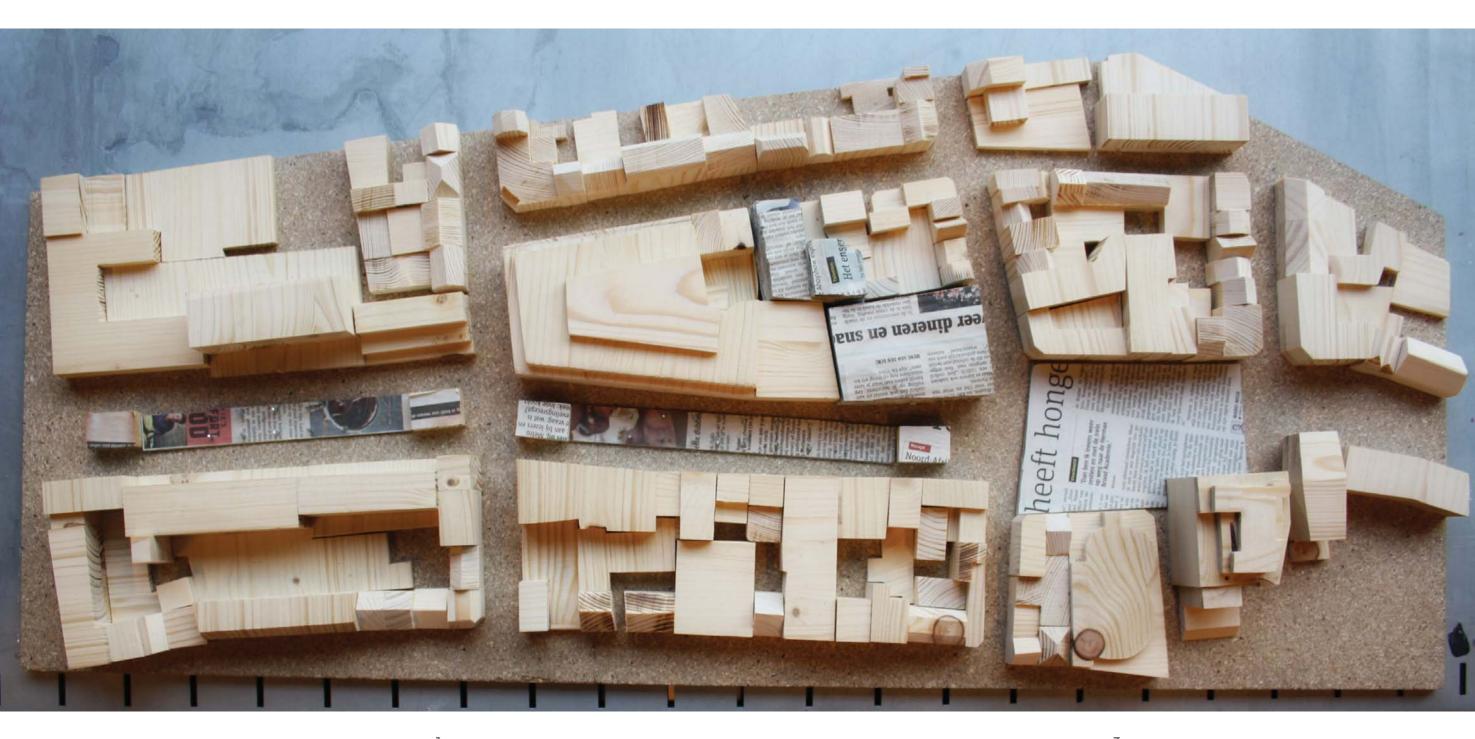
Conceptual model of the Gastronomic Quarter, newspaper represents the elements of interest. A view from the Bongerd looking at one of the Ungers pavillions and the former department store.

a greenhouse, places for food education and research, and productive gardens. 3. The market square is reinterpreted

with the introduction of new market stalls, corresponding to the stall inside the 'De Markt'.

The Gastronomic Quarter is a combination of outdoor rooms and enclosed scenes, acting as positive and vital spaces for the urban fabric

of Heerlen. It competes with the Woonboulevard and the Maankwartier, as food tourism is a globally proven successful concept if properly implemented. It serves as a place where people go for a break, to recreate or meet new people. It is a food-centered environment that brings more vitality to urban space, and best connects the sale and consumption of food with the urban realm.



1

'Promenade'
food exposition

2
de 'Bongerd'
market square

'De Markt'



The junction of the three elements: street, square and building 1:600

























A walk starting from the first Ungers pavilion at the ring road, over the Promenade, along the Vroom and Dreesman to the Bongerd.

THE PROGRAM OF DE MARKT

De Markt bridges the gap between consumer and producer by housing all elements of the food system in one building: growing, harvesting, processing, educating, cooking, dining and selling. The location of De Markt in the urban fabric emphasizes the human scale. It marks a sense of place and it a good fit between the form of space and its numerous social, economic and environmental functions. The program of the redeveloped building builds on the idea of the need of a diversity of ingredients to sustain public contact and cross-use needs (Parham, 2005).

people to go to for a break, to recreate and socialize. De Markt provides a space to enjoy urban life, and has the same time the ability to become an indispensable social segment to influence future urban development. De Markt is highly permeably, and the human scale is further reinforced by the absence of large servicing or delivery vehicles. The building not only seeks to engage the local community but draws visitors from far and wide as well.

The mixture of these elements allows

GROWING

Productive trees
Vegetable and fruit garden
Bee city
Greenhouse
Experimental gardening

PROCESSING / HAVESTING

Process space Storage Cooling Enoteca

EDUCATING

Auditorium Cooking class Classroom Research center

COOKING

Food lab Open kitchen

DINING

Restaurant Picknick

SELLING

Fresh supermarket Market hall

SUPPORTING

Delivery
Offices
Toilets
Meeting rooms
Employee space



THE GRAND BAZAR

The chosen site for the architectural intervention is the former Grand Bazar in Heerlen, a corner building on the junction of the Saroleostraat with the Promenade, marking the edge of the market square 'Bongerd'. In 1961, the Grand Bazar - designed by A. Stasse - opened its doors. The Liège-based concern 'Grand Bazar' developed from the late 1960s onwards into a Benelux concern with shops in Belgium and the south of the Netherlands. In 1970, the Dutch affiliates suffered from losses, which led to the rejection of these shops (van Opdorp, 2013). Since 1990 the building houses the Dutch chain of department stores 'Vroom & Dreesman', and was at that time redeveloped by A. Swinkels and H. Salemans. The current perspectives of the Vroom & Dreesman are not promising at all, as in the beginning of 2015 the local news announced that the department store group was almost declared bankrupt (NOS, 2015b). In my proposal I take an advance on the future and redevelop this building.

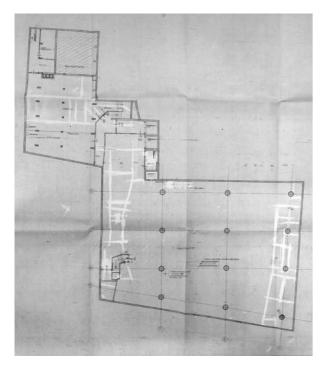
The building is a merger of an existing building facing the Dautzenbergstraat and a new part that was built simultaneously with the design of the Promenade. The merged five storyhigh building (including basement) is a simple reinforced concrete structure, with 1m wide columns to create open retail spaces. The building is part of a building block, enclosed by surrounded constructions and three façades facing the street. The layout of the plans allowed the former retail functions to use the 'back' of the building (Dautzenbergstraat) as supportive space for the 'front' (Saroleastraat and Promenade) that opens up to the public. As accession of daylight was deemed no longer relevant in the 1960's (van Mastrigt, 2013), the façade is built as a closed box using light ceramic tiles, and only a few recessed windows.

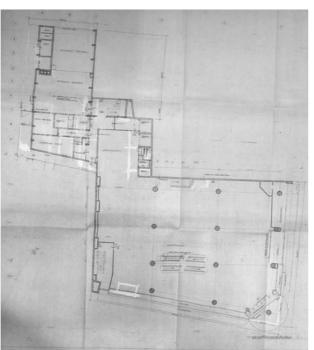


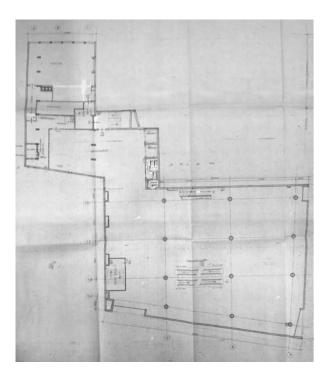
The Grand Bazar (1965)

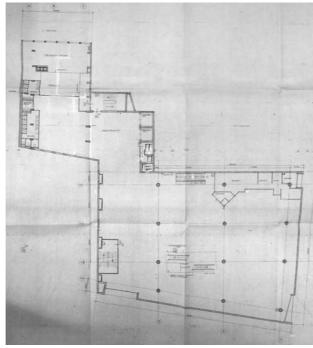


Vroom and Dreesman (2015)

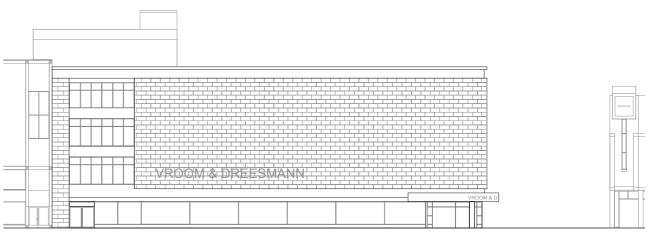








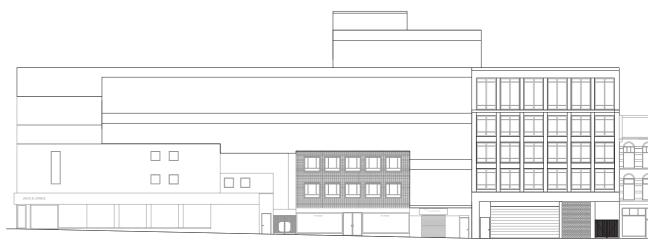
Original drawings of the redevelopment from 'Grand Bazar' to 'Vroom & Dreesman', 1990



Elevation Promenade (2015) 1:200



Elevation Saroleastraat (2015) 1:200



Elevation Dautzenbergstraat (2015) 1:200

DEALING WITH REDEVELOPMENT

A multi-level retail building is often encouraged by urban planners and designers as a way to create more vibrant, denser, neighborhoods (Reurbanist, 2012). However, upper floors often suffer from lower sales performance as stairs can ward off less determined shoppers. As a solution, restaurants are placed on these upper floors to create 'vertical' retail. Examples are the existing Vroom and Dreesman with their café 'La Place' placed on the top floor, or the new developed restaurant-concept 'The Kitchen' on the upper floor of the Bijenkorf (NL). Placing these foodrelated places on the upper floors works in theory, but not that much that it can really make people move upwards.

This is the reason why for the valuation of retail buildings the comparative principle of valuation is used that recognizes some parts of the building are consistently les valuable than others. Retailers consider that the front

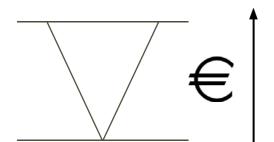
of a shop is usually of considerable higher value than areas to the rear (Nijsten, 2015). The basement, first floor and upper floors are considered to be of relatively low value. As a result, retailers attach less value to the potential benefit which can be derived from trading on other levels than the ground floor. Often it is the case that the upper levels are empty, and the tenant only trades from the ground floor of the building. In a region with high retail vacancy rates it seems to be an easy solution to demolish the vacant multi-level retail buildings and place retail solely on the ground level, directly connected to vibrant streets. However, this does not serve as a solution for shrinkage. The answer on how to deal with vacant buildings lies more in the amount of demolishing, and revaluation of the floors.

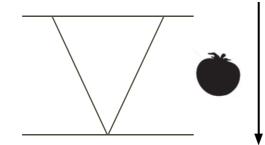
The program of 'De Markt' consists of public functions (selling, dining, cooking, education) combined with less

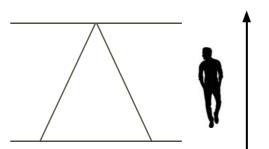
public functions (growing, harvesting, processing). It seems reasonable to just place the less public functions on the upper floors and the public levels on the lower floors. However, I want to encourage people to wander through the building and explore the different facets of food production. Not by forcing them to move from one floor to another by, for example, creating a circular routing, but by encouraging them to freely move around purely out of curiosity of what is to be seen on the level above. I believe vertical movement can be encouraged by creating visual and auditory connections and designing prominent stairs in plain sight. This new program of is being placed in a more than 10.000 m² five story-high building that is predominantly surrounded by neighboring buildings impeding daylight from entering the floors. The floors are of a significant width (40 by 30 meter respectively), taking away the opportunity of daylight to lighten the floors at all.

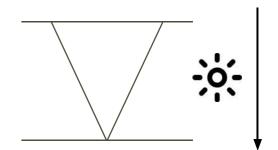
The answer to above problems - how to deal with vacant multi story buildings in terms of economy, how to encourage vertical movement and how to bring daylight into the building – results in one intervention: opening up the floors from top level to ground level in the shape of an enormous V. Floors are partly demolished following the line of economic valuation - ground floor is most valuable, upper floor the least (Nijsten, 2015), resulting in revaluation of the floors. Upgrading by demolition; a paradox. Daylight is brought into the building all the way to the basement, and the created void brings opportunities for new routing and visual connections.

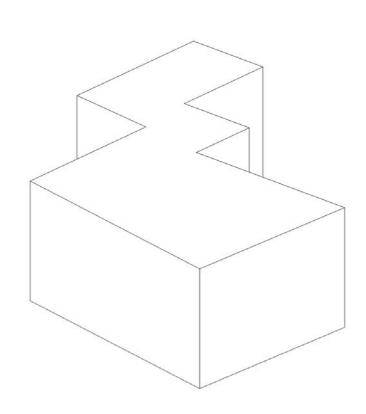
The V also represents the programmatic interpretation where the public and less public are placed from lower to upper floor. Visitors enter the building on the ground floor and move up, as food is being produced on the upper floor and moves down.

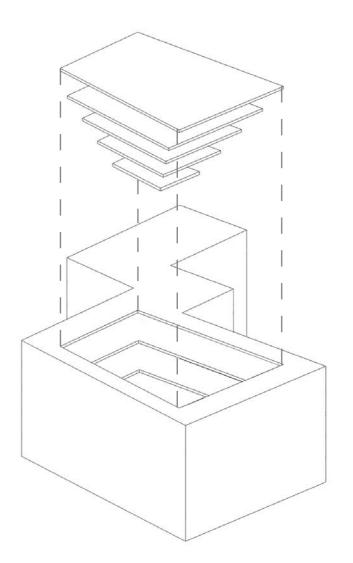


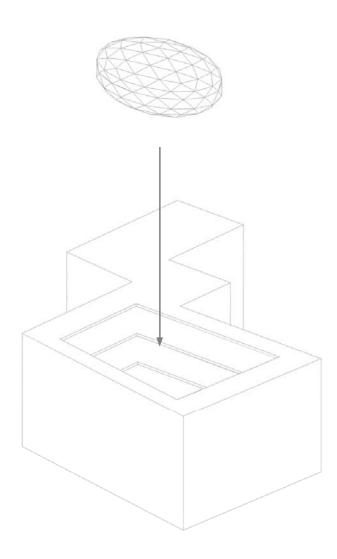








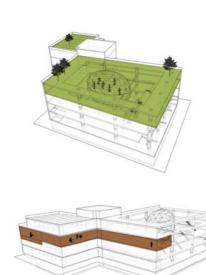


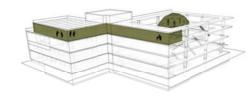


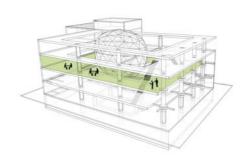
A new architectural element is placed in the middle of the void, breaking direct sunlight and acting as an eye-catching element. The lightweight geodesic structure stands

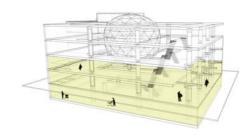
in strong contrast to the heavy concrete mass around it, creating an adventurous spatial experience. The dome works as a pedestal for a special function in the building.











growing harvesting processing educating cooking dining

selling

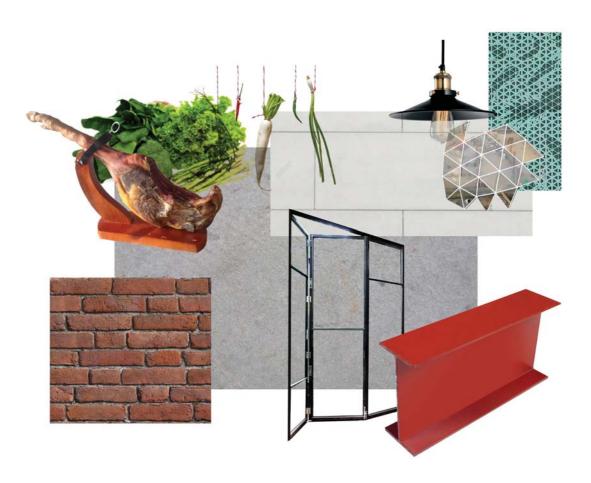
DE MARKT

De Markt transforms the experience of food shopping into something flamboyant. The nearly 10.000 m² building brings together spectacularly theatrical ploys, like the elevated open kitchen and large green walls running from the basement to the second floor. This all creates an environment that is rich in experiential detail as well as in colour and ornament. Educational parts, a restaurant and other social spaces add vitality to the city center of Heerlen that is lacking these facilities.

The design also responds to the architectural character of the building: a concrete over-dimensioned structure that was built cheap and quickly in the 1960's. Its expressive structure seems 'brutal' and lends itself to a similar rough aesthetic. The floor as well as the ceiling expose the existing concrete,

supplemented with steel construction. A visual spectacle is created by the main atrium and various voids running over several floors, allowing visitors to see the chef cook or smell grilled vegetables. The use of dramatic lighting stays in contrast to the high-frequency lights where shoppers and products most stores are in. The façade and the greenhouse cast shadows and keep the overall level of illumination eyepleasingly dim.

Multiple eating places surrounded by the theatre of food selling and production deliver a place in which to experiment, meet, learn, eat and fall in love. The visual scale and brutality of the building are referenced. De Markt not only seeks to engage the local community but draws visitors from far and wide as well.



Material collage

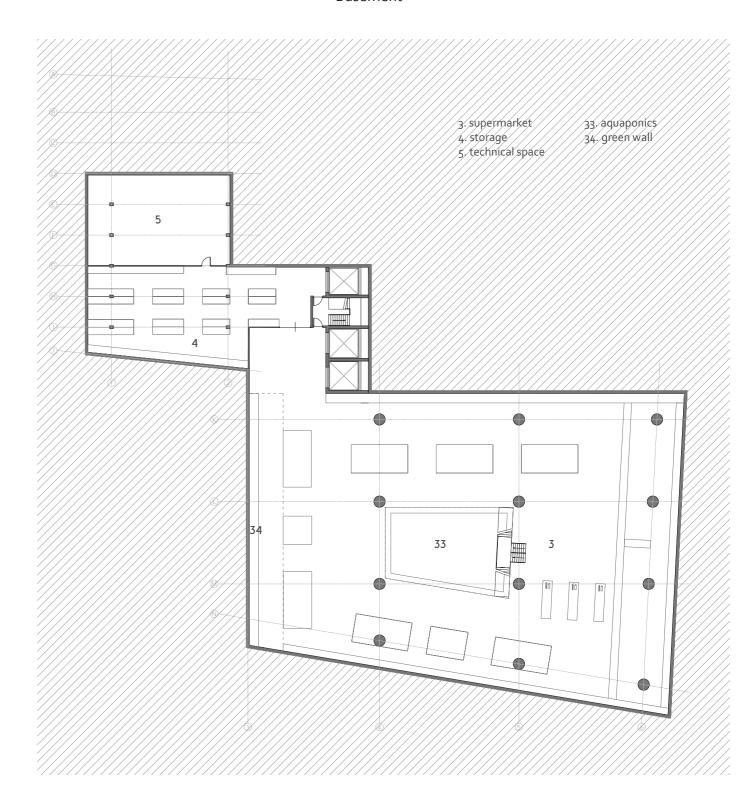


FLOOR PLANS

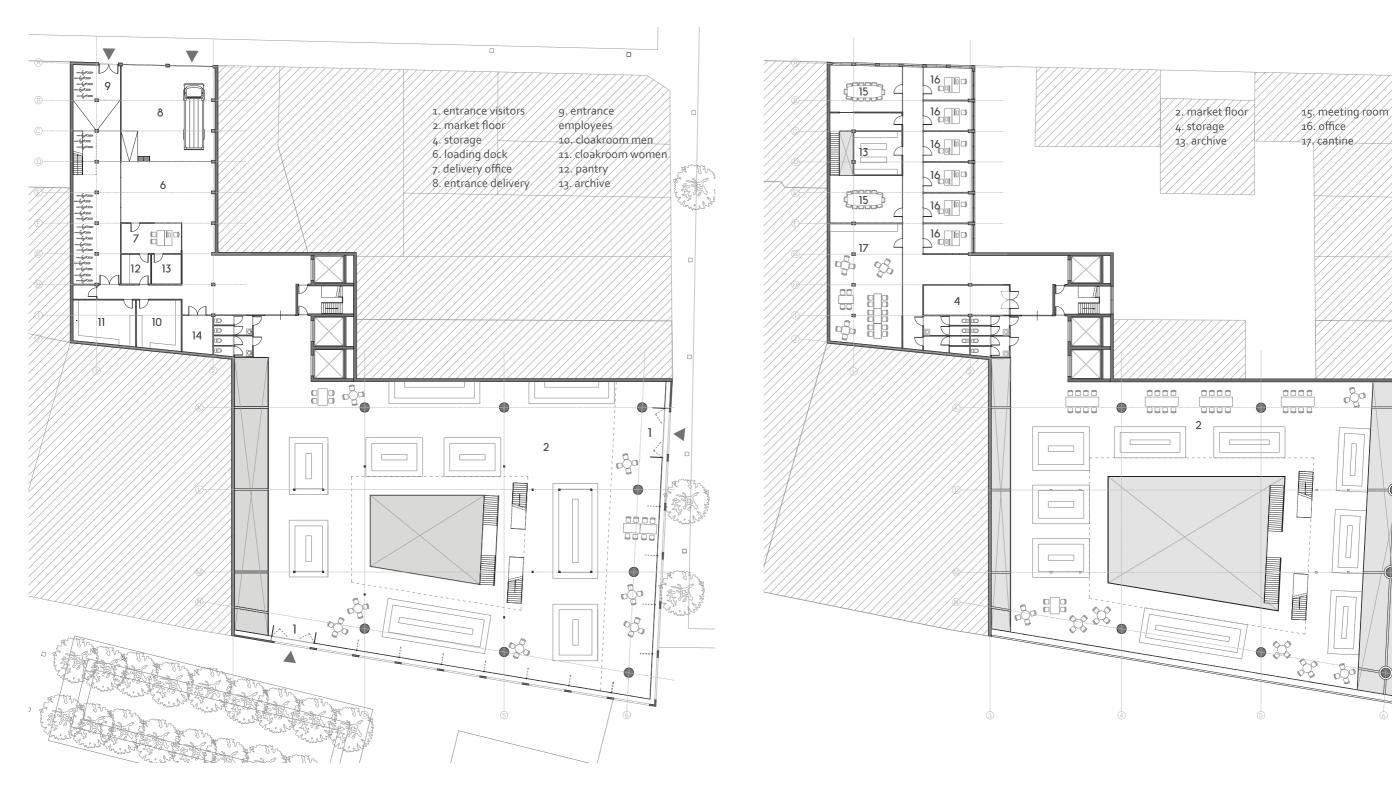
scale 1:400

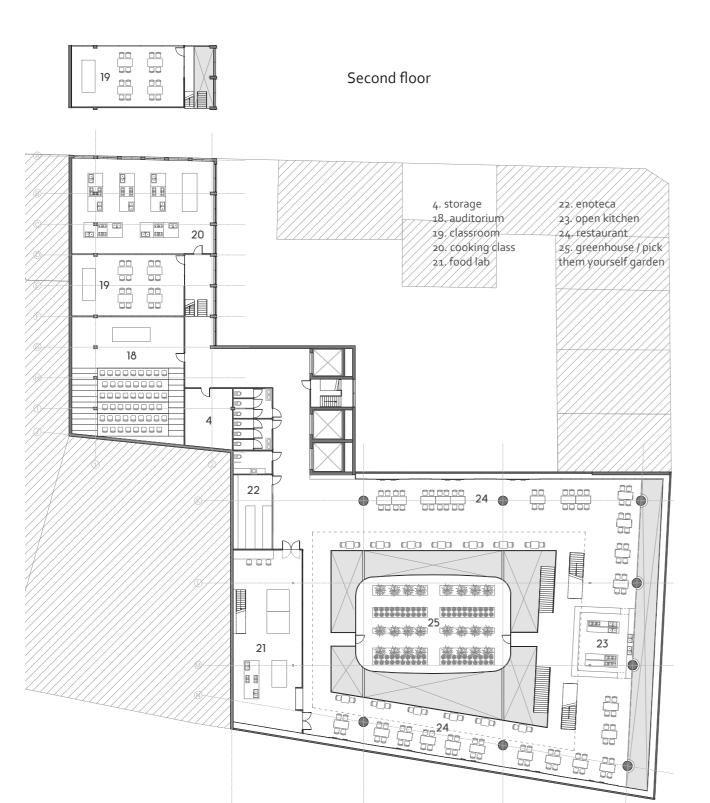
1. entrance visitors 19. classroom 2. market floor 20. cooking class 21. food lab 3. supermarket 22. enoteca 4. storage 5. technical space 23. open kitchen 6. loading dock 24. restaurant 7. delivery office 25. greenhouse / pick 8. entrance delivery them yourself garden 9. entrance employees 26. research center 10. cloakroom men 27. experimental 11. cloakroom women growing space 12. pantry 28. process space 13. archive 29. freezer 14. cooling 30. roof garden 15. meeting room 31. vegetable garden 16. office 32. bee city 17. cantine 33. aquaphonics 18. auditorium 34. green wall

Basement

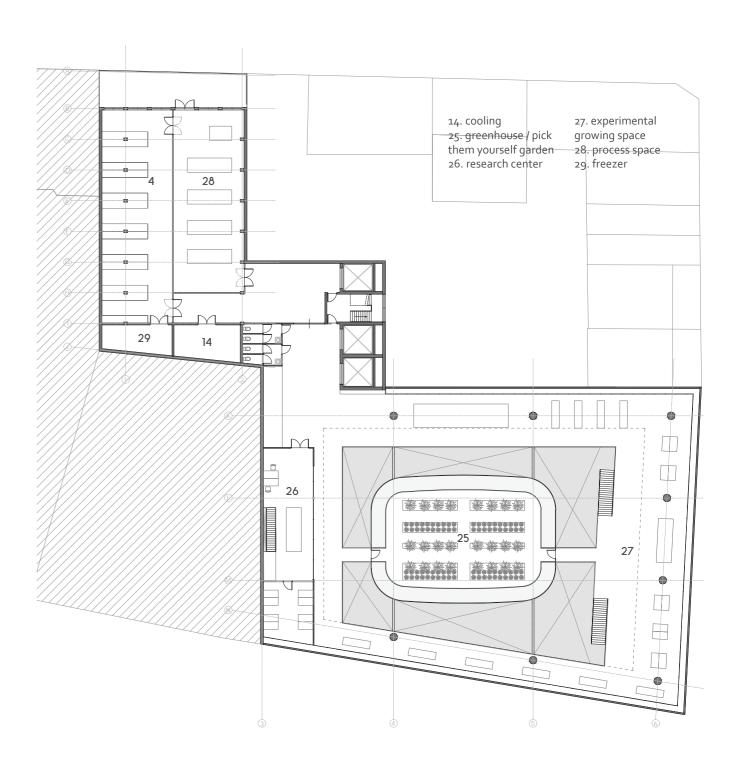


Ground floor First floor

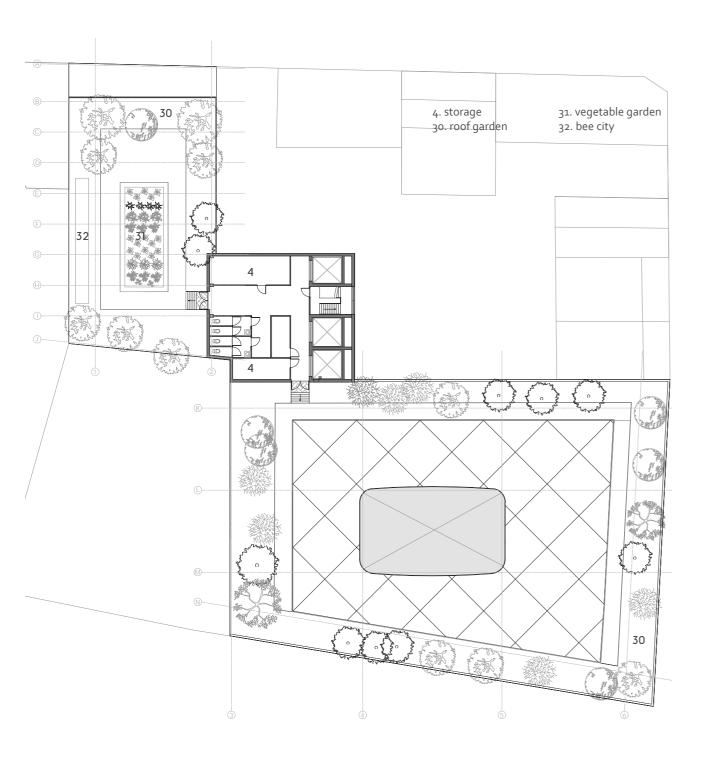


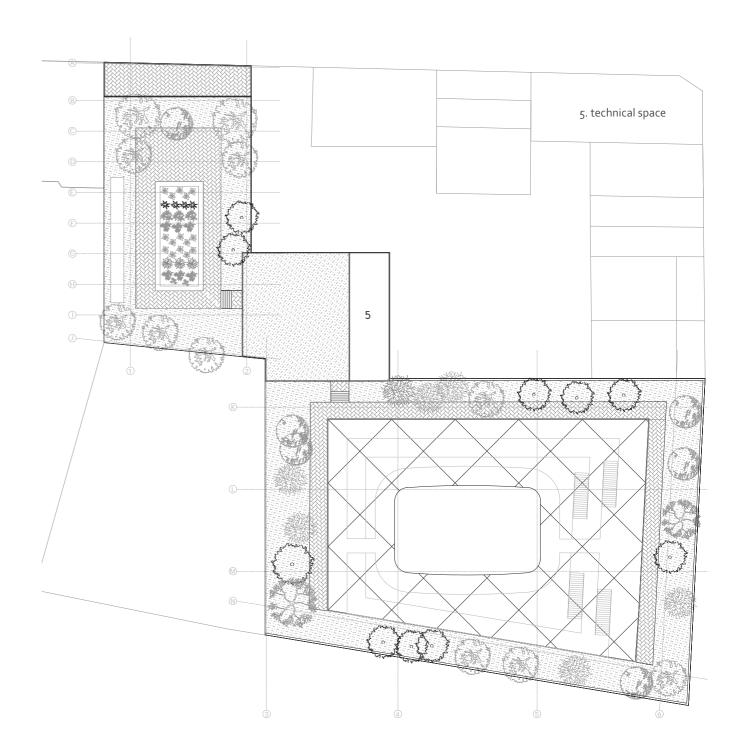


Third floor

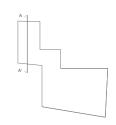


Fourth floor Roof









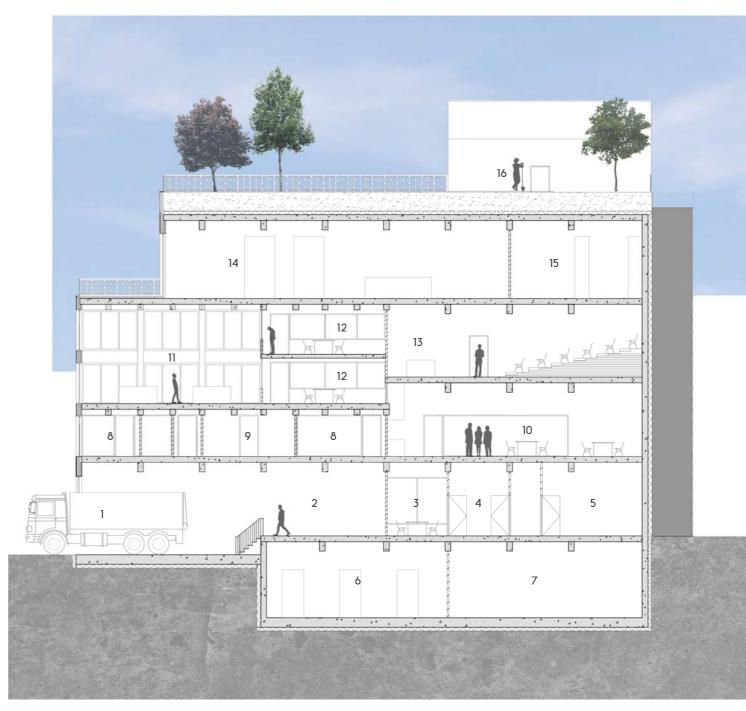
Section A-A'

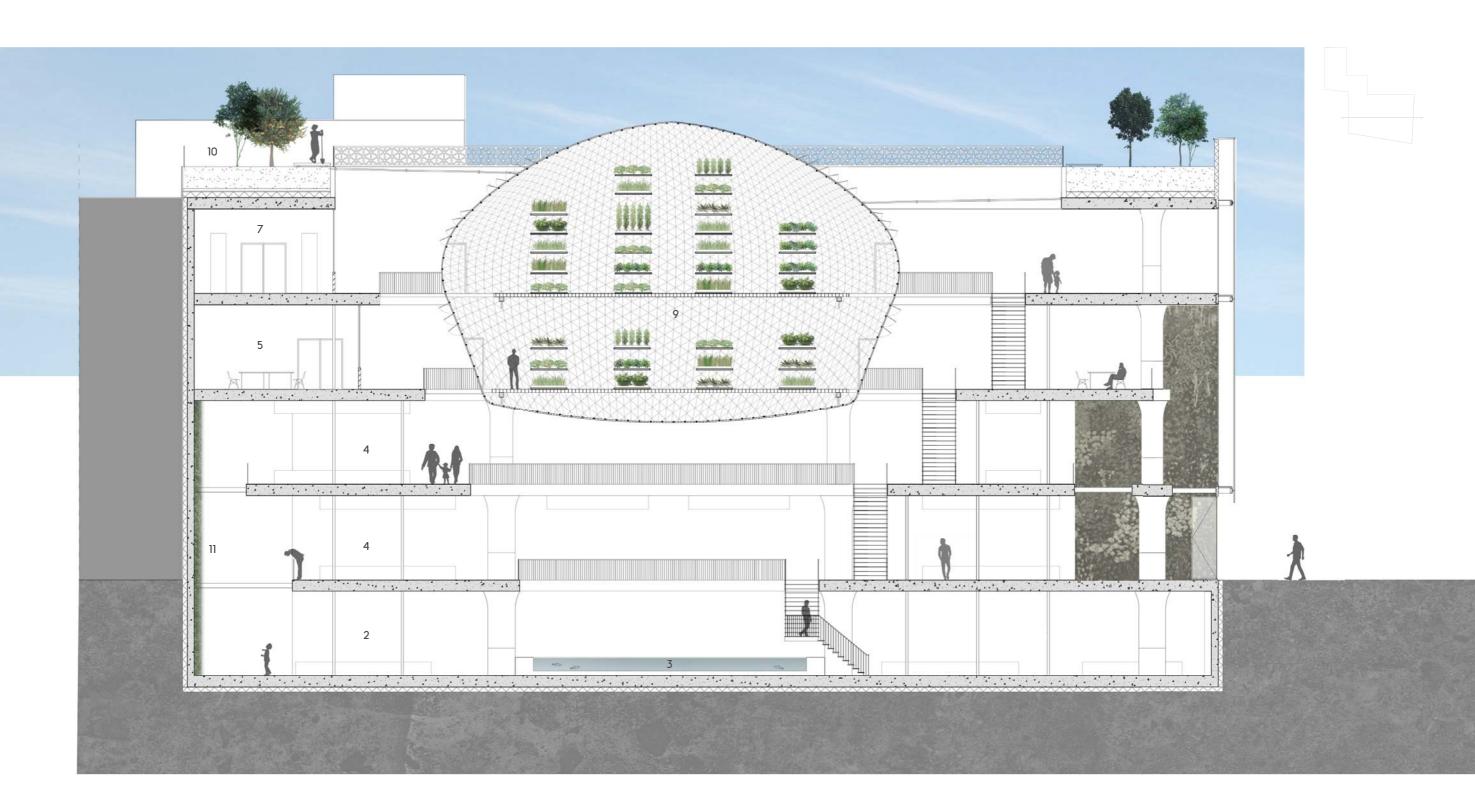
9. archive 1. entrance trucks 2.loading dock 10. cantine 3. delivery office 11. cooking class 12. classroom 4. pantry 5. cloackroom 13. auditorium 6. technical space 14. process space 15. cooling 7. storage 8. meeting room 16. roof garden

Section B-B'

110

entrance visitors
 supermarket
 aquaponics
 market space
 food lab
 restaurant
 experimental)
 growing space
 greenhouse /
 yourself garden
 roof garden
 green wall





STORYBOARD

A REGULAR SATURDAY AT DE MARKT

06.00

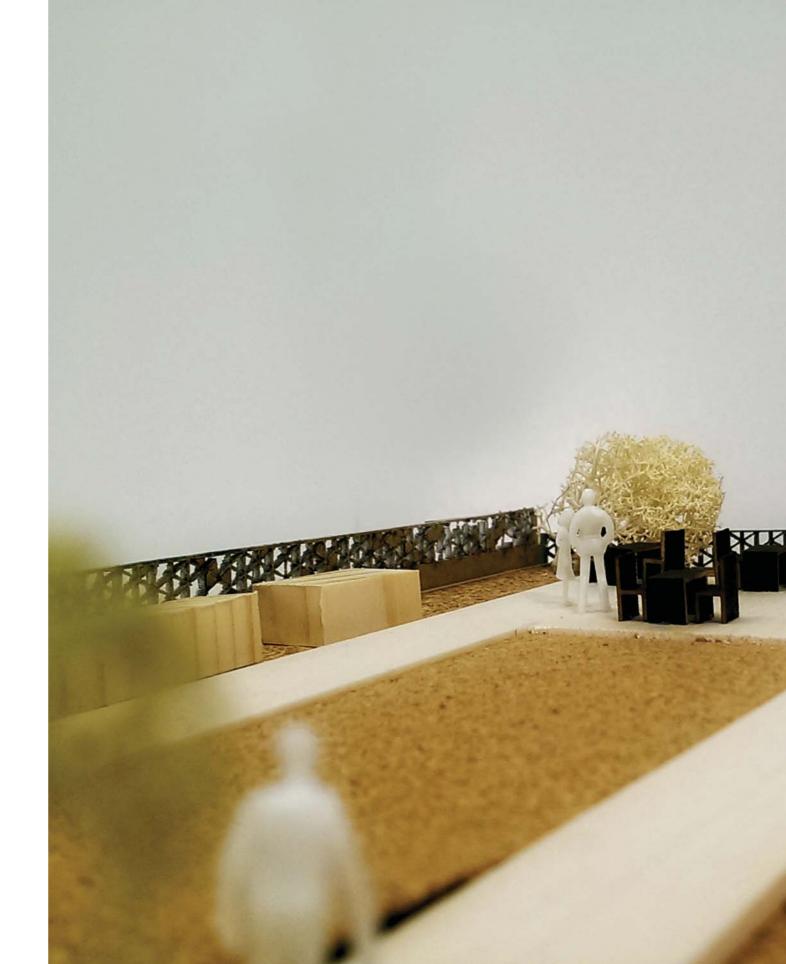
The first cityfarmers and other agricultural entrepreneurs from the region arrive in the Dautzenstraat to deliver their goods for the sale of today. They arrive by bike, or by a small truck they drive into the building to unload their produce. A Markt employee is waiting for them from behind his office facing the delivery entrance. Next to his office, employees are entering the building one by one, changing their everyday clothing to something that suits the job he or she is employing today. Part of the fresh delivered goods are directly brought into the supermarket located in the basement, as other goods are transported to the upper floor where the raw products are processed into marketable food products. Tenants of a market stand find their way on the ground floor that is based on a long-life loose-fit design principle. During this first hour, vendors have the opportunity to personalize their stand by raising the visual display of fruit, vegetables, meat, fish, cheese and other products to a rich level. Depending on the amount of good they sell, they can hire a full stand or share it with others.

07.00

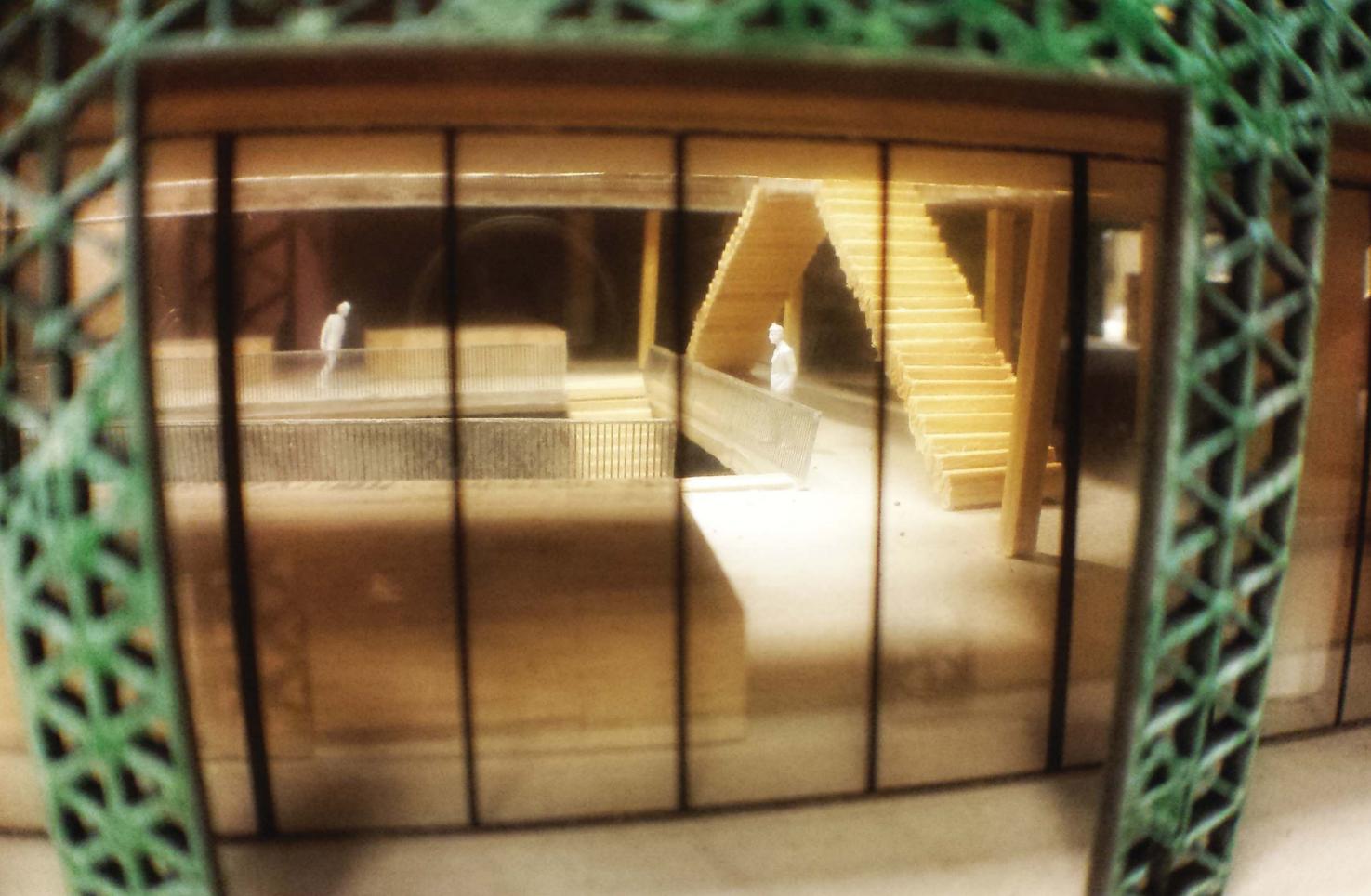
It's going to be a hot summer day. The regular outside market on the Bongerd is built up as well. A select few could not wait for de Markt to be opened, and as the doors open they march inside to be the first to buy the best fresh goods. Not only the two main entrance doors situated in the Promenade and the Saroleastraat are opened today, the transparant folding doors covering the full plinth of the building are folded open and offering maximal accessibility and permeability. This creates a physical connection with the outside market on the Bongerd on top of the visual connection of similarities in the design of the market stands.

08.00

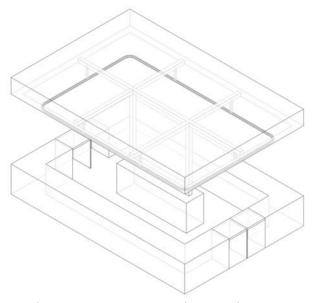
More visitors are passing by the building. Most of them are locals walking from their homes to enjoy the early morning, buy some seasonal, products and socialize with the vendors and neighbours. This early, the *Markt* is still a relatively quiet place. A cityfarmer starts his day by taking the elevator to the roof to weed his part of the roof garden. Several fruits, vegetables and trees are planted on thick layer of earth here. He mumbles that the beekeeper should arrive soon, as the hive seems to be almost filled with honey.



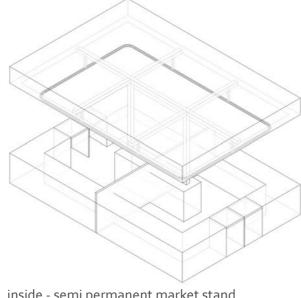




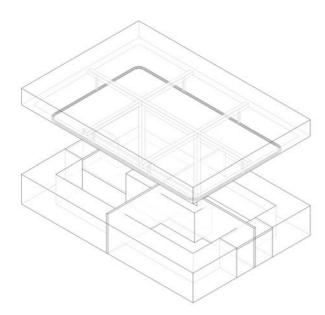




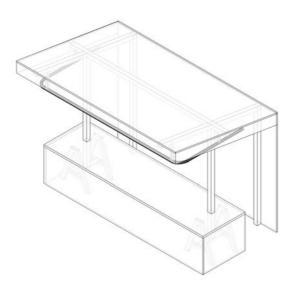
inside - semi permanent market stand one tenant



inside - semi permanent market stand two tenants



inside - semi permanent market stand four tenants



outside - flexible market stand one tenants









material collage

10.00

The chef of the restaurant wanders through the market stands to pick the ingredients of his menu of today fastidiously. Purple eggplants from the fields next to his house, and darkred tomatoes from the lady that he had a nice talk with about the good weather of today. As it is a Saturday, the research lab on the upper floor should be empty. However, yesterday one of the researchers experienced a tremendous breakthrough in creating nutrition out of toxic waste and he rushes into his research lab to explore further possibilities.

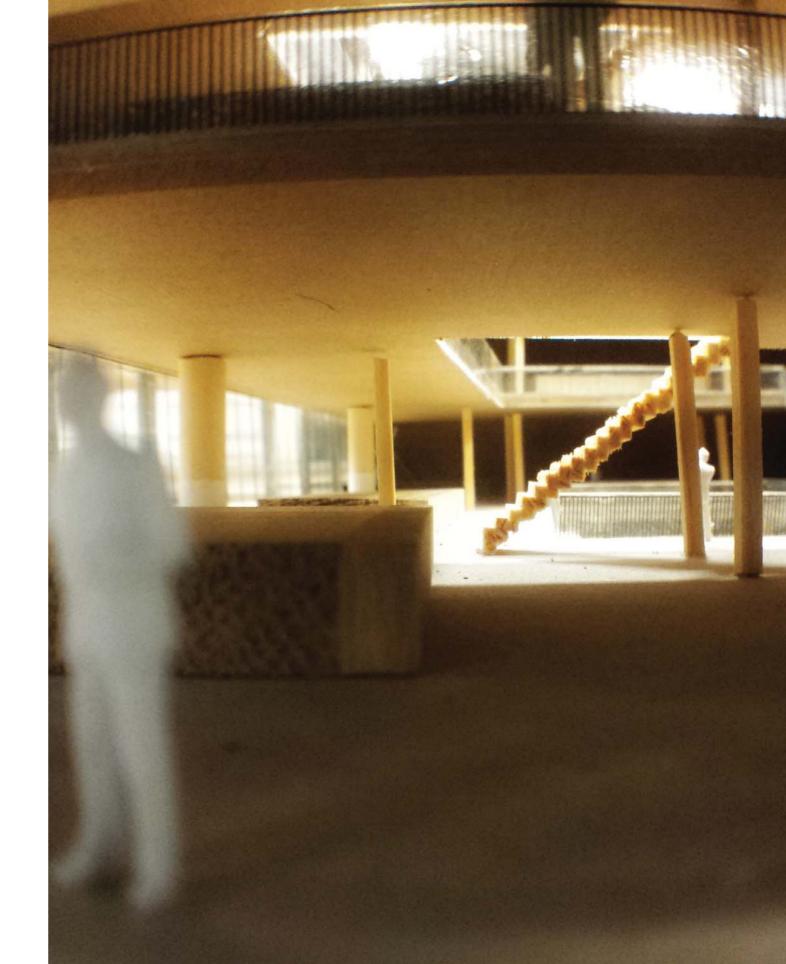
11.00

Tourists from all the way of Amsterdam are arriving at the station with the purpose to visit the *Markt*. They heard it is a new qualitative food-related place in the heart of *Parkstad*, a mustvisit. Deep aromas are filling the air, the food is diverse, colourful and enjoyed. There are places to pause, sit and have breakfast or lunch. The food production on offer enables customers

to communicate with food providers and producers, an essential part of an intelligent and meaningful shopping experience. A small boy waves from the basement, where he was intrigued by the fishes swimming in the pool, at his mother standing one level above him. She tells him he needs to be at the restaurant in an hour to have a meal.

12.00

The smell of coffee emanating from a market stand, the clatter of wineglasses from the restaurant, light music, and the lively chatter of diners together present an interesting cacophony of sounds. All this in striking contrast to the regular supermarket shopping experience, where foods are often contained in plastic or paper, prices are fixed, and where the interior space is usually smell-free with minimal noise. The architecture of the *Markt* creates a mood for slow movement and discovery. The treads of the stairs are covered with light ceramic tiles from the existing facade, making reuse an integral part of the building.







13.00

With the sun almost at its highest point, the visual spectacle of the greenhouse in the enormous void becomes apparent, as sunlight touches its geodome-like structure. A shell of triangles encloses the greenhouse existing of two floors, allowing various plants to grow in a relatively humid environment. A few people are, encouraged by the chef, picking thyme to enrich their potatoes served in the restaurant in a way they like it. Other restaurant visitors are standing next to the showcase of the foodlab to pick their meal, as they are in an adventurous mood to try something as a result of research.

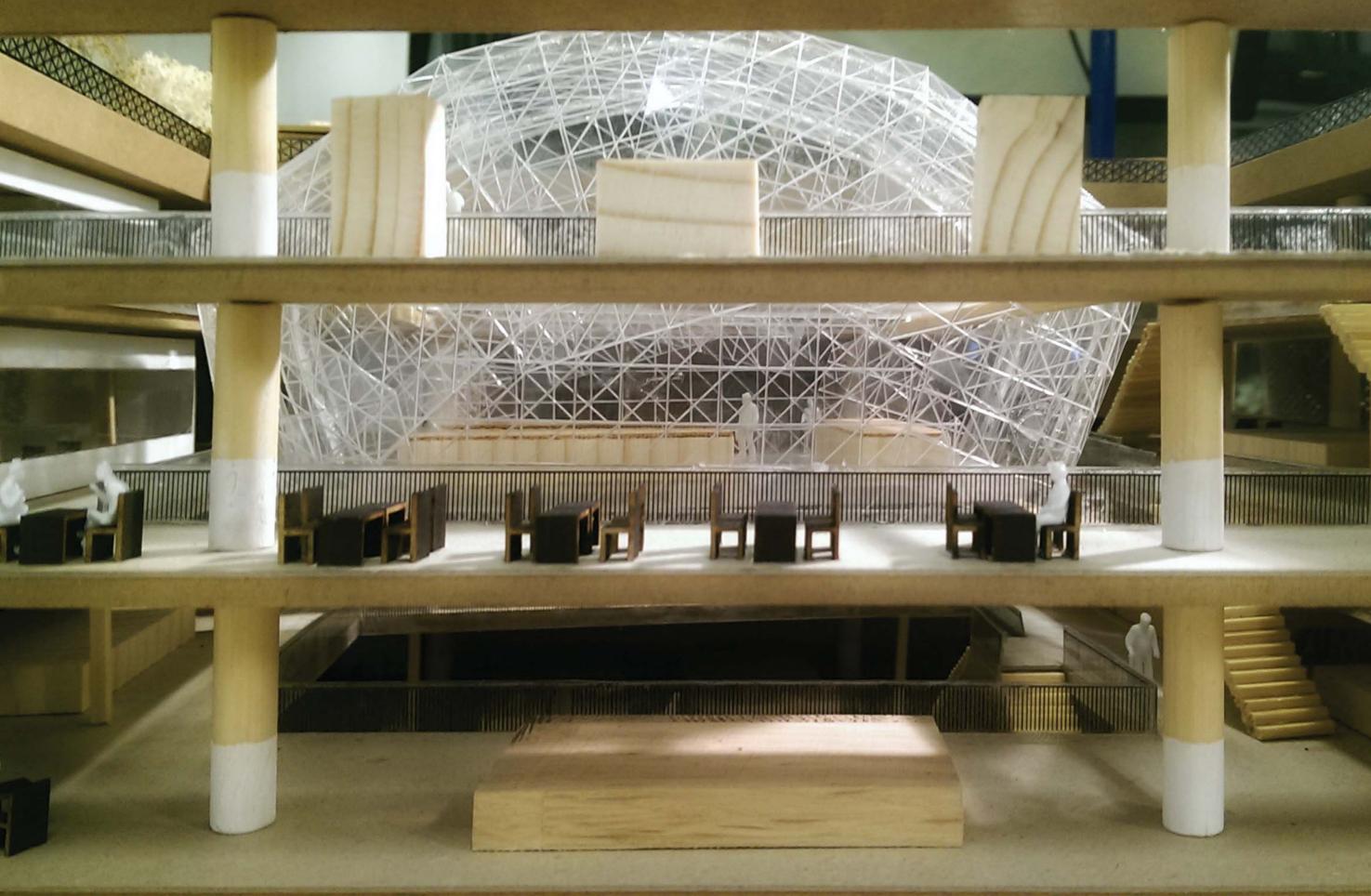
15.00

Several people gather in front of the auditorium on the third floor to have a good seat for the lecture of the local nutrition coach. After the lecture, they will be part of a cooking class where they can take theory into practice. Maybe they will learn something to surprise their families with. At the same time, a local entrepreneur is waiting in the meeting room of the urban agriculture office for one of the office employees. He wants to turn the derelict land at the end of his street into a communal garden, but doesn't know what are the best plants for the existing soil of that particular place.









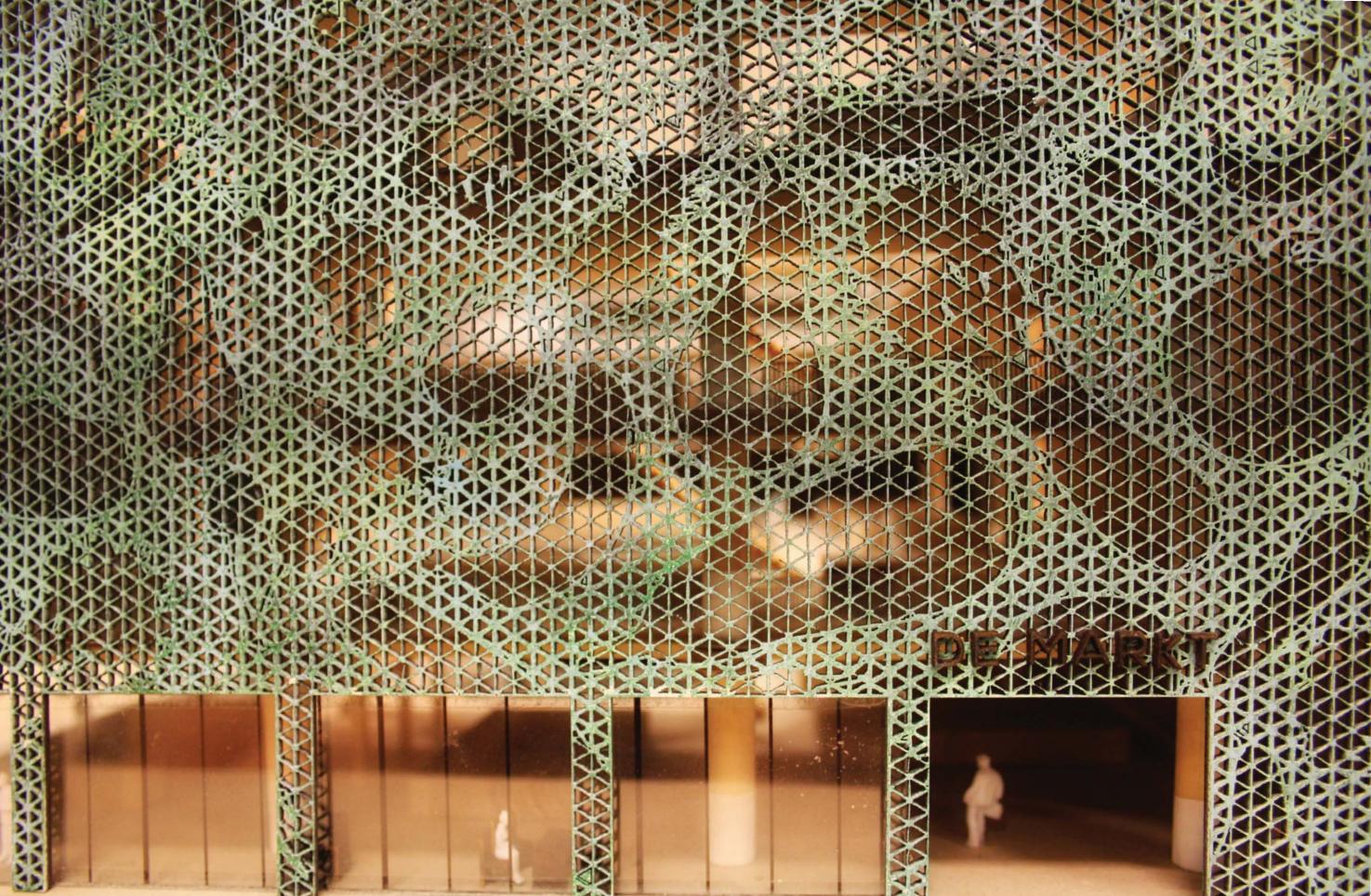






16.00

As clouds pass over Heerlen, colours shimmer and shift subtly on the surface of the playful façade. The façade of the Markt is made of perforated patina copper sheeting showing a pattern of fruit and vegetables that directly tells the story of what is inside the building. It functions as a second façade, as the building is initially wrapped in glass. It works as sunshade as well, and keeps its strong presence as sliding windows are opened in the inside to allow fresh air into the building. The façade responds in a way to the predominantly flat facades of the surrounded buildings, and, most important, it is a worthy counterpart of the Glaspaleis on the other side of the *Bongerd*.

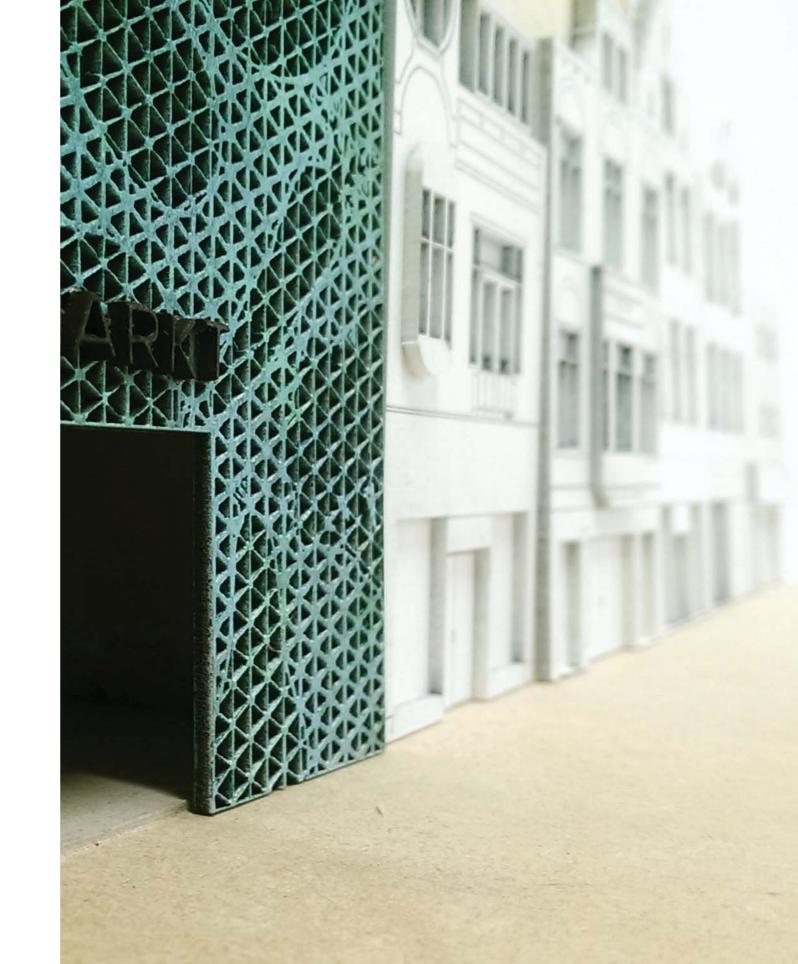


17.00

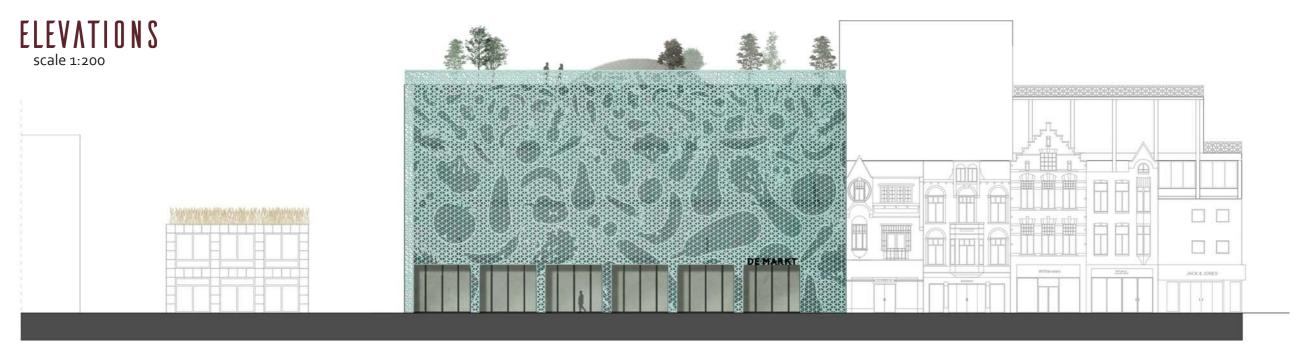
After a whole day, the atmosphere stays friendly even as potential customers haggle over prices and comment on the quality of the produce. A city official monitors the proceedings and occasionally takes samples for testing to ensure that the goods meets health and quality standards. Senses keep being filled with more information on food, telling the visitor unmistakable: I am at 'De Markt' in Heerlen. As the heat of the summer cools down a bit, a young couple finds a place on the benches between the Ungers pavilions to enjoy their freshly bought walnuts.

20.00

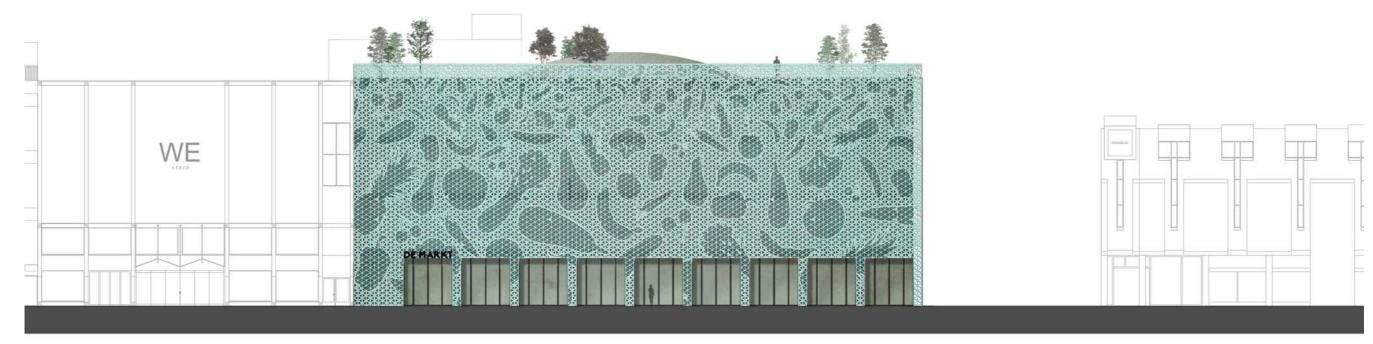
The end of a day in the *Markt* is near. Vendors are cleaning their stands, employees are chatting about the various customers of the afternoon and tables are being set for tomorrow. The sliding- and folding doors are closed, waiting to be opened for a new fresh day.



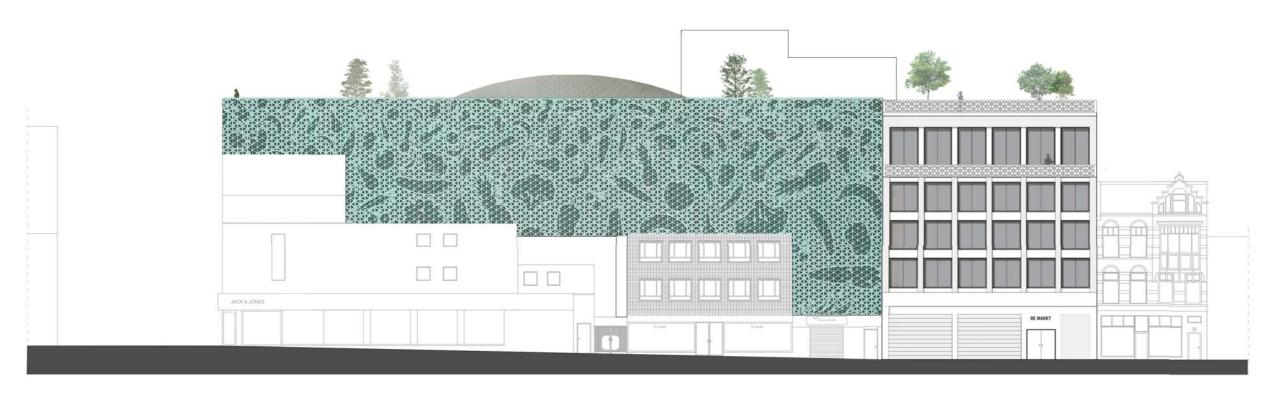




Elevation Saroleastraat

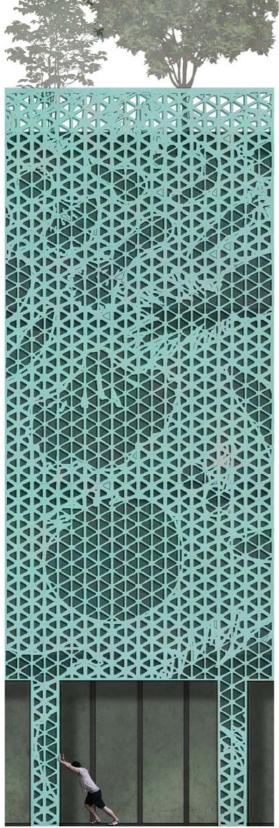


Elevation Promenade



Elevation Dautzenbergstraat





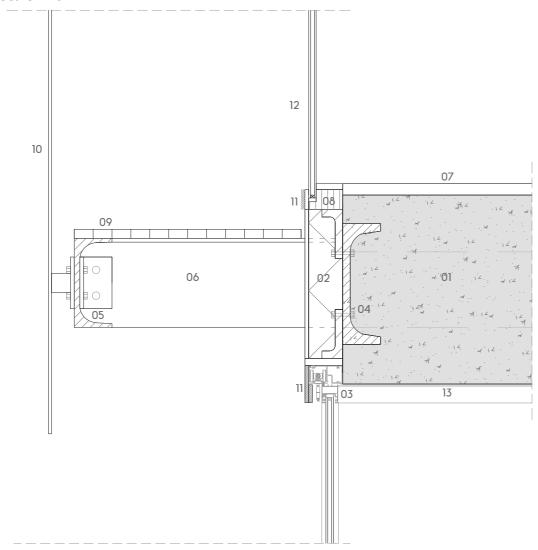
roof 16800 + P floor 3 12600 + P floor 1 4200 + P section façade

fragment façade



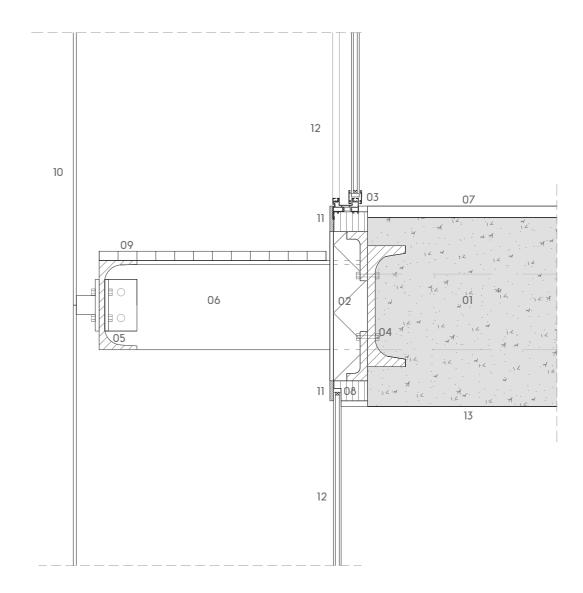






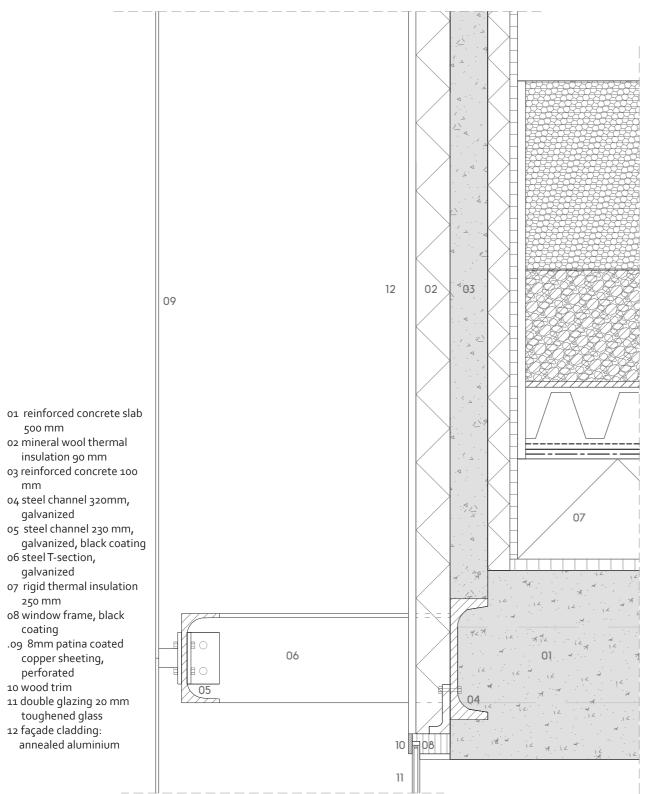
01	reinforced concrete slab 500 mm	07	transparant protective layer
02	mineral wool thermal insulation 90 mm	08	window frame, black coating
03	Jansen steel folding door 3700 x 1100mm	09	24 mm grating
	black coating	10	8mm patina coated copper sheeting,
04	steel channel 320mm, galvanized		perforated
05	steel channel 230 mm, galvanized, black	11	wood trim
	coating	12	double glazing 20 mm toughened glass
06	steel T-section, galvanized	13	translucent protective coating

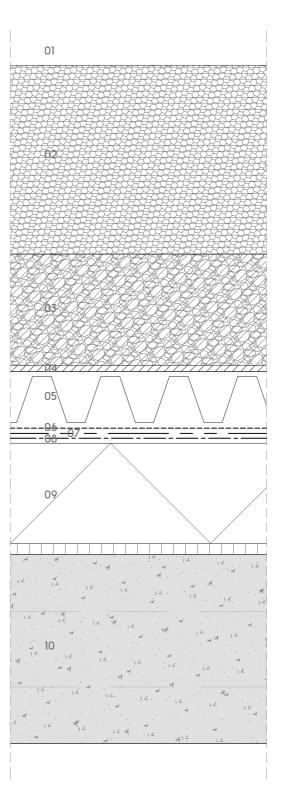
connection first floor sliding door - façade



01	reinforced concrete slab 500 mm	07	transparant protective layer
02	mineral wool thermal insulation 90 mm	08	window frame, black coating
03	Jansen steel sliding door 3700 x 1100 mm	09	24 mm grating
	black coating	10	8mm patina coated copper sheeting,
04	steel channel 320mm, galvanized		perforated
05	steel channel 230 mm, galvanized, black	11	wood trim
	coating	12	double glazing 20 mm toughened glass
06	steel T-section, galvanized	13	translucent protective coating

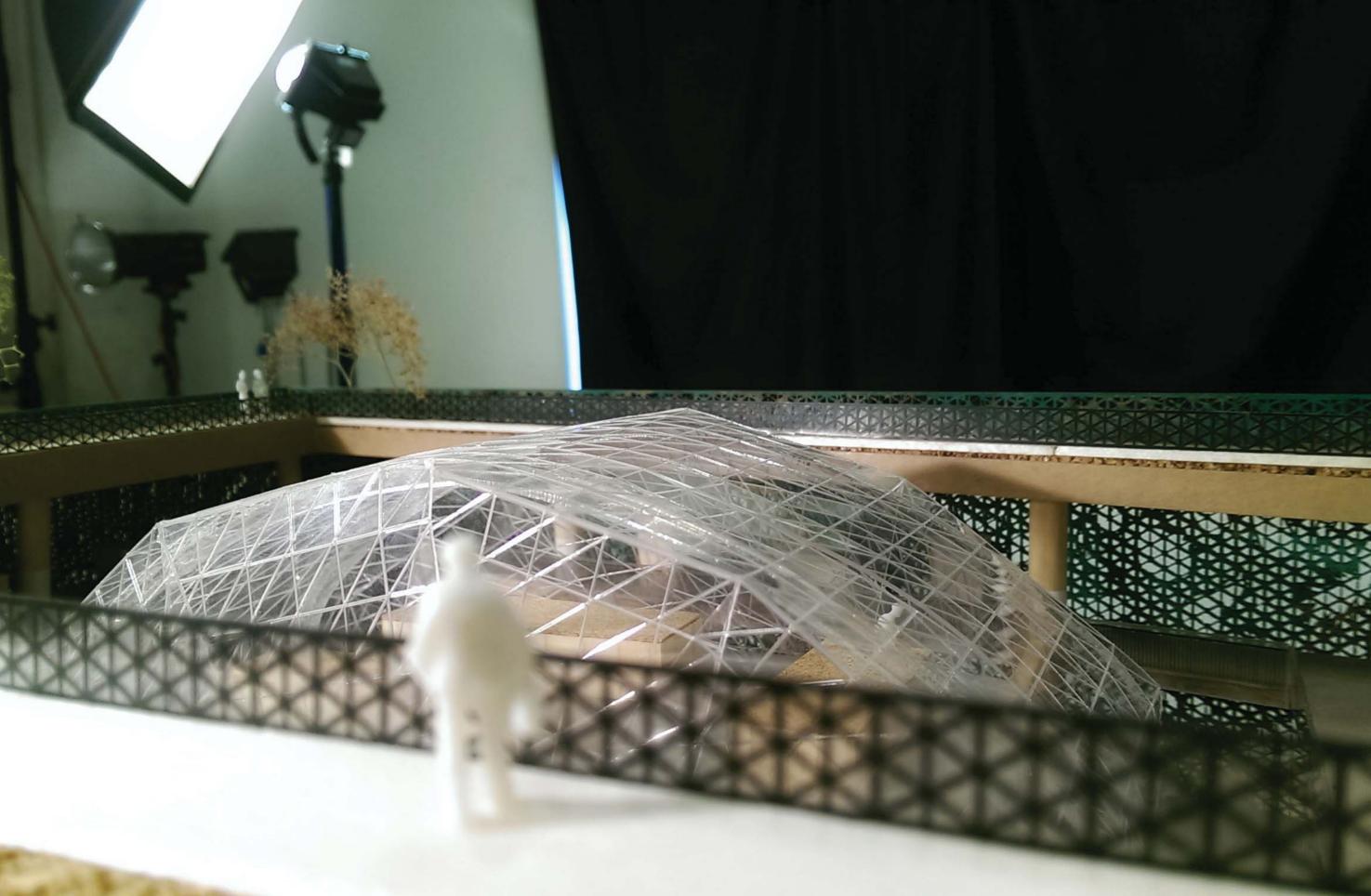
connection façade - roof green roof





o1 plant level
o2 upper substrate 500mm
o3 lower substrate 300 mm
o4 filter sheet SF
o5 Protectodrain drainage
o6 protection mat
o7 TGF 20
o8 root barrier WSB 100
o9 rigid thermal insulation 250 mm
10 reinforced concrete 500 mm





EPILOGUE

The average consumer does not feel very powerful within the global food system, but the exact opposite is true. Every time we are running a product through the supermarket scanner we are voting for local or not, organic or not. Everyone is part of the food system, and everyone has the ability to change it. Knowing the future is facing ongoing population growth, further urbanization and food accessibility and safety are at stake, making people more food-conscious is a matter of course.

An architectural link is found between rise of attention for good food and the shrinking region of Parkstad with the design of The Gastronomic Quarter. The Quarter revitalizes existing (good-quality) buildings and spaces that give opportunities for adaptive reuse related to food. The visual environment of de Markt is very distinctive, differing from the bland generic of most supermarkets. Not only has the design delivered a new genre in food retailing, it has become a social hub. A place of and for the community, adding richness and identity to the inner city of Heerlen whilst also honouring and celebration food. The Quarter as a whole functions as a major magnet that draws people to the urban (open) public space of the inner city of Heerlen with the opportunity to enjoy food. In addition to satisfy hunger and thirst, food plays an important role in urban life, as an attractive way to relax, read, socialize and people-watch. It is a food-centered environment that brings more vitality to urban space, and best connects the sale and consumption of food with the urban realm. The emergence of urban agriculture supports the Gastronomic Quarter, and give new interpretation to the vacant space present in the shrinking region of Parkstad. It offers vibrant green spaces and recreation, helps building community and potentially serve as a new source of modest economic development. The benefit lies not its ability to feed the city, but rather in its ability to educate city dwellers about fresh, healthy food and the efforts it takes to produce it.

ACKNOWLEDGEMENTS

Of course thanks to my graduation tutors Jos Bosman, Sukanya Krishnamurthy and Hüsnü Yegenoglu for their tutoring during the year. Sometimes for tempering over-enthusiastic ideas, sometimes for motivational support. Thanks to my fellow students of the graduation studio, especially Thijs and Joost. Together we conquered the second floor of our faculty building Vertigo. Thanks to Joeri, friends and family who I bored with my theories and ideas, and sometimes had to withstand my desperate moods. Thanks to all the people I spoke with during my quest to understand the contemporary landscape of food and the region of Parkstad. Collecting their experiences and reflect them on my own impressions has proven to be of great value for the project. And thanks to all the others who helped me making the project what it has become.

IMAGES

Images are own work unless stated otherwise

p. 21 The fish market in Rotterdam, 1694. [Colored engraving] J. de Vor. Rotterdam, Maritiem Museum Rotterdam. Holland, seventeenth century.

p. 31 'Electrische worstenfabriek' Macrander Stationsstraat 4 Heerlen, 1923. [Photo] Retrieved from: http://www.macrander.net/25_afbeeldingen_NL_louis.html

p. 38 The Swiss Spaghetti Harvest, 1957. [photo] Retrieved from: http://www.news.com.au/national/photos-e6frfkp9-1225788595490?page=6>

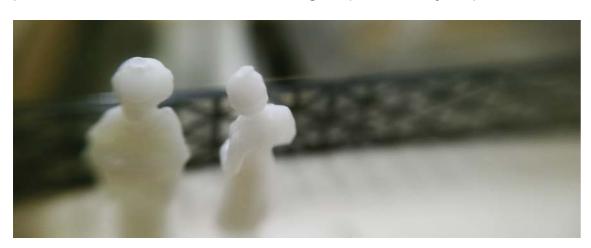
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