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Asselbergs, Thijs; Snijders, Anne; Smit, Mo; Koch, Freddie

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journal

aE studio / INTECTURE 2016/2017

graduation project by Alessandro Giacomelli
Bending the grid

news aE in action

Introduction aE/INTECTURE innovating architecture

by **Thijs Asselbergs**

The graduation studio of Architectural Engineering focuses on the integration of (new) technology in architecture. For this purpose, the name aE/INTECTURE® was devised, which will be developed further as a brand in the coming years. Students start with a technical fascination and translate this into an architectural concept, finally being able to implement this within the environment in a responsible way. 'If technology is the answer, what is the question?' Under the guidance of a team of enthusiastic (guest) lecturers, students search for the dot on the horizon that is necessary for coming up with solutions that improve the quality of the built environment and make it more sustainable. In addition, either the 'making' (make) or 'the energy and material flow' (flow) is used and applied as a basis in different contexts.

Digital fabrication

The 'make' theme has already earned aE/INTECTURE an excellent reputation through the integration of the ideology of 'digital fabrication' by Pieter Stoutjesdijk. Pieter was the faculty's best student in 2013 and now exhibits his work at the Stedelijk Museum in Amsterdam. Last year, Nadia Remmerswaal also graduated from aE/INTECTURE as student of the year. She also works on innovations using digital production techniques. Stoutjesdijk recently developed the 'Comfort Cabin', an innovative solution for temporarily empty buildings to make them habitable for refugees. The project has been widely cited in the press and the Chief Government Architect regularly shows it as a good example of innovation. Meanwhile, Pieter has developed the 'Comfort City' in collaboration with former aE/INTECTURE student Anneloes de Koff, which received the first prize in the Central Agency for the Reception of Asylum Seekers' (COA) design contest 'A Home away from Home'. In addition, thanks to the digital method of production, high profile chair production projects have been rolled out to the Minor in Architectural Engineering and Junior TU Delft Architectural Engineering programme.

Collaborations

Talent development and seeking out relationships with the business community and government are the points of departure for strengthening our position in society and examining how we can integrate this into the academic domain. For example, connections have been forged with the Directorate-General for Public Works and Water Management (Rijkswaterstaat), together with whom we've built and managed 12 beach houses as part of the Stuiflab project during the Oerol Festival on the island of Terschelling in 2015. aE/INTECTURE has also been involved from the start as an advisor and source of inspiration in the creation of IBA Parkstad in 2020. In addition, new ideas for addressing off-the-grid housing and infrastructure solutions in kampungs (informal villages) in Indonesia have been mapped out in the recent past. Students have visited Bandung and collaborated with the local business community and university. Last year, students were assigned to work on 'Learning from Lowlands', the famous annual Lowlands festival in Biddinghuizen. They examined what could be learnt from temporary building structures. Meanwhile, an inspiring design relationship has been established with the management of the Marineterrein in Amsterdam. Students and researchers are given the opportunity to collaborate on the 'Flexible City' that will be developed at this unique location in the Netherlands over the coming years. Our Seismic project deals with earthquake problems in Groningen and, in particular, the design solutions being devised for that.

Inspiration and innovation

aE/INTECTURE wants to use such examples to demonstrate that architects can integrate innovative design solutions, thus contributing to the improvement of living conditions. We follow our graduates in their practice in order to see if our approach is influencing the changing world of the contemporary architect.

IBA Academy

AE studio at the IUAV Venice

aE/INTECTURE joint the international IBA Academy in Venice. Students presented their work at the IUAV in Venice and curator of IBA Parkstad Jo Coenen presented their results at the EU Urban agenda in Brussels. The IBA Academy aims to form excellent research alliances by constituting an international panel of academies, supporting current and future transformation processes related to cross-border regions and urban areas within the European context. IBA Parkstad and aE/INTECTURE are jointly working on the 2020 exhibition in the south of Limburg.

Digital Craftman

Booost

The growing importance of new digital production methods for architecture (3D printing, robotification) was the reason for the Booosting workshop 'Digital Craftsmanship in Architecture.' Booosting presented their book at the Berlage rooms. aE/INTECTURE graduates Cas van der Zanden and Anneloes de Koff showed their models. Wessel van Beerendonk of Studio RAP gave an interesting and powerful presentation about RAP's innovative approach of robotic architectural production. Order the book at www.booosting.nl

Stedelijk Museum

Dream Out Loud exhibition

Pieter Stoutjesdijk presented his post-disaster shelter for Haïti at the Dream Out Loud exhibition in the Stedelijk Museum in Amsterdam. The group exhibition explores one of today's most relevant topics: social design. The 26 designers featured in the show go beyond a beautiful design and proof that things can be different. They all dream about a better world and try to figure out ways to solve today's complex societal issues. Design and architectural engineering are coming closer together and will make a new future.

aE in action **news**

A Home Away From Home

Innovative and flexible housing solutions with social value

In the beginning of 2016, the Central Agency for the Reception of Asylum Seekers (COA) and Chief Government Architect Floris Alkemade launched the Open Call 'A Home away from Home': a design competition for innovative housing solutions of asylum seekers. The results of the open call contain a wide range of possible solutions, varying from foldable units and building kits to social strategies. This form of social housing presents a solution for a far wider group of people who need short- or longer-term accommodation. Anneloes de Koff, graduate of aE/INTECTURE won the first prize together with Pieter Stoutjesdijk. They presented their project 'Comfort City' at the Dutch Design Week 2016 in Eindhoven. This event focuses on designs for the future and stimulates cross-overs between design disciplines. The exhibition in the Klokgebouw was visited by Queen Maxima and hundreds of thousands of people.

aE expo

02 May – 14 May 2017

Makerversity

Future of architecture

On 20th March 2017 aE/Intecture organized, a lively panel discussion about the future of architecture and engineering in education, in practice and in society in collaboration with the Makerversity at the Marineterrein in Amsterdam. The day also functioned as open day for the Makerveristy, inviting current and new enthusiastic makers to collaborate within the workspace.

The panel discussion integrated presentations of the state of the art of aE/Intecture by Pieter Stoutjesdijk (founder of 'The New Makers' and member of aE/Intecture), Makerversity member Cas Van Der Zanden (aE/Intecture graduate and inventor of BLOKKI & LUNA), Thijs Asselbergs (professor aE Chair), Anne Snijders (aE/Intecture curator and tutor) and Frederique Sanders (aE/Intecture graduate). Afterwards, a lively and interesting debate on this topic with the audience was chaired by Lennart Booij (curator of the Amsterdam Light Festival).

INTECTURE 17/18

Students and alumni

This graduation year (2016/2017) two groups of aE/INTECTURE students (studio 17 & 18) launched new research and design projects. At the start of the two semesters they kicked off with the Intecture Pavillion Pitch, in which they introduced themselves and their technically inspired design fascinations.

On 2 May 2017 aE/Intecture organizes a special aE Alumni Day during which the studio presents new developments in architecture and alumni share their practical work experiences. On the back of this aE journal you'll find an interview with alumni Carlo Maria Morsiani who organizes a summer school in Italy this summer. aE/INTECTURE travels to Italy to join the programme.

Context Shelterlands

New social environments

text **Annebregje Snijders**

‘Home’ is the name of the place (the house) where someone lives. ‘Home’ is the place where you feel safe. It therefore has a positive connotation.

As part of the MaCuBs programme, aE/INTECTURE researches within the context of ‘Shelterlands’ the question how digital fabrication methods can play a role in the design for dwellings which on the one hand need to be affordable and replicable and on the other hand have to serve different basic needs in a social vacuum.

Through research & design, prototypes and pilot projects, MaCuBs explores the potential of digital fabrication in the building industry to solve real world problems in innovative and realistic ways. Challenges MaCuBs students are currently working on include the development of safe and affordable construction systems for slums, the transformation of vacant offices through mass-customized interiors, and the use of the speed and flexibility of digital production methods to house asylum seekers. The Product Development Lab investigates how digital fabrication techniques could provide an economic and ecological advantage for the building sector.

Many aspects of the New Industrial Revolution are involved in the design projects and the research: open source knowledge, fab-labs, mass-customization, local production, file-to-factory, new business models, new collaborations between architect and client and new kinds of ornamentation.

CASCO BUILDING BLOCKS

by **Cas van der Zanden**

The current hosting facilities for refugees are too small to give them all a safe home. There is a need for a large number of additional affordable temporary houses. Casco building blocks provide a solution that enables the refugees to take part in the design and the building process. Standardized human sized building blocks are prefabricated in a factory. Plywood comes into the factory and goes straight into the CNC milling machine, the prefabricated parts are flatpacked and transported to the building site, there the building blocks can be assembled like Ikea furniture.

T- BOX COMMUNITY

by **Shiji Zhang**

Since the number of asylum seekers is exploding, there is a great need of building more and better AZC’s. The main purpose of the research is to use the fast construction technology of CNC milling to explore the possibilities for transformable space inside an eight person unit. In this way, qualitative housing could be created for the asylum seekers. On the other hand, this project could be an example of the implementation of a new building system in existing buildings in order to create a comfortable living environment at low cost in the IBA Parkstad area, at the same time being applicable for other AZC’s in the Netherlands.

REFUGEE CITY KURDISTAN

by **Twana Gul**

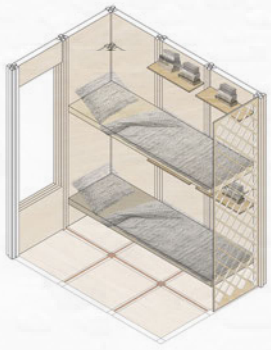
There are many refugee camps around the world with their own conditions, identity and settlement structure. All camps have one main objective in common: providing refugees a place to stay. This project explores how to re-design and transform existing refugee camps in Kurdistan into off-the-grid refugee cities, which can be build by refugees themselves with locally produced biobased materials such as reed and mud. Different Kurdish refugee camps have been visited during graduation and the design has been tested and qualified to the constraints of the environment and culture.

ARCHIPRIX NOMINEE

COMFORT CITY

by **Anneloes de Koff**

Anneloes de Koff who just graduated at aE/ INTECTURE is one of the six winners of the design competition 'A Home Away From Home' organised by the Dutch Central Agency for the Reception of Asylum Seekers. She uses vacant buildings to house refugees. In the design the future residents can put together their own dwelling. They will be provided with elements and a construction drawing that together forms an easy puzzle. Each dwelling contains a ComfortCabin which is a modular core containing all the necessary utilities. In collaboration with Pieter Stoutjesdijk, Anneloes built a prototype of a part of the ComfortCity design, which was finally shown at the Dutch Design Week in Eindhoven in 2016.



Context Beyond the Current

Increasing the energy efficiency of the existing stock

text **Tjalling Homans**

From 2020 on, all newly built buildings in the Netherlands need to be energy neutral. However, every year, only about 1% of the building stock in the Netherlands is being refreshed. Therefor Beyond the Current focuses on this big challenge: the sustainable transformation of the existing housing stock.

Most deep renovation designs of dwellings focus on the housing stock that is relatively easy to transform: (early) post-war row housing. A major challenge remains how to generate designs for more complicated housing estates such as pre-war housing and apartment blocks, particularly concentrated in the larger cities.

In our graduation studio we aim to generate design solutions for deep renovation of representative parts of the more complicated housing stock to increase its energy efficiency as well as architectural quality. The progress and results of the studio are reviewed by a group of postdocs working on the same topic.

DESIGN FOR LIFE

by **Josien Kruisinga**

Sustainability in architecture is often about finding the balance between people, planet and prosperity. In this balance, the planet component of architecture is often restricted to solving energy related problems. Ecosystem functioning is frequently being disturbed, while it is this that provides essential services for humanity and all life on earth, such as the supply of water, food, materials and fresh air. This design in Amsterdam West aims to contribute to ecosystem functioning as well as solving the energy problem, while increasing the density in the area.

THE GREENHOUSE TRANSITION ZONE

by **Thyrza Bauer**

The Airey building blocks in Amsterdam currently don't meet the regulations set for 2020, that demand that buildings should operate in an energy neutral manner. The goal of this project was to establish whether the addition of greenhouses can improve indoor thermal comfort while reducing the total energy use in such a way that they contribute to energy neutrality. It showed that the addition of a greenhouse yields more energy than required on a yearly basis. Additional systems were required to maintain the balance between heat harvesting and thermal comfort.

FIX-UP THE WALK-UP

by **Ruben Wessels**

Walk-up flats (portiekflats) of the 1960's have to cope with multiple problems such as functional/spatial problems, energetic problems and social problems. The design approach of this project incorporates a renovation of the energetic building performance, the development of fix-up dwellings (kluswoningen) and the integration of valuable collective social spaces. The flats are wrapped in a new facade of reclaimed bricks. An outdated building stock, a bad social cohesion and a passive mentality of the current community, these are precisely the kind of problems that the 'Fix-up the Walk-up' renovation approach strives to solve.

COMFORTABLE ELDERLY

by **Iris van den Brink**

The Airey building blocks in the western garden cities in Amsterdam are one of the many examples of existing building stock that no longer meets the needs of modern living. In addition the Netherlands is facing a shortage of suitable housing for elderly. This project aims to solve both. It is important to look at the specific thermal and physical requirements when designing for elderly, so that the building contributes to their health. The addition of a greenhouse to the existing buildings is a possible solution to meet the needs of elderly, while improving the current state of the Airey strip.


Comfort/ indoor climate


Autonomy


Privacy


Social interaction


Safety


Contact with nature


Homecare


Accessible for wheelchair


Domotica


Zero step appartment

Context IBA Parkstad | Gardencity 2.0

Consolidating living conditions and settlements

text **Annebregje Snijders**

Parkstad is an administrative partnership between the eight municipalities of Brunssum, Heerlen, Kerkrade, Landgraaf, Nuth, Onderbanken, Simpelveld and Voerendaal. Its area covers 210 km2 in the former mining area in the southeast of Limburg.

Within this context the IBA Parkstad programme is launched. IBA is an abbreviation for: Internationale Bauaustelling. It's a German programme which contributes to the improvement of a city or region. It's a creative approach which has proven to have positive economic impact. It will lead to physical changes in the area, contributing to a cultural shift in thinking and appreciation, to a renewed pride that invites to invest and create value. In 2020, the IBA period ends with an exhibition of the completed projects. Traditionally, innovation in design and ways of construction play a major role here.

Meeting our comfort needs, looking for smart solutions and dreaming about the 'unknown but wanted', developing challenging examples for improvement and transformation.

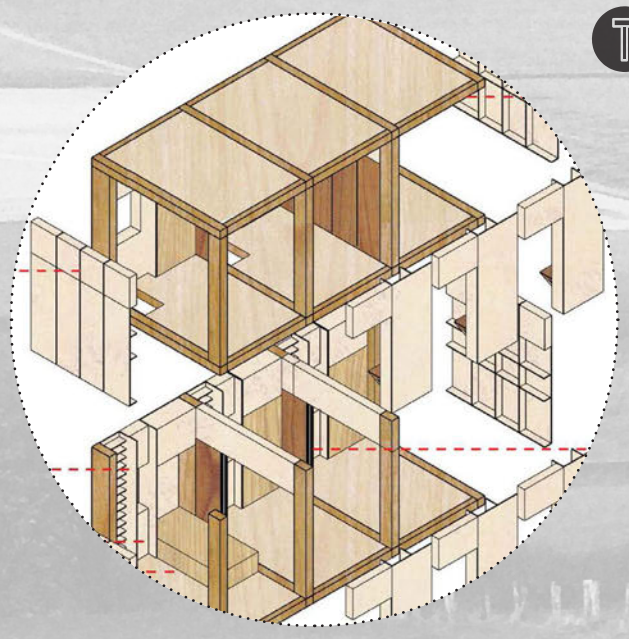
Regarding the changes in demography, the vacancy and shrinking conditions, we question the qualities of the area while looking for chances in combination with technological innovations.

How to attract new people, who are they, what are their needs? How to transform the existing to make people stay, how to improve abandoned buildings to become attractive again?

REVITALIZING VACANT OFFICES WITH EWF

by **Peter Swier**

Due to technological innovations buildings use their environment and by doing so, they are connected to it. There still is a demand for high quality office space, though I believe we should not make 'office spaces', but pleasant, healthy and productive 'work environments' with a great deal of flexibility. My graduation project is a showcase for the refurbishment of the existing stock into architecturally attractive, healthy, comfortable, productive and durable work environments.



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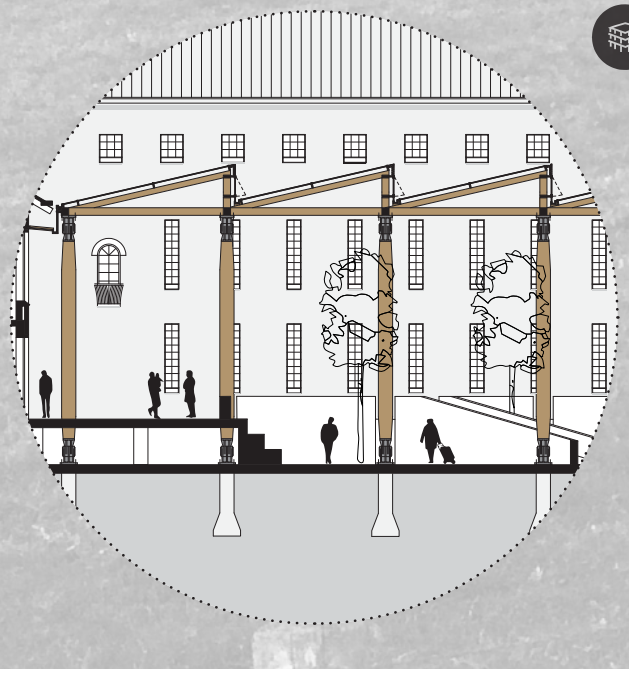


PARKSTAD (CARE) HOTEL

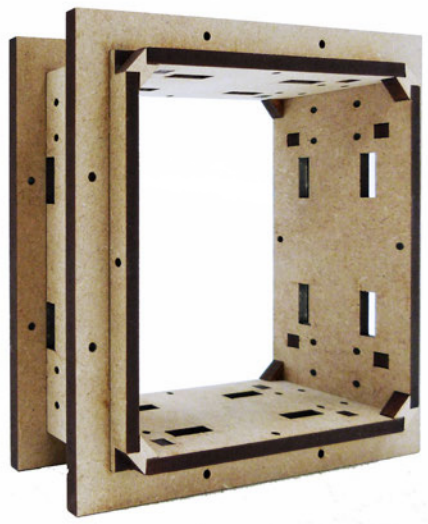
by **Nina Kuipers**

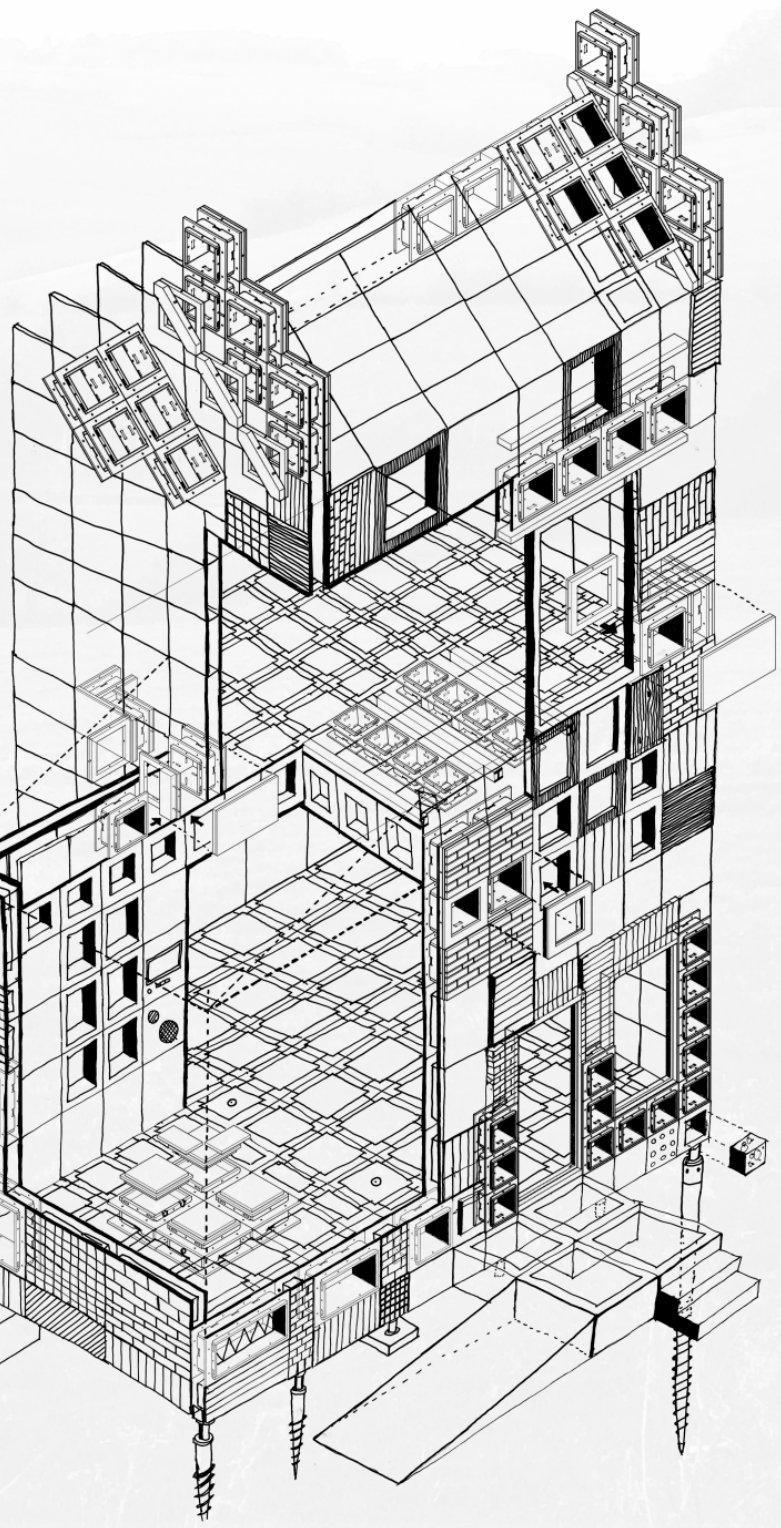
Changes in the care regulations and ageing of the Dutch population are important factors that are causing a shift in the demand and supply of care typologies. The length of a patients' stay in hospitals is shortened, resulting in patients going home sooner. Yet many patients are not able to be fully independent after they've received care. Especially elderly tend to end up in care homes sooner than needed. The Parkstad (care) hotel is a solution for patients who need temporary care. Here they can rehabilitate in a comfortable environment, while being connected to society.

REVOLUTION IN DIY BUILDING SOLUTIONS

by **Cas van der Zanden**

Standardized human sized building blocks are prefabricated from plywood in the factory. The prefabricated parts are flatpacked and transported to the building site, where the assembly can start immediately. It is a dry building system which includes also the full facade. In this way an affordable house can be build in one day without the need of heavy and expensive machines, complex project planning and the need of experienced building professionals. Assembling the blocks can lead to different forms architecture and be used for example to build holiday homes.





Context IBA Parkstad | Gardencity 2.0

Examples of creating new artefacts

text **Annebregje Snijders**

Until 2020, IBA Parkstad will function as a laboratory: an engine for groundbreaking building projects, remarkable exhibitions and innovative plans. They will put Parkstad on the world map and will help to (re-) shape Parkstad's future. aE/Intecture sees opportunities and joins!

The arrival of the construction exhibition in the region offers the potential, next to the administrative and social cooperation, to start new building alliances between stakeholders. Can shrinkage also be used as an opportunity?

In a changing society, in which we run out of resources, we see a big role for designers to research sustainable alternatives, leading to innovations that are well integrated within a specific cultural context. What are the necessities is this changing society? Could the need to reform energy production and consumption contribute to an integrated whole? What is the role of material usage? And will this lead to new meaningful artefacts or social environments in architecture?

The question of identity manifests itself by the smeared layer of the mining history. The loss of economic opportunities ask for for a new regional engine.

aE/Intecture works on interventions for Parkstad as a model city, showing how - based on the uniqueness of the place - Parkstad can transform into a coherent and renewed landscape. Themes that will be discussed are the urban metabolism, the development of a positive business climate, the creation of a renewed identity by making old and new artifacts, the realisation of mutual connections and the introduction of new programmes and use.

The student results are shared with the IBA Parkstad organization. Twice a year aE/Intecture organizes an excursion to IBA Parkstad. In socalled 'workhouses' students can work, meet other professionals and reflect on their projects. Besides TU Delft also RWTH Aachen, TU Hasselt, UTwente and TU Eindhoven are connected.

CLOSING LIFE CYCLES WITH ALGAE AND AQUAPHONICS

by **Jian Rui**

The Parkstad area is suffering from building vacancy and a decreasing population since the closing of the mining industries. The area has lost its vitality and identity. At the same time the area has been affected by coal resource exhaustion. Currently the energy crisis, such as the rising energy consumption in the world and the depletion of fossil fuels in the near future, offers new opportunities for the Parkstad area. So the purpose of this project is to give the area a second life by closing local life cycles for food and energy production with algae and aquaphonics.

RUIN PROSTHESIS

by **Thom Schreuder**

This project aims to design an architectural 'prosthesis' to the castle ruin of Schaesberg. Vacancy and lack of maintenance have left the ruin in a deplorable state of decay. Using state of the art techniques, such as 3D scanning and digital fabrication, the connection to the ruin will be designed to fit exactly to its ragged edges. The fully reversible extension will stabilize the structure and rehabilitate the building as a modern craft school. By drawing inspiration from both the castle's history and its present form carved by nature, the project will show the thin line that separates history from the future.

INFINITE MINING FOR STRUCTURAL COMPOSITES

by **Stefanie Tseggai**

In Western society waste is produced in large quantities. Yet at the other end of our consumer society a constant shortage of material resources is apparent. In Parkstad Limburg, formerly the Eastern Mining Area, extraction of coal constituted the industry, providing economic prosperity for the region. An opportunity for new economic activity is offered by forward-thinking theories, which eliminate waste. Therefore this project aims to comprehend the complete process of producing a structural composite made of waste, available in the Parkstad region.

chair

Education & Research Architectural Engineering

journal 2016/2017

education bachelor

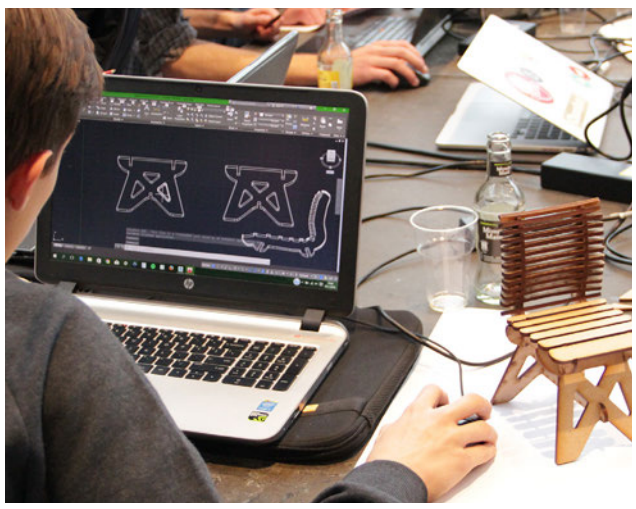
Junior TU

Young Architectural Engineers

text **Roel van de Pas**

For the second time this January, BK City will welcome a group of high school students for the Digitally Designed Chairs project (DiDeChairs). The event is part of the campus-wide Junior TU Delft programme, which offers a range of courses for ambitious, technologically minded students.

At our faculty, the students design a chair to be produced in CNC milled plywood, a sister-exercise to an assignment developed with Pieter Stoutjesdijk for the Archineering minor. The students will learn the basics of design, construction, ergonomics and CAD modelling, and produce laser cut models of their designs. The goal of the DiDe Chairs project is not just to offer a group of high schoolers interested in design and technology a first look at Architectural Engineering, but also to further explore the possibilities of digital fabrication technologies. Last year's results exceeded all our expectations for what a group of first time designers could produce in just 5 short days!



Archineering

Minor

text **Roel van de Pas**

The minor Archineering focuses on two main issues:technology as an essential part of any design product and making explicit the design process. Just like an athlete can train to become a master, a designer can train the design process as well. By training, designing, engineering and prototyping in a number of short exercises (like the design of a digitally fabricated chair) and explicitly studying and reflecting on the design process, more insight in the personal design process will be acquired. Some of the Archineering design projects focus on architectural design & engineering, involving construction, climate and materialization, other assignments are focussing on industrial design, digital manufacturing and aerospace engineering.

This very mixed programme results in new assignments, in which the relationship between design and technology is a key theme in the experiments of the students; do research and learn about the material aspects, construction and detailing of a design, get insight into climate design; translate a project very quickly and concisely in a physical and functional design that is well integrated into the urban and socio-cultural context; formulate a guiding theme and enrich and strengthen the concept through technical engineering; increase your 'frame of reference' and design language by using sketches, diagrams, drawings and (sketch-)models.

Design and Engineering

The BSc2 ON2-assignment

text **Frank Schnater**

For the inspiring location of 'De Omval', an existing peninsula in Amsterdam, first year students design a pavilion for a rowing club. This final project of the first year focusses on engineering a well-functioning construction and developing a comfortable indoor climate using a variety of passive climate approaches.

The 'Omval' is situated on the other side of the Amstel river, opposite from Berlage's Plan Zuid. Along the water lies the Amstel quarter with its offices, on the other side of the location there is the Bijlmer neighbourhood and a new urban area in development.
Aspects of structural engineering, climate design and building construction are represented by four experts per student group. Next to that students get education in Computer Aided Design (CAD) and construct different scale models by hand, ranging from 1:1000 models to 1:20 models, guaranteeing spatial, structural and material quality through all scales. In workshops various specialists help the students to connect their design to the urban context.

master **education**

Bucky Lab
MSc 1

text **Marcel Bilow**

The Bucky Lab course is already known for quite a while and the way we teach our students within the first semester of the master is a huge success. We approach problems of the built environment with an innovative mindset, solving problems through experiments, engineering and building full scale prototypes.
This year the students work in close collaboration with MOJO, a renown Dutch festival organisation, developing innovative systems that will allow to construct temporary structures on festivals.
Together with Casper van der Meer I'm busy to get the best out of the projects and look forward how the concepts will develop. Please check www.buckylab.nl to keep informed. Who knows maybe we could welcome you next year in a new structure on Lowlands?

Extreme | MSc 2

text **Job Schroën**

Last year the Extreme course addressed building at high altitude. The group was joined by a team of lecturers and teachers like Marcel Baumgartner, the architect of the Neue Monte Rosa-Hütte and the professors Holger Techen and Stefan Behnish. The students made presentations of their designs, showing the architecture, the climatic and structural approach, and their concepts on detailing. The next Extreme, starting in November 2017, deals with earthquakes on Iceland. Students will make a integrated design within a spectacular landscape at the Islandic coast, known for some of the most extreme earthquakes on our planet.

Gezel tot Meester | MSc 2

text **Elise van Dooren**

In the design project 'van Gezel tot Meester' two lines are followed: studying the design process and teaching design. By training the design process in a few short design assignments and reflecting on it, students learn about all kinds of aspects in the design process. By doing an internship in a first year design project as assistant-teacher, students learn about guiding students in the design process. The design project is based on research on design education by Elise van Dooren. In the course a vocabulary to talk about the design process is applied, explored and developed in different ways. In the end students have a short portfolio consisting of a few design results and a reflection on the process.

Delft Seminars on Building Technology

text **Bas Gremmen**

Imagine you have a beautiful facade in mind that you want to make. Or you are fascinated by materials. Or you are convinced that we should realise energy neutral buildings -or even better- buildings that produce energy.

But now you have to design it. You need to have the knowledge and the skills to make your idea concrete. In the way you want it to be. We want you to experience what is needed to make your design feasible and buildable. This is what the course 'Delft Seminars on Building Technology' is about.

Design task
The design task of the 'Delft Seminars on Building Technology' is to make a re-design for an existing building, from the perspective of building technology design. How to integrate structural elements, facade construction and climate design in one design? Finally, the design should be '2030 proof', suitable to function in a changing socio-cultural context, making use of new technical possibilities, having a minimal ecological footprint on the environment.

architectural engineering: the new architect

A GOOD DESIGN

creates attachment and as a result is sustainable
is innovative
is designed as little as possible
is environmentally friendly
and connects users

MUZIEKPALEIS FOR UTRECHT

In 2004, I was commissioned by Stichting Jazz Utrecht (Utrecht Jazz Foundation, SJU) to design a jazz biotope. Herman Hertzberger was asked to make major modifications to the old Vredenburg concert venue, which he had designed. Jo Coenen was working for Tivoli on a new pop music venue. Hertzberger was given control over the design of what was then going to be called the Muziekpaleis (Music Palace) and invited NL Architects to create a 'crossover hall'. Ten years later, the Muziekpaleis in Utrecht was completed and the name was changed to: TivoliVredenburg. This 'Gesamtkunstwerk' was opened by King Willem Alexander with a festive ceremony in 2014. Utrecht, the Netherlands and the world was given yet another incredible building: a city within the city, a machine for all ages and music styles, a place for rich encounters, a real experience that received the Rietveldprijs and a nomination for the Mies van der Rohe Award. I have always regretted not keeping a diary of the countless dialogues and meetings that we had as architects. The discussions between Hertzberger and Coenen were mostly practical lectures about how to tackle a joint design assignment. Because architects are pragmatic. If it can't be done the way it should be done, it has to be done the way it can be done. The New Architect shares responsibility.

Thijs Asselbergs

text **Thijs Asselbergs**

The role of the architect has changed considerably in recent years. Architects are looking for new ways of collaborating with various parties, improving the world together through architecture.

Changing position of the architect

Which position do you take up as an architect? Which role, which responsibility and which goal do you want to achieve with your design? And with whom do you want to collaborate? Or: would it not be better if you put together a good team for each project and formulate your own assignment?

If you want to make beautiful and good things as an architect, you need to be able to share all responsibilities that are involved in a project. From neighbourhood to government, from budget to safety, from detail to material, from sustainability to architectural quality, you should be able to actively participate in the process. Because if you are not given space to formulate the assignment into a dialogue as you think this should be made, you will be reduced to being a stylist. But the new architect is no stylist, is not someone who is allowed to direct a pretty facade on the basis of numerous requirements regarding building aesthetics.

But is it not your role as an architect to reveal the essence of the assignment? And are you not the engineer who is able to integrate the technique optimally in the design? In short, is it not time to position your role as the person responsible for the design in such a way that you can be the Baumeister or master builder of the work?

A NEW ARCHITECT

shares responsibility
is not a stylist
is an engineer
connects the assignment's essence
is a master builder

You do that as a team, of course, whereby the process is organised and set out in such a way that each team member knows what his or her task and contribution is. And in such a way that you, as the key player in an ongoing dialogue, can shape, materialise and even manage the design to be built to great satisfaction of the users.
The New Architect wants people to become attached to the building and its environment. It is only sustainable when people understand the design and can use it naturally, and when it is friendly to its environment. For this, you must be innovative as an architect and be part of a team in which different members work with respect for each other on beauty and on sustainable practical value.
In recent years, I have learnt that this does not happen spontaneously; that choices need to be made for that and that you must carefully consider with whom you cooperate. It requires a process in which the right people and parties join in at the right moment. Moreover, everyone has a responsibility for the built environment. Building together requires the right balance between process and product. A balance between the complexity of the building process and the challenge of wanting to produce the maximum architectural quality. Enough rubbish is built. Let us view that what is already built with respect, transform it where necessary or integrate it optimally into an environment. You do that together: working in a network in order to create a win-win situation that makes everyone happy and enthusiast. That is the quest for The New Architect.

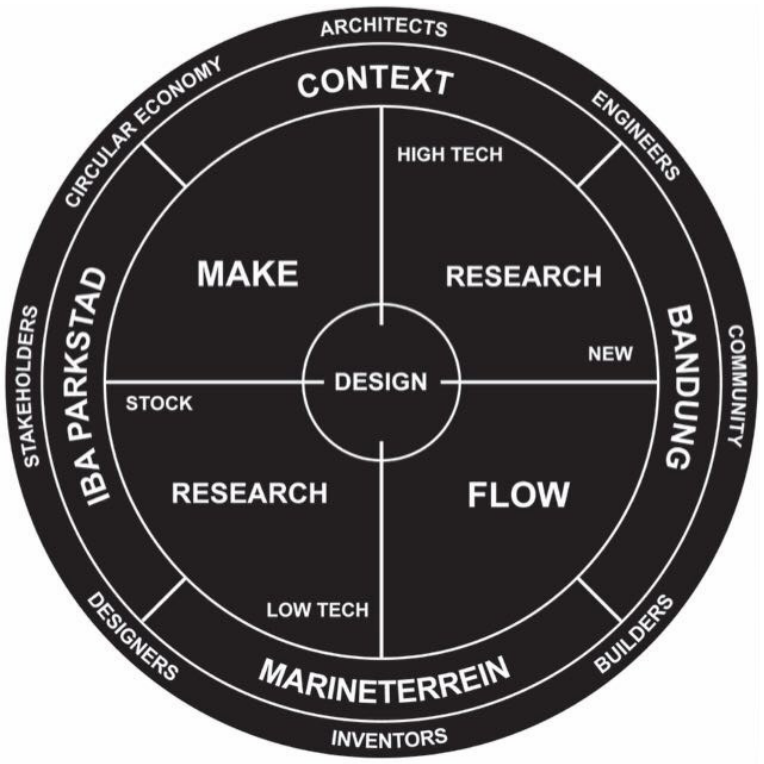
research featured

INTECTURE

Research & design topics

text **Annebregje Snijders**

aE/INTECTURE integrates design and technical innovation through all scales. If technology is the answer, then what's the question? In our architectural engineering program we seek for innovative and inspiring architectural solutions for societal issues. Driven by the need to think differently about resources, energy, power generation, the choice for materials, effectiveness, user involvement, bottom-up and top down approaches, we see the built environment in a new perspective: there's a vast amount of vacancy and unused buildings, a large percentage of the existing housing stock does not meet our comfort needs. Moreover, new buildings have to deal with changing requirements. Do we assume we are able to solve the challenges we are facing today by optimizing the status quo? Or do we really want to go down the rabbit hole and come up with radical solutions for current challenges? Understanding the existing, knowing the possibilities of renewal, and discovering how to design, innovate and make the change are central themes in our studio.



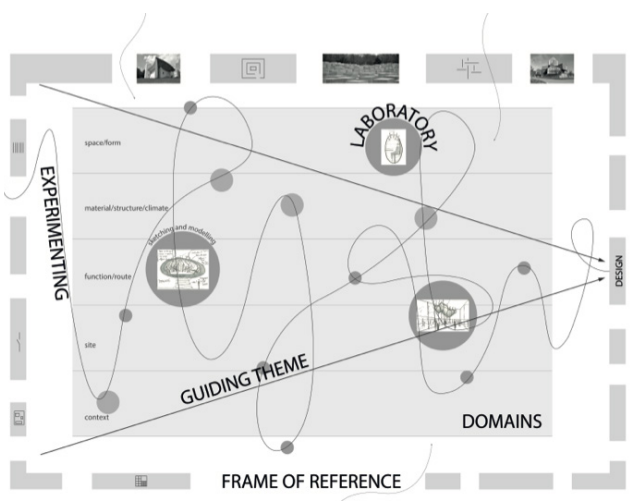
Make is about new (digital) production methods, the (re)-use and development of materials and systems for existing and new applications. How do we change the future of our environment, our homes and our cities, using a bottom up approach towards a better and more sustainable future?

In Flow we see buildings as structures interwoven with their wider system. The sustainable performance of buildings has everything to do with flows. Well managed flows of people and resources contribute to valuable, comfortable and healthy spaces and cities.

Design Education

text **Elise van Dooren**

Learning to design is the key point of education in every design studio. At the same time it often is opaque. Observing teachers and students at work in the design studio, they mostly talk about all kinds of aspects of a design product, such as composition, details and the way designs (have to) fit in their environment. In addition, teachers should question the design process as well. For example, how to experiment by making a lot of sketches and models, how to reflect, how to come up with ideas, and how to use common known principles, patterns and guiding themes?



Beyond the Current

text **Tjalling Homans**

Increasing the energy efficiency of the housing stock is one of the largest challenges in the built environment. Until now, in practice and research, a strong focus has been on (deep) renovation approaches for row-housing, creating design solutions for energy efficiency.

Other parts of the housing stock, e.g. pre-war housing estates and post-war four story apartment blocks, also form an interesting opportunity for sustainable transformation. This counts particularly in the larger cities, where there is a major need for affordable and attractive housing. However, non-row housing is often characterized by complex ownership structures, which increases the need for a close fit between design and user preferences.

Moreover, current design solutions are often supply-driven, being developed by contractors for professional clients, focusing mainly on technological aspects. The challenge is how to integrate social, cultural and aesthetic aspects within the design process, thereby also contributing to a wider range of user preferences.

featured **research**

PD Lab

text **Marcel Bilow**

We already have introduced the research activities around the Product Development Lab (PD Lab) in the last aE Journal. The idea is born from the activities of Pieter Stoutjesdijk and his friction fit CNC milled wood constructions. The PD Lab is a research activity that is funded by the 3TU Bouw Lighthouse programme and a collaboration of a team of researchers from Delft University of Technology and Eindhoven University of Technology. Within our own faculty team Pieter Stoutjesdijk, Thijs Asselbergs, Tillman Klein and Marcel Bilow developed the prefab house that is made out of wooden building blocks that can be easily assembled on site. The team was also able to include the work of two Building Technology graduate students who contributed with research projects for the connection of the building blocks (Nick van der Knaap) and a new watertight Reynobond cladding (Jeroen van der Veen). After a period of product development we are excited to have finally started building the PD Lab on the west side of our faculty. During the construction the faculty team is assisted by a group of interested students.

Flow approach

text **Jan Jongert**

Sustainability in architecture can't exist by itself. Architecture is undeniably part of a bigger ecosystem and chain of processes that continuously need to be challenged to create the highest value possible, with both the environment and the people benefiting. The design can be approached as a (by)product of an ever changing metabolism. Buildings have a relatively big impact on the environment, which requires that their designers find different solutions for a dynamic environment.

The Flow approach of Jan Jongert is called systemic design: understanding the flows in an environment and defining the system they are part of. This approach helps to communicate processes and helps to choose and prove which physical intervention creates the biggest positive impact. Systemic design includes visual communication and imagination of the mutual benefits in programme, space and materialisation. The added value of this approach for the future architect is that he/she no longer is stuck to the position of 'just' materialising other stakeholders dreams, but is enabled to take part in and even initiate processes that will create their future commissions.

Bandung connection

text **Mo Smit**

Together with the School of Architecture, Planning and Policy Development of Institut Teknologi Bandung (ITB) and the Global Smart Cities & Communities Coalition (GSC3.city/ Alliander), the department of Architectural Engineering is setting up a programme focused on research & development of smart (off-the-grid/circular) and inclusive neighbourhoods in Indonesia. In November 2015 Mo Smit presented a paper (by Thijs Asselbergs, Suzanne Loen, Mo Smit) about this topic at the Habitechno conference on housing innovation, organised by ITB in Bandung.

Cast Formwork Systems

text **Nadia Remmerswaal**

CAST Formwork Systems (CFS) is a concrete formwork-system based on CNC milling technology. It enables self-construction in informal areas to build up safe, incremental housing up to four storeys high. CFS was the graduation project of Nadia Remmerswaal of aE/Intecture. After being awarded several prizes and funding, the awarded money was used to further develop the project on both technical and economical aspects. Nadia tested her system at the Green Village in Delft (see picture) and also started constructing a prototype in Bandung Indonesia.

chair Architectural Engineering

From left top to bottom right: Roel van de Pas, Bob van Vliet, Mo Smit, Tjalling Homans, Pieter Stoutjesdijk, Ype Cuperus, Freddie Koch, Barbara van Vliet, Thijs Asselbergs, Annebregje Snijders, Job Schroën, Marcel Bilow. Op deze foto ontbreken: Elise van Dooren, Bas Gremmen, Jan van der Voort.

Education

Junior TU | Bob van Vliet | *bob@sjokola.nl*

BSc2 ON2 | Frank Schnater | *f.r.schnater@tudelft.nl*

Minor Archineering | Roel van de Pas | *r.r.j.vandepas@tudelft.nl*

MSc 1 Bucky lab | Marcel Bilow | *m.bilow@tudelft.nl*

MSc 1 Delft Seminars on Building Technology | Bas Gremmen | *b.gremmen@tudelft.nl*

MSc 2 Extreme | Job Schroën | *jschroen@septemberarchitectuur.nl*

MSc 2 van Gezel tot Meester | Elise van Dooren | *e.j.g.c.vandooren@tudelft.nl*

MSc 3 + 4 Graduation Studio Intecture | Mo Smit | *m.j.smit@tudelft.nl*

Topics

Beyond the Current | Tjalling Homans | *t.c.homans@tudelft.nl*

Home at Work, Bandung | Mo Smit | *m.j.smit@tudelft.nl*

Coastal Living | Annebregje Snijders | *anne@annebregjesnijders.nl*

Design Education | Elise van Dooren | *e.j.g.c.vandooren@tudelft.nl*

IBA Parkstad 2020 | Annebregje Snijders | *anne@annebregjesnijders.nl*

MaCuBs | Pieter Stoutjesdijk | *p.m.m.stoutjesdijk@tudelft.nl*

Marineterrein | Thijs Asselbergs | *m.f.asselbergs@tudelft.nl*

PD Lab | Marcel Bilow | *m.bilow@tudelft.nl*

Seismic | Job Schroën | *jschroen@septemberarchitectuur.nl*

Shelterlands | Annebregje Snijders | *anne@annebregjesnijders.nl*

The New Architect | Thijs Asselbergs | *m.f.asselbergs@tudelft.nl*

more info: **INTECTURE**.blogspot.nl

COLOPHON

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Annebregje Snijders
Mo Smit
Freddie Koch

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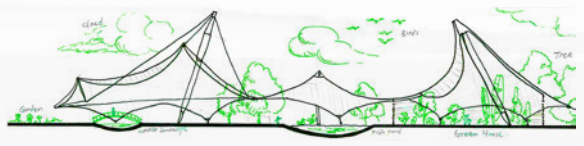
aE Alumni Day
2 May 2017

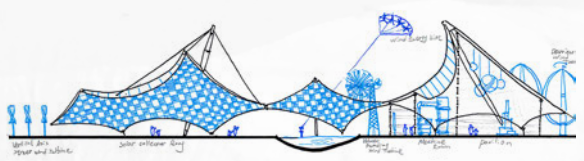
TU Delft

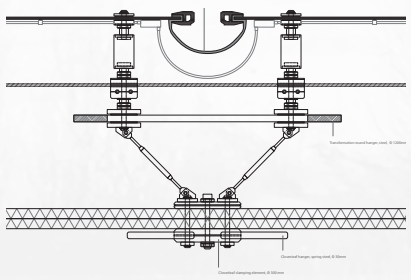
SEE THE SUN RISE

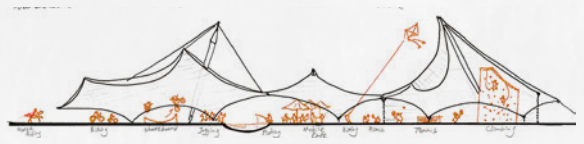
by **Keren Yang**

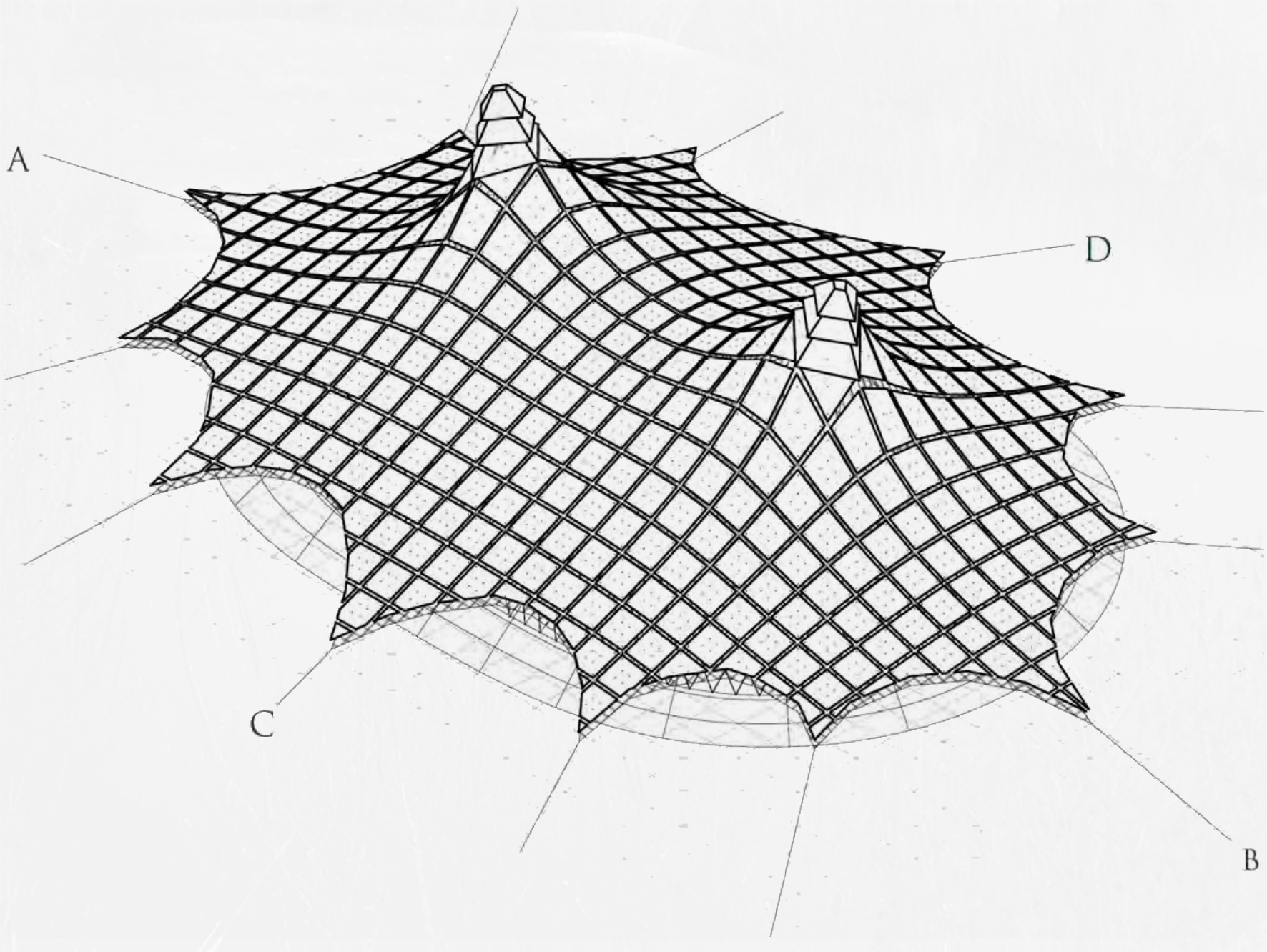
Kerkrade is working on several sustainable renovation approaches that focus on renewable and local resources with a zero-impact on the environment. The goal of this project is to create an energetically maximized and environmentally comfortable architectural landmark, which improves Kerkrade with sustainable contributions and provides the general public with education about sustainability.











Context Groningen | Seismic

Tools for earthquake proof buildings

text **Job Schroën**

The Seismic Studio focuses on the changing environment in the province of Groningen, where earthquakes caused by the extraction of natural gas are a new reality. The main challenge of this studio is to use architectural tools in order to return confidence to the inhabitants in the built environment.

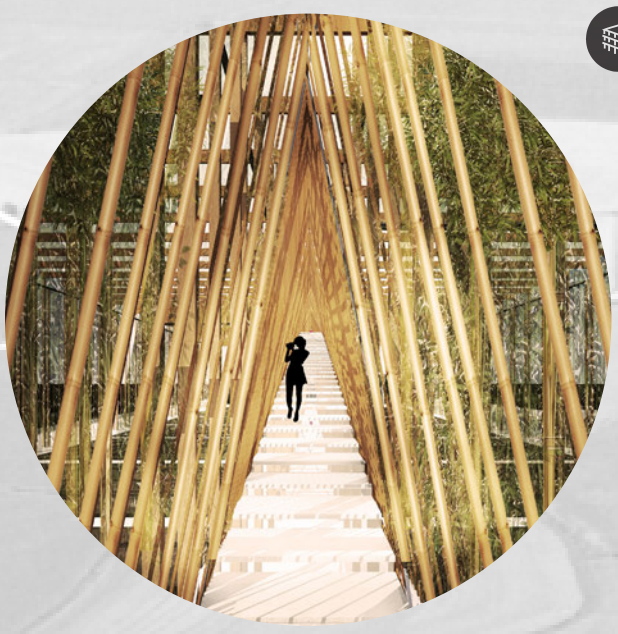
Architectural innovation is a result of the development of new materials and tools, new requirements and new environments, combined with the insights of a good architect. Because of the earthquakes in Groningen, the environment has changed and the technical quality of the existing architecture is no longer an answer to present day circumstances and threaths. The studio is thus looking for a new architecture for Groningen.

This can be done in many ways, for example by re-inventing traditional materials in such a way that they can deal with earthquakes. Or maybe we need to build with new and different materials? Another strategic approach is to make temporary structures, as it is expected that the earthquakes will not last for more than 50 years.

SEISMIC ARCHITECTURE THE WOOD SOLUTION

by **Paul Versteeg**

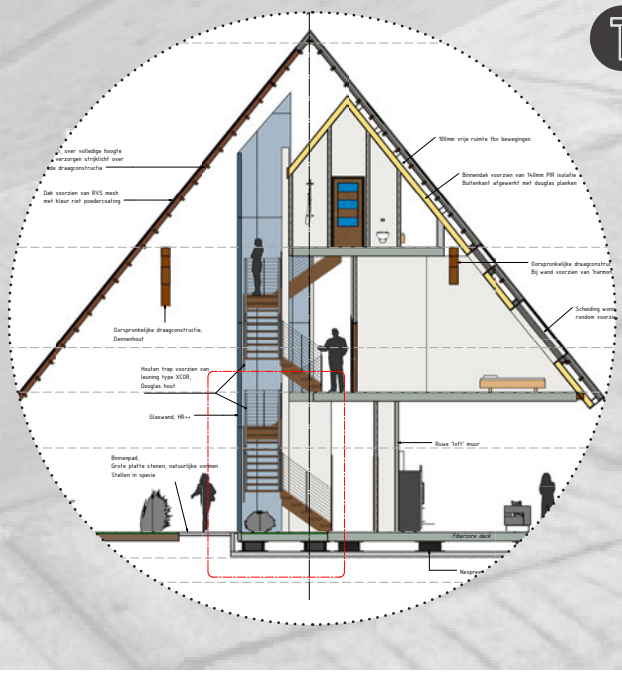
The province of Groningen has much to offer in the sense of historical and cultural heritage. Because of the earthquakes monuments have to deal with safety issues, but this isn't the only challenge. The biggest problem lies in the contradiction of the prevailing desire to keep a monument authentic, while earthquake-proof interventions often ask for rigorous interventions. Recently developed solutions are balancing on this contradiction, mainly because they are initiated by heritage-minded institutions. However, without rigorous actions the heritage might be destroyed forever.



SEISMIC PROOF, LAMINATED BAMBOO STRUCTURES

by **Lavinia Spruit**

The Groningen gas field has been a Dutch underground goldmine for over 50 years, but if no measures will be taken this will result in an impoverished living environment. Therefor a broader sustainable vision is required, in addition to currently applied building reinforcement strategies.
Is it possible to use laminated bamboo as a sustainable building material for earthquake proof buildings in the Netherlands and for a positive socio-economic development of the Groningen area?



LOCOMOTION OF DEMESNE, FLEXIBLE ARCHITECTURE

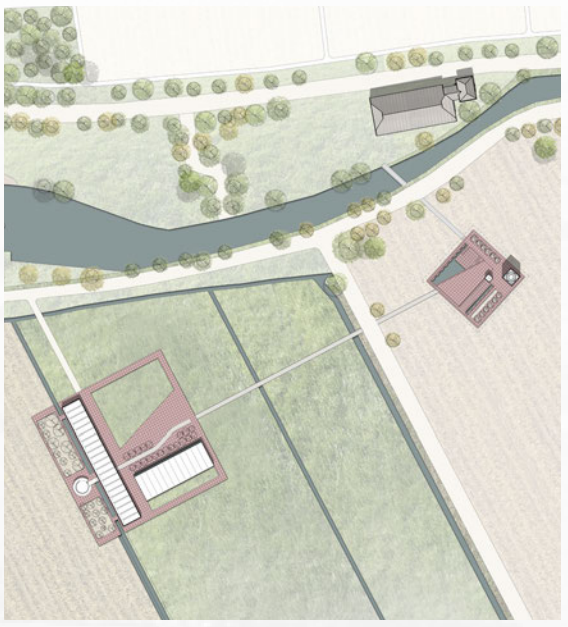
by **Bob Heester**

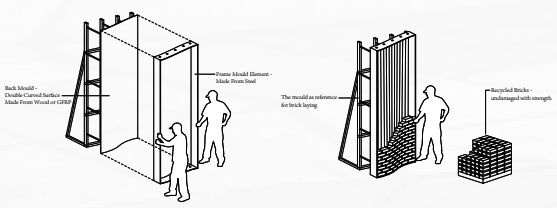
In a lot of buildings in Groningen the cracks caused by the earthquakes are compromising the overall structural integrity of the building and big emergency support structures are needed. Many structures are created with only one single purpose: save the building from demolishing. Until now there is no architectural vision on how to make buildings in Groningen earthquake proof. This project therefor focuses on the upgrading of the building to a complete new level where structural engineering and architecture are part of the same solution.

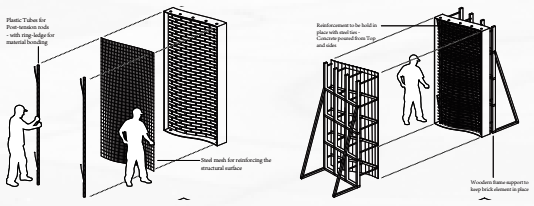
BRICK FANTASY FROM BRICK LEGACY

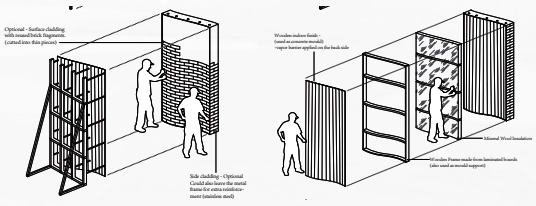
by **Lu Ding**

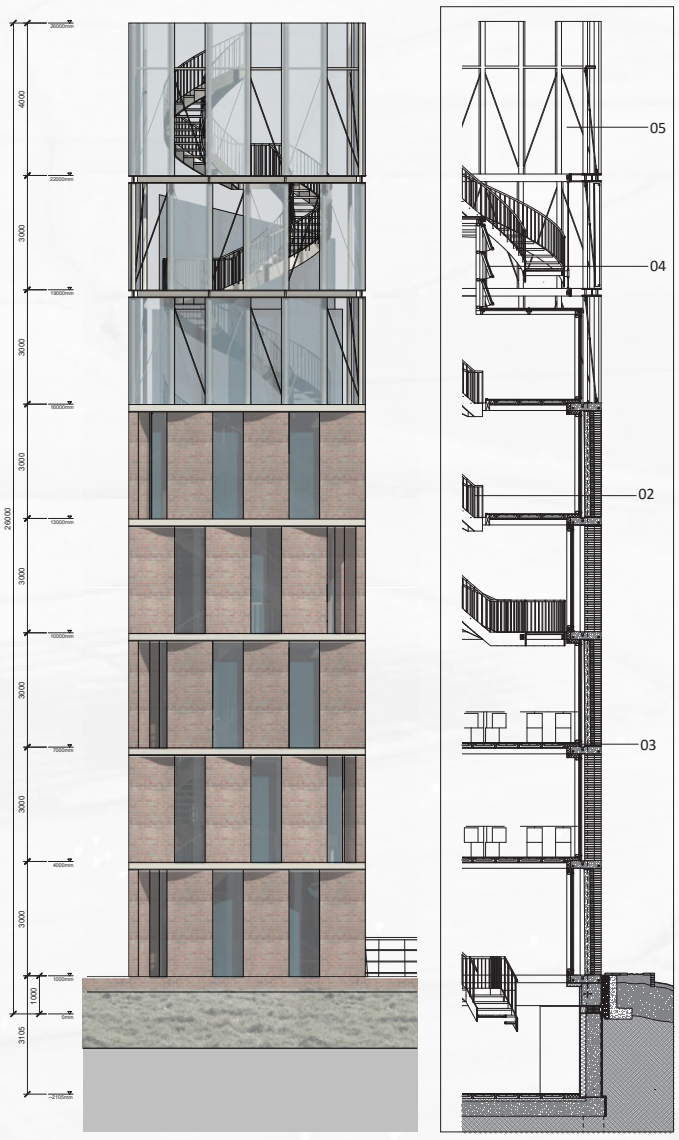
Earthquakes are challenging the safety of existing buildings in Groningen. Finding an efficient, elegant and reliable structural system based on traditional brick construction will be crucial to bring back confidence in the building culture. There are opportunities to reuse materials from the demolished buildings and reduce environmental impact during the reconstruction. As the design tackles the seismic issues of Groningen while improving its social coherence, it shall also contribute the sustainable development of the region on a longer term.

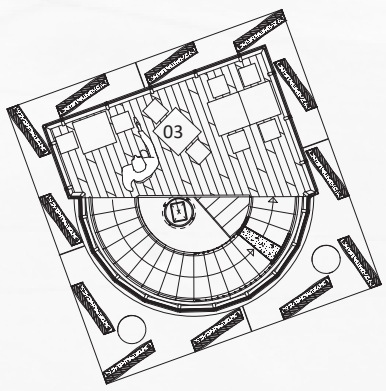




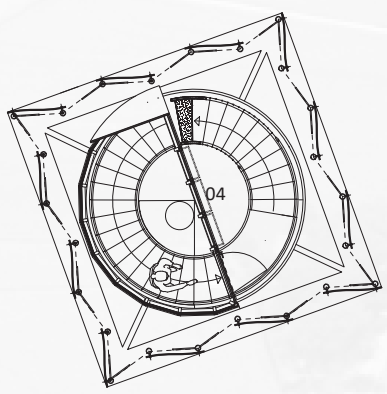




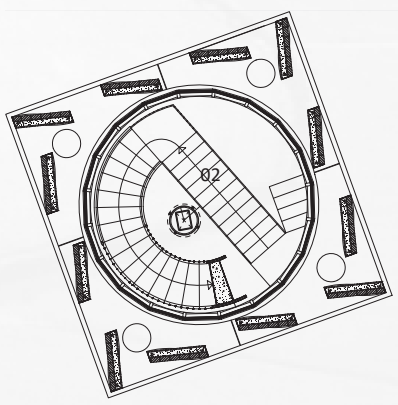




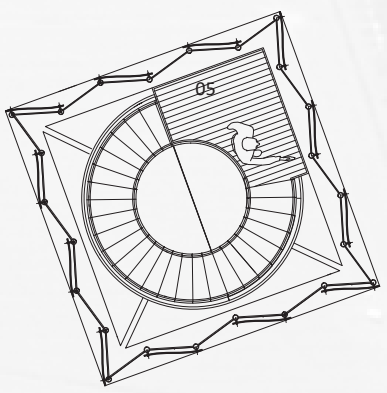
1:50 Plan Upper Level - Dinning Space



1:50 Plan Top Level



1:50 Plan Ground Level



1:50 Plan Roof Observation Platform

Context Bandung | Home at work

Towards a healthy and inclusive live-work environment

text **Mo Smit**

Industrialisation and urbanisation in Indonesia led to a backlog of 15 million affordable homes with an additional 800,000 units required each year to house villagers who migrated to work and cities in search for a better life. This is not just a huge quantitative and spatial challenge, but also a challenge in terms of building technology, resources and the environment.

The metropolitan area of Bandung is known as Indonesia's fashion hub. This extensive urban region, with over 7 million inhabitants, is known for its creative urban communities and a thriving textile and garment manufacturing culture. Next to fashionista's and weekend shoppers Bandung also welcomes masses of factory workers, flocking the city on the tides of the local and global textile market.

Factory workers mostly live in peri-urban industrial kampungs. Under influence of global mass production and the corresponding arrival of large scale factories since the 1980's these originally rural villages have rapidly transformed into unplanned and heavily polluted factory towns.

The off-the-grid character of the industrial kampung is a quality that can be embraced to make the neighbourhood not only economically self-sufficient, but also ecologically regenerative. Instead of wasting resources they can be brought into a closed cycle on the scale of the industrial kampung. Community-based strategies and circular design concepts that relate to the local eco-system and informal culture are needed to bring greater equity to underdeveloped industrial communities.

How to (re)develop neighbourhoods and design homes in an environmentally responsible and socially inclusive way? Would it be possible to leap frog from the current situation into a fossil free future and reverse the negative environmental impact of such a large scale development into an economic and ecologic opportunity?

REFLOW THE KAMPUNG

by **Jordi Wilders**

This design focusses on the improvement of the living conditions in the Indonesian kampungs by re-managing water and waste flows. A representative community facility, consisting of large and expressive bamboo structures and a new bridge over the river, captures the rain water and brings water and waste flows in a closed-loop. The carefully integrated communal facility, forms an attractive new social meeting place within the kampung. By the provision of clean energy and drinking water, this intervention finally leads to improved sanitation and health of the kampung residents.

BIO SHOPHOUSE

by **Louisa de Ronde**

Today, most of the homes within peri-urban kampungs are self-constructed with unsustainable materials, such as concrete, steel and asbestos. The structures are often unhealthy, unsafe and of poor building quality, caused by the need for urban densification. The technical objective for this project is to develop a community-based building process using locally grown biobased materials. This way a sustainable and social cycle is being created for the self-construction of buildings in kampungs. The design objective is to develop a new typology of shop houses, that can contribute to the economical self-sufficiency and resilience of the kampung.

LOCAL WASTE POTENTIAL

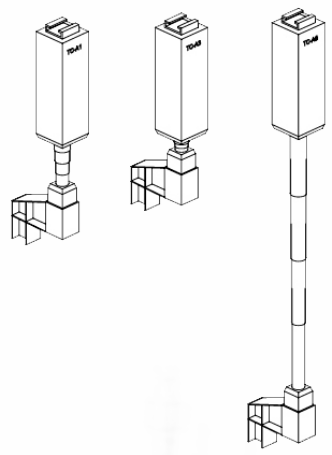
by **Katja Rossen**

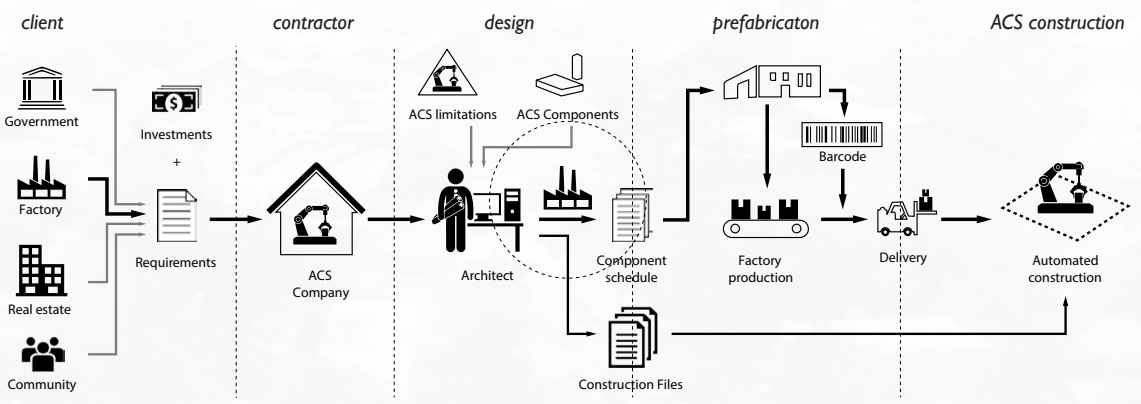
This project shows how municipal solid waste can be turned into a valuable building material using a community based approach. Within the neighbourhood an educational factory has been designed, in which household waste is processed in building elements, such als bricks, roof tiles and panels. The educational factory showcases the use of these elements in its construction, thereby stimulating kampung dwellers to use the elements to build or extend their homes.

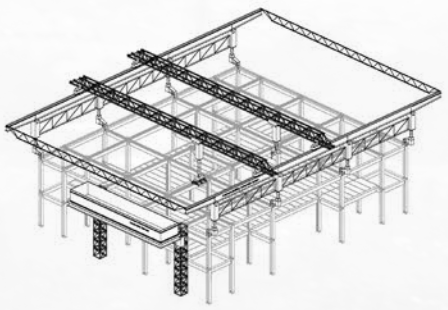
A.H.E.A.D

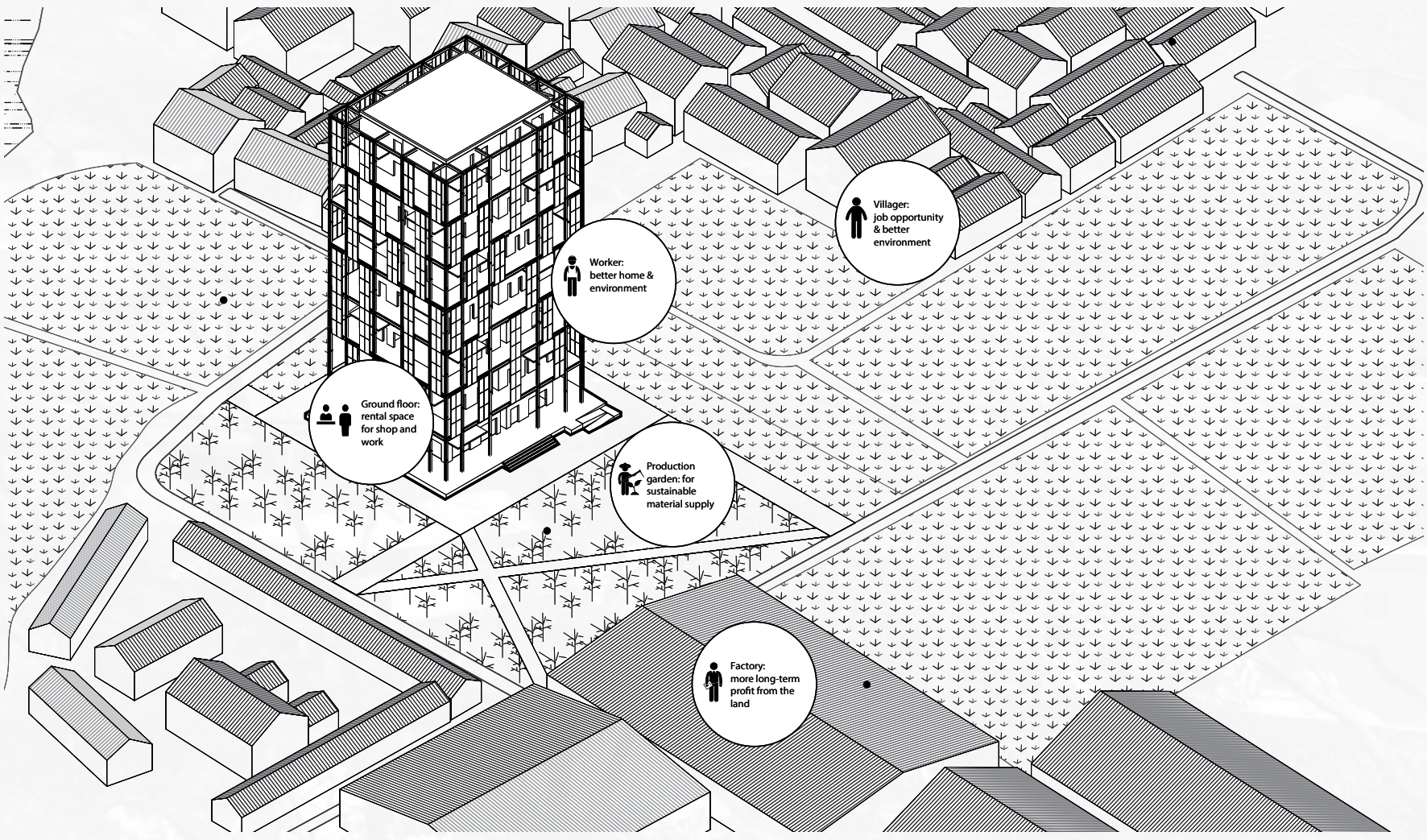
by **Jingxiang Liu**

This project focuses on the design of a customizable and affordable housing product for low to middle income households in Indonesia. The product features the use of automated construction technology (robotization), which increases production efficiency, improves the building safety for high rise structures, lowers the construction cost and makes mass-customization affordable. Finally a design of a tower with worker homes is elaborated, spatially and socially organised like a vertical kampung, combining raised homes with qualitative communal outdoor space.









Context Building with nature

Rethinking coastal areas

text **Annebregje Snijders**

The Dutch coastline is constantly changing. No day is the same. It is a landscape in transformation. Wind, sand, salt, sand dunes, hills, vistas, they always take another shape. Rijkswaterstaat spends large amounts of sand supplementation to keep the coastline safe. Also the use of the coastal zone is an ongoing subject of discussion and design. There is economic pressure to develop the coast as a leisure and recreational area. Plans that are developed provoke lively discussions within society.

We follow the political agenda of the national government to anticipate what may be a useful contribution from a design and research point of view. The inspiration for the coast may be to think differently about energy: how to use wind, sand, sun and algae as renewable resources?

Last year aE/INTECTURE presented the drift laboratory during the Oerol festival on Terschelling in collaboration with Rijkswaterstaat and Buckylab. We did research on the impact of the construction of beach houses. How could we come up with better solutions that promote the drifting of sand? Many people have seen this presentation and we discovered that coastal buildings immediately evoke emotions. The next time we will continue to focus on different solutions. New solutions for building along the coast. Materials, systems, shapes and above all integration in the landscape are important themes.

AMPHIBIOUS MINIMAL RESORT

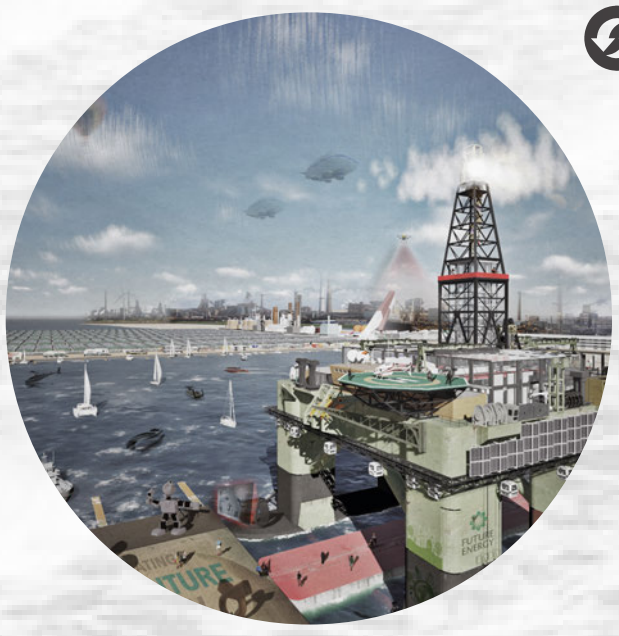
by **Rosa Hurkmans**

An amphibious minimal resort has been designed suitable for different conservation areas. The resort consist of a group of units, that function both on land and on water. In this case is chosen for the Wadden Sea, in the north of The Netherlands. This area asks for a careful attitude towards its fragile and unique flora and fauna. At the Wadden Sea, where there is ebb and high tide, it is important that the object is able to move up and down with the tides of the sea, and when the sea falls dry the units of the resort should be able to rest on the sand.

AEOLIAN SYMBIOSIS

by **Calcen Chan**

Aeolian describes any process or form that is related to the wind. Symbiosis is an interaction between two organisms in which both benefit from one another. This graduation project proposes a different approach to coastal building in the dunes. Presently, dune resiliency is achieved by blowouts which are gaps created in the frontal dunes that allows sand to be transported to the grey dunes. Aeolian Symbiosis aims to simulate the functions of these blowouts while providing the opportunity to create unique spaces that allow for development, activities, growth and experience in the dunes.



RE-OIL COAST

by **Nan Yang**

In the contemporary era of climate change and the scarcity of fossil resources it is necessary to search for new alternative energy resources. Microalgae are the potential media which produce usable resources like biofuel and biogas from its photosynthesis. This proces makes microalgae one of the most interesting renewable resources. With laboratory studies, the yields and productivity of algae are succesfully tested. The solution of this project is to create an off shore algae-based farm community, resulting in a responsible landmark for the future.

Wood architecture

text **Pierre Jennen**

As a result of the growing awareness that we need to take action in climate change architecture students want to contribute to a sustainable future. The global building industry accounts for 18% of all CO2 emissions and therefore has a large footprint on the planet. Most construction materials such as concrete, steel and brick use huge amounts of energy for production and are strong carbon emitters.

In the construction industry new building methods are therefor being developed. Because of the urgency in respect to declining resources and symptoms of climate change worldwide, there has been a shift towards a more sustainable use of material and energy. In this respect one of the most promising new construction techniques is engineered timber. Wood is the only building material that actually stores CO2 while it grows and is therefor carbon-negative even after it is cut and processed to be used in a building.

The advantages of using wood in construction are multiple:

Wood is not only good for the planet, it is also good for people. Wooden buildings are healthy buildings. Wood being vapor open and having a good heat buffering capacity regulates the indoor climate. Also building with wood is healthy for construction workers. Wood is energy efficient through computer aided manufacturing, prefabrication and a clean and fast on site assembly. Because it is lightweight also building on top of existing buildings to densify our inner cities becomes technically possible and economically viable. Wood is a sustainable resource, there is a regrowth of building material in maintained forests. Wood is a safe material since it performs well during earthquakes and mass timber construction elements are in fact fire resistant since they only scorch superficially.

On account of these obvious advantages the range of wood applications has been growing considerably in our students' architectural projects. Engineered timber constructions improve the mechanical qualities of wood and because of their good weight-performance ratio enable spectacular constructions for sustainable future buildings.

BENDING THE GRID

by **Alessandro Giacomelli**

Bending the grid is a project that investigates the potential of computational methods for the use of natural materials in architecture. Through this approach, material information becomes the generative driver for the design of a timber gridshell that shelters public space. The first step consists of setting the goals and objectives for the architecture, then a space is created within a physics-based digital environment. The computational model helps the designer to test different alternatives for the overall roof geometry, including the bending behaviour of wood and the basic characteristics of the designed structure.

WOOD FOR ALL

by **Anne-Louise Bergkamp**

In an attempt to balance the housing market in the light of population decline, HEEMwonen, a local social housing association in Kerkrade, Limburg, demolishes part of their building stock. The resulting vacant land will be transformed into a public park in the coming years. This project uses a fragment of this park and includes a restaurant and watch tower to increase the park's value for the people living in the neighbourhood. The architectural goal is to create an appealing all-wood building as an exemplary piece of architecture for future sustainable building, finally being exhibited at the 'Internationale Bauausstellung' Parkstad in 2020.

EARTHQUAKES & SHRINKAGE IN GRONINGEN

by **Tijs van den Brom**

Throughout the years, Groningen has become increasingly subjected to earthquakes caused by gas drilling's. Yet, 80 percent of the buildings in Groningen are built with unreinforced masonry, making them susceptible to breakage during earthquakes. It is the projects' objective to create a more architecturally justified solution to reinforce these buildings, without compromising the historic facades. This is achieved by adding new structures with additional programmatic value for the public, simultaneously reinforcing the existing building.

Context Marineterrein

Slow architecture

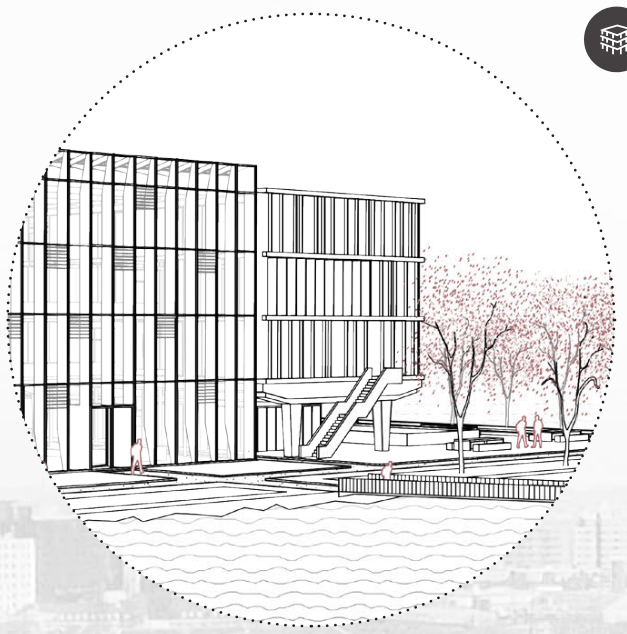
text **Thijs Asselbergs**

The Marineterrein offers an oasis of tranquility in the bustling city of Amsterdam. Though a protected enclave, it has nevertheless traditionally been a hive of business activity. The municipality would like to preserve this character. The Marineterrein will become a meeting point for the residents of Amsterdam, a place where they can enjoy peace and quietness, water, and the panorama over the city. Besides this, it will become a place in which researchers and entrepreneurs from many countries can collaborate.

aE/INTECTURE works together with the Bureau Marineterrein Amsterdam (BMA) and is looking for a new experimental approach to develop the area. Students are working on different subjects: from a complete new energy system to an innovative school, from a tiny house project to temporary festival architecture. We like to discuss our proposals also with the local people who work or live at the Marineterrein. By working on these type of experiments we like to contribute to the development of innovative uses of the city and add value to this unique enclave in the thriving centre of a European metropole.

The expressed wish of the Municipality of Amsterdam and the Dutch government for the Marineterrein is an incremental development trajectory on the basis of a gradually growing consensus. This innovative approach has been settled in an administrative agreement and will be completed by BMA. Furthermore, the prospect of cohesion and interaction is improved, as the owners and users will be working together on completing the character of the property instead of working towards the completion of a predetermined masterplan.

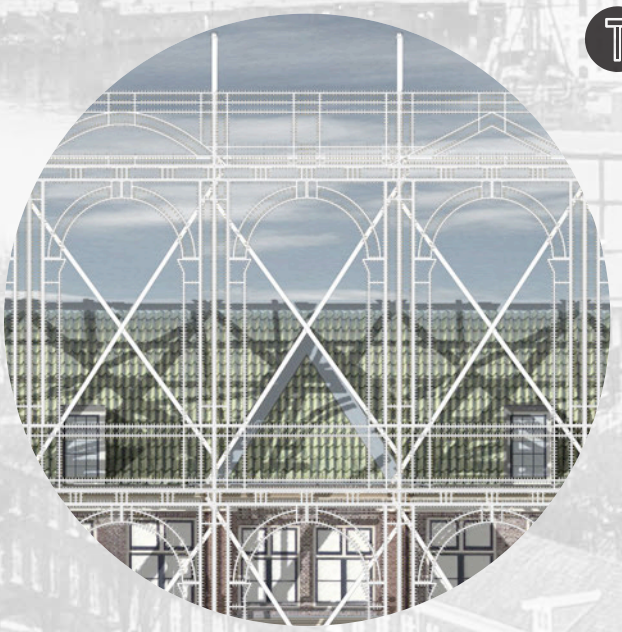
It is the intention to stimulate the area to grow in value. This includes economic value as well as societal values such as sustainability, integration within the city and the improved profiling of the international identity of Amsterdam. Growth in terms of societal values is important to the owner, the Dutch government, which can then economically and socially distance itself from the property. This is also important for the Municipality of Amsterdam, who are enabled to decide in which direction they would like this new part of the city to develop.decide in which direction they would like this new part of the city to develop.



CITIES IN FLUX: A NEW URBAN TYPOLOGY

by **Raphael Reuter**

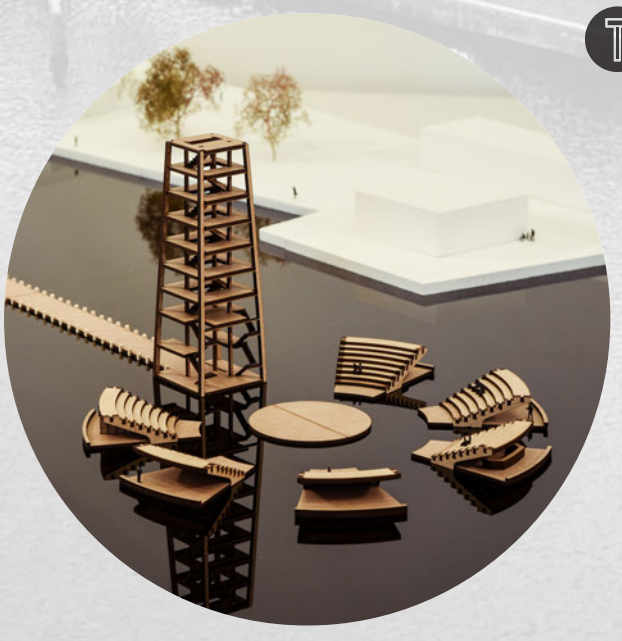
The Marineterrein has to be completely redeveloped the coming years. The old structures have to be refurbished and transformed to host new uses after the move of the military, making it an ideal playground to test new ideas for the improvement of cities. 'Cities in Flux' offers an alternative for the use of buildings with 24 hour usage via different activities with a focus on young start-up companies. Flexibility and transformability are seen as tools to allow the building to host different kinds of activities in one space and make it easily changeable.



INCREASING DURABILITY OF LUMINARIE CONSTRUCTION

by **Giulio Mariano**

The Luminarie Construction System uses simple materials as wood poles, iron wire and wood modules to create temporary architectural landscapes in the open air. It focuses on finding solutions that will extend the Luminarie Construction Systems' durability to weather stress and time. The result of the research shows a set of protection practices for this structural wood system for outdoor use.



THE THEATRE EXPERIMENT

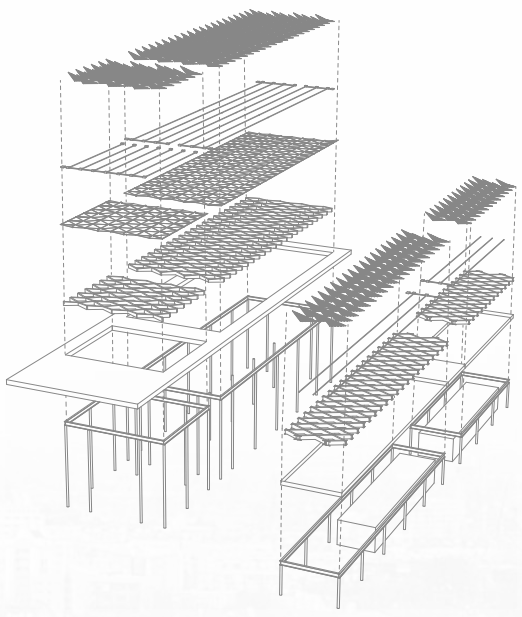
by **Marta Meijer**

The number of theatre visitors have been in decline for years. Focusing on attracting a broader audience with a wide range of shows, from performances to storytelling, 'The Theatre Experience' is a flexible floating open-air theatre with the possibility for many different configurations, allowing theatre makers to experiment with the art of theatre itself. At the same time, it functions as a cultural catalyst for the Marineterrein, an isolated area in the centre of Amsterdam, in order for it to become a vibrant part of the public realm.

PV AS ART

by **Frederique Sanders**

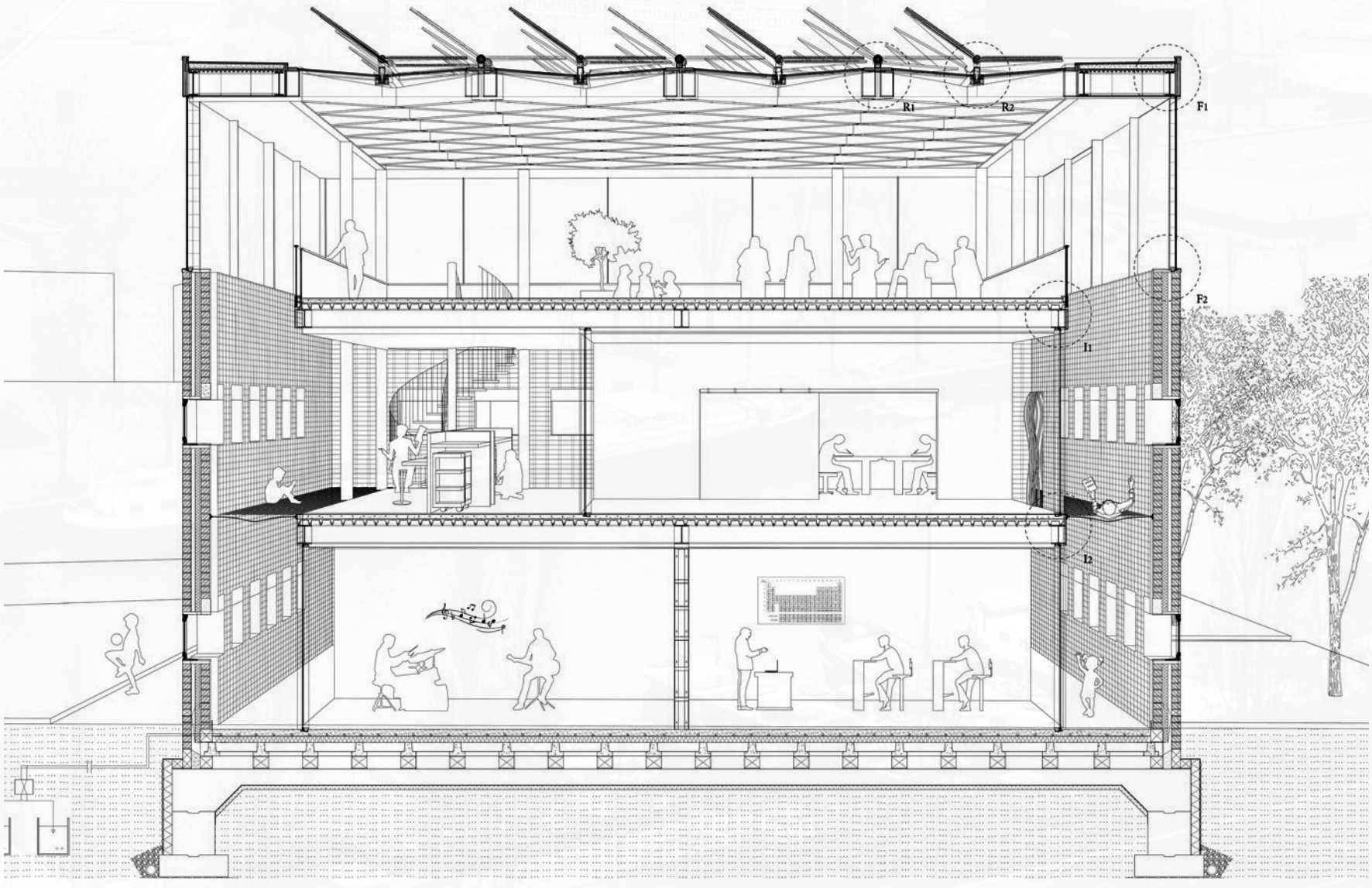
For centuries daylight has been used as the primary source of light in interiors and has been an implicit part of architecture. Regrettably during the 1960s, we forgot everything we knew about the art and science of daylighting; cheap energy and air conditioning did us in. The use of roof windows delivers significantly more light and a larger variation of light levels than vertical windows. The project focuses on innovation towards an aesthetic and eco-efficient roof-mounted sunshading system, which not only combines but integrates daylight and solar energy and is applied on an existing building on the Marineterrein in Amsterdam.



SUNFLOWER MOTION
horizontal grid

SUNFLOWER MOTION
diagonal grid

LOTUS MOTION
diagonal grid



Alumni

aE/INTECTURE interview with alumni Carlo Maria Morsiani

When did you graduate @aE/INTECTURE?
I graduated cum laude @aE/INTECTURE during the winter of 2012 with prof. ir. Thijs Asselbergs, prof. Jan Engels, ass. prof. Henriette Bier and ir. Gerrie Hobbelman from the Faculty of Architecture and the Built Environment. My thesis project la Casa del Paguro is a marine research center located in the Dutch dune coastline developed also in collaboration with biologist drs. ing. Bob Ursem from TU Delft Botanical Garden and geologist Dr. Ir. L.A. van Paassen from the Faculty of Civil Engineering and Geosciences due to its strong bio-material research approach. Can biology, craftmanship and geometry define a design methodology? Can 'erodibility' be controlled to plan a disappearing building? Can five scalar dimensions of design (from 1:1 to 1:10.000) be sufficient to control a complete process ?

You are planning an inspiring summer course in 2017. What is your goal?
Yes, during the 15th - 23rd of July 2017 in Vignola, a small town in the province of Modena I am organizing, together with a private cultural institution (Fondazione di Vignola / www.fondazionedivignola.it), the first of a 5 years long summer course series, with the ambition to describe hypothetical places through small scale interventions such as lectures, exhibitions and installations. There are three main ingredients: local materials, national patrimony and international discourse. An exchange between ceramic industries, Jacopo Barozzi body of work and participants from The Netherlands, Portugal, Switzerland, Japan and United Kingdom will drive the explorations of the coming event. Precise locations inside the village are prearranged while a definitive program (exercises, fees, calendar etc) will be disclosed in the beginning of next year.

Working for Herzog and the Meuron after your graduation. How was that?
After working for Arata Isozaki & Associates in Milan and MVRDV in Rotterdam I decided to move to Switzerland, first in Zurich, at Christian Kerez architecture office and then in Basel at Herzog & de Meuron. During this last experience I had the possibility to not only grasp and digest the inner need for excellence, typical of any Swiss individual, but also to appreciate it and master it in my own way. The office composed by more than 300 employees is hierarchic yet outright, large yet intimate, efficient and fragile at the same time, a very inspiring environment where the elasticity learned during my TU Delft experience was very helpful in approaching any given task. The academic/scientific knowledge acquired at the faculty of Architecture prepared me with multiple pragmatic and intellectual tools very appropriate for such a strong professional environment.

What are you doing now?
Since the summer of 2014, after 10 years away, I am back in my home town Modena, Italy, trying to set up an architectural company. I am mainly focusing on the critical aspect of professional dignity, understood as the essential means of operation within our ambiguous contemporary context. Through social independence (define a relation with a cabinet maker father) economical independence (work on the so called Made in Italy investment sector) and cultural independence (interpret mannerism traditions) I recognize production, export and heritage as key elements to unleash local potentials with international standards. Once achieved such autonomy, I foresee the opportunity of architecture as an immune action towards the definition of possible identities.