D4.5

**ENSAM SUMMER SCHOOL 3 :
SLOW URBANISM**

ka
au_

Knowledge
Alliance
for Advanced
Urbanism

D4.5 ENSAM SUMMER SCHOOL 3 REPORT

SLOW URBANISM

The summer school is part of the project:
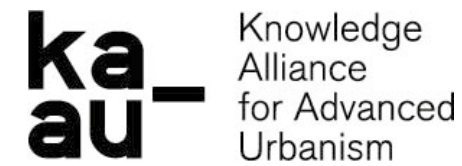
The summer school have been organized by:

with the support of:

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FOREWORD //
KNOWLEDGE ALLIANCE
FOR ADVANCED URBANISM

KA-AU PROJECT

The increasing availability of data creates new opportunities not only for monitoring and management, but also for changing the way we describe, understand and design cities, challenging many fundamental assumptions of city design and planning professions.

In order to promote the innovative education and training that emerging technologies require higher educational institutions together with industrial partners have created the Knowledge Alliance for Advanced Urbanism (KA-AU).

The group understand "Advanced Urbanism" as the sensitive integration of ICT in cities, taking in consideration cultural heritage, environmental and social dimension issues. "Advanced Urbanism" is about designing and planning processes instead of just con-

crete artefacts, linking citizens, business and governments into sustainable urban business cultures. "Advanced Urbanism" requires changing traditional design and planning practices towards more open, collaborative and interdisciplinary practices.

KA-AU develops courses, symposiums and an educational and training platform, with the objective of offering participants an innovative education on planning.

KA-AU is co-funded by the Erasmus+ Programme of the European Union

D4.5 REPORT

This report describes the main findings of the Third ENSAM Summer School, organized by ENSAM in cooperation with the KA-AU partners.

The ENSAM Summer School is part of the KA-AU program WP4, Task 4.5.

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PARTNERS

The KAAU partners involved in the ENSAM Summer School are:
- ENSAM: in charge of the activity organization
- InAtlas: organizing tutorials to the students
- Technilum: organizing tutorials to the students and hosting the final presentation in its headquarters
- Useful Simple Project : analising, advising and subjecting proposal for improvement
- Darts : organizing tutorials to the students

Ecole Nationale Supérieure d'Architecture de Montpellier The School of Architecture of Montpellier and through it the study field 'South Metropolises" aim to work on architecture and urban projects starting from a specific entrance point which is the interrogation of the locality as a vector of urban development. This strategic methodology deals with a continuous awakening of the Cultural heritage allied with the integration of paradigms such as "smart cities" and ITC integration in cities. Through the taking into account of the cultural heritage "Métropoles du Sud" questions the massive contribution of new technologies and their impact in the city, new governance and Metropolis constitutions. Thus, what is called "smart cities" is a necessary though for architects in order that this new "intelligent city» can be able to build a "sensible" city where new shared experiences could take place.

InAtlas is a ICT company specialized in Geo-spatial Big Data and Location Analytics. It has created an online business solution that allows users to integrate urban data in one simple dash board. It is aimed to give services to companies where location play a key business role, and to cities on helping implementing urban socio-economic policies. inAtlas technology has already been used for several urban and territorial strategic plans, both with cultural and natural heritage backgrounds (UNESCO recognition).

Technilum® is a company which centred its activity on the design and the manufacturing of street furniture and lighting. Thanks to its Research and Development pole it has an expertise in "Smart cities".
It also had the initiative to create a cultural organization Lézigno, whose programme answers the interrogations on becoming a contemporary city, through the light and the interferences with architecture, art, design and landscape.

Useful Simple Projects (USP) is a consultancy company specialized in urban design and development. USP works with cities and delivery partners on major infrastructure and development projects to bring about broader sustainability outcomes. USP also run engagement programmes with urban planners, cities, universities and built environment professionals to encourage systemic, multidisciplinary and innovative approaches. USP works with clients in particular to ensure that ICT systems and data management can be used to solve urban development challenges from maintenance of assets and efficient use of resources, to community engagement and city mobility. For this project USP will partner with their sister company Think Up who specialize in building learning and development programmes for the built environment. This includes through digital platforms and experiential learning. A key part of this work is to ensure that programmes have a long term impact and evaluate programme success.

Darts Engineering develops Advanced Real-Time Systems, providing to customers ICT consultancy services, software development, system integration, customized solutions, and bookshelf services and technologies. Darts constantly invests in industrial R&D and experimental development activities in different fields. Since 2010, Darts strongly focused its R&D&I activities in two themes, core of the KAAU project: environmental monitoring and resilience of the territory, and value of cultural heritage.

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ENSAM SUMMER SCHOOL 3 //
SLOW URBANISM
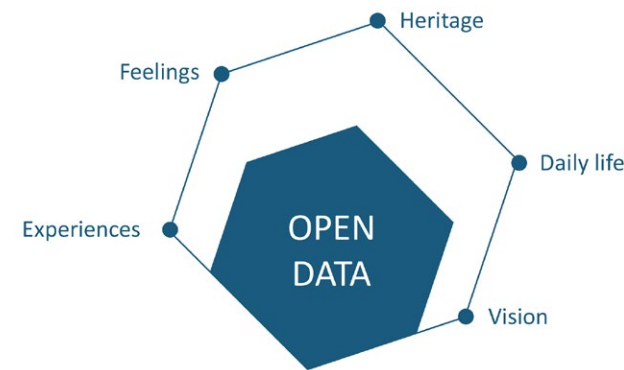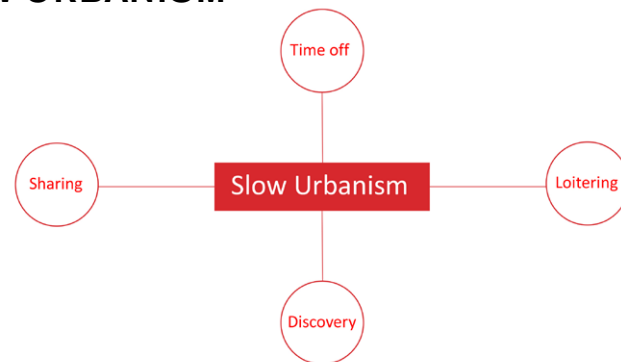
MENTAL MAPS

NOTE

ENSAM Summer School 3 didn't occur during summer and was organized during regular courses season in order to exploit the ENSAM tools. These tools have been exploited for organizing research about slow urbanism including also the partners cities where the students meet the KAAU partner companies. Moreover, this calendar offers the possibility for students to participate to several events organized for the KAAU projects, creating links with partners and improving their involvement in the project. It also offers flexibility to visit the partners involved through the three years.

CONCEPT

New technologies are in the centre of contemporary paradigms. Producing a new layer of connections between people, objects, places and events, these new technologies provide a huge amount of data and informa-tions crossing permanently. Always sought and constantly informed, these data are changing the way we live, we move and meet people. That is why we introduce the concept of SLOW URBANISM. This theme aims to succeed in bringing a more sensitive eye, rather than just efficient, on the technologies that surround us every day. Therefore, the goal is to bring a primitive look at the city, sharing discoveries, pathways and unusual places.

It is essential in urban planning to take into account the human aspect of the place, the SLOW URBANISM tries to connect sensitive data of the city using wireless technologies to provide a different perspective on cultural heritage and contemporary places we practice every day. Beyond a purely objective efficient, this approach aims to use the data gathered to provide personal visions that we can share with the world. It seems important to keep this part of mystery

that exists in the city, keep discovering elements do not stick to a pre-set course but to be led by the city itself.

In the same way that social networks have developed a new grid of social interactions, slow urbanism offers an alternative to the discovery of a city. Made directly by the inhabitants of a city, this initiative aims to create urban course in connection with the experiences. The places to visit are less targeted by pragmatic interests than from everyone's life experience. This provides the opportunity to be guided through a fun course, diverse and atypical.

The pathway in each city does not match the fastest way to connect point A to point B, but the journey itself has a genuine interest. Mixing interests in order to focus more on life experience to discover.

Temporality also plays an important role, these routes are proposals based on the time available that you have. A city is not dis-

covered in the same if you have two hours or two days. That is why these paths offer the opportunity to visit the city at your own pace. These paths, like a playlist, can be divided, assembled and exchanged to create a grid of interactions in the city.

SLOW URBANISM intended to filter information from one place to earn a quality experience that it is possible to qualify. The objective is to personify the city, withe a personal vision, to share it with friends, family and even strangers. Putting People at the center of the device seems to be necessary to put technology at the service of the sensitivity of the city, it will increase the interactions between people and the practice of the city as such.

MAIN TOPICS

The theme for which the consortium was chosen revolves around key issues to be addressed, questioned and sharpened during the 3 years.

- Smart City

In recent years appears many questions around what would be defined as the future of our cities becoming «smart cities», «creative cities»... Combining indifferent manner and sometimes confusion, the relationship between the massive arrival of new technologies and questioning their impact in the territory, even in the urban structure of the cities, creating «digital cities»; but also opening to a city more «green» «environmental» seeking to reduce both a sprawl, but also expensive infrastructure; it is also looking for a more just city, democratic, participatory and virtuous done. In short a great city that it seems difficult to be between the search for a new urban utopia and exploration of possible futures.

- Sencity (sensory city (sensor = Sensor) + sensitive city)

European cities are trying many sensors, online information and communication system. They become living laboratories where industries can drive new devices.

The increasing availability of data related to these sensors create new opportunities not only in monitoring (surveillance) but also in the way we design the city.

Based on this new challenge, the consortium aims to promote exchanges between the research units and industries dedicated to the development to the emergence and use of new communication and information systems specialized in urban planning. The purpose of this consortium is to seize the challenges of the contemporary city, to reconcile openness to global flows: informative, migratory they have outstanding environmental, social or cultural.
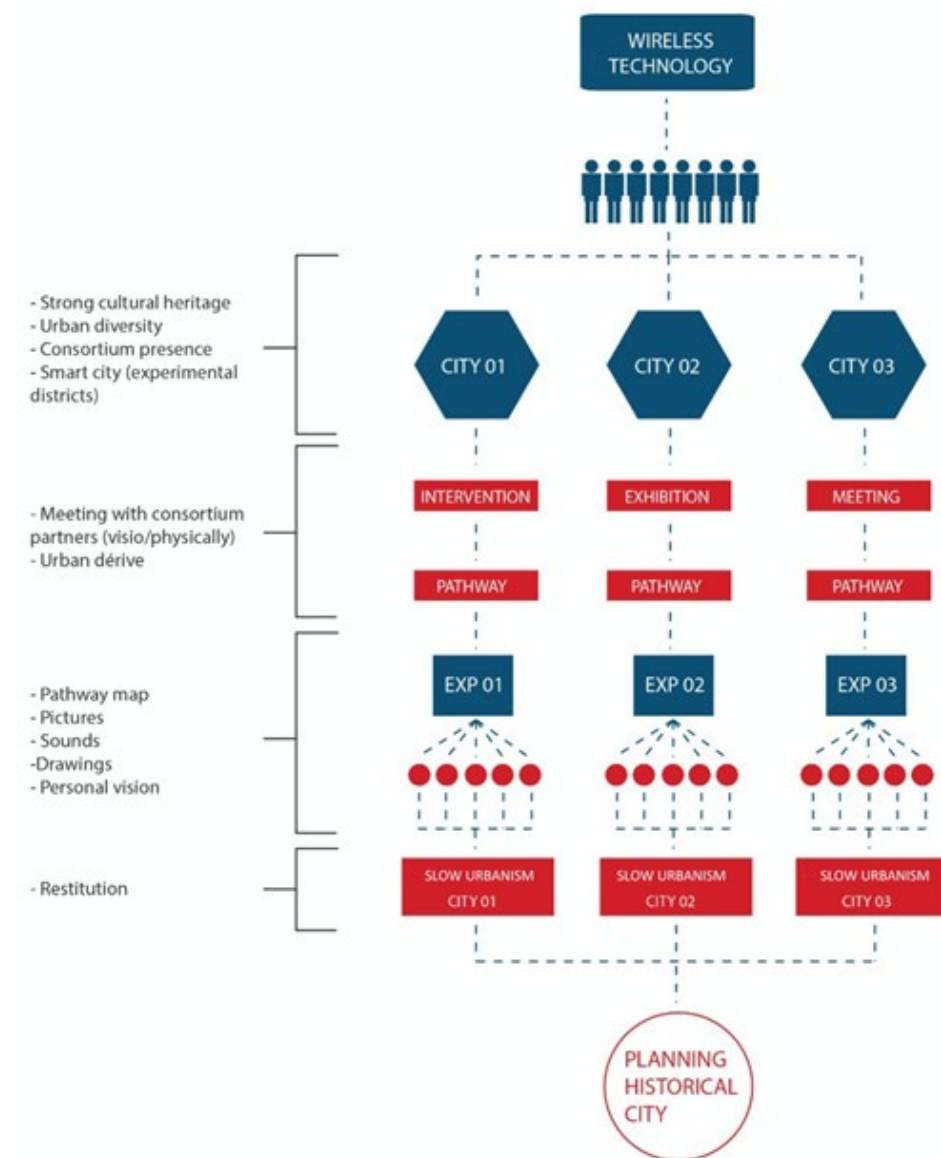
The scope of the SEN platform is devoted to the definition of what will be the cities-senses (sensory sensitive city + city) as informative and interactive as spaces and at the same time open to citizen participation, co-innovation. The combination of heritage and innovation as well as the binomial «smart city» and «friendly city» is paramount.

**- Highlighting the cultural heritage in the city**
The specific entry point through which will be addressed this theme is the question of the locality as urban development vector. This strategic methodology in between reasoning with the inclusion of cultural heritage combined with the integration of paradigms that are integrating ICT into the city, or more broadly the smart city. The intersection of architectural and urban scales seem pertinent

to produce relevant knowledge in connection with the consortium.

- Urban Drifts
Drift is a way to wander in a place for his discovery, as a network of experiences and lived. It is an approach which is to move through the different moods of a space (a city, a neighborhood ...) and will be guided by impressions, for the subjective effects of such places.

Urban drift was defined by the Situationist Guy Debord in 1956. The poet and writer has used this idea in his paper The theory of error 1 to bring his readers to reconsider how they live the urban space. Rather than remain trapped in their daily routine and make every day the same trip without paying any attention to their living environment,
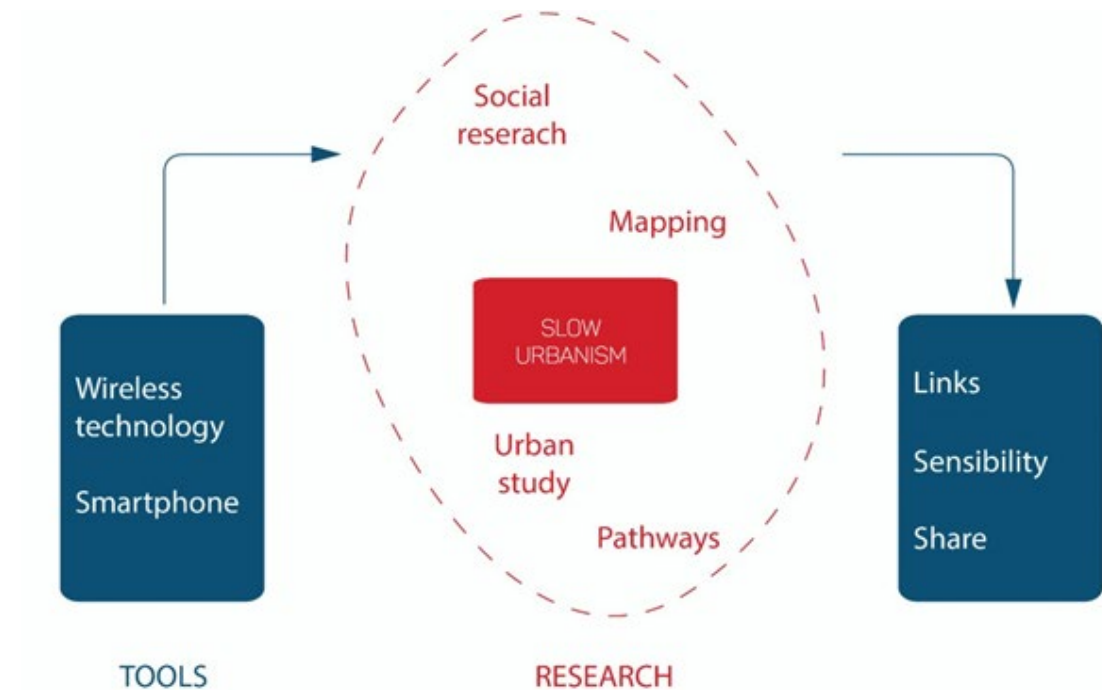
drift urges citizens to follow their emotions to watch urban situations in a radically new way.

Questioning the urban space based on your knowledge through a stroll inside of it, questioning the concept of journey and its transcription and finally realize the transcript of

a course and make available all are the foundations on which we will use to develop a new and innovative educational content.

- Slow urbanism

The emergence and gradual introduction of technologies in the public sphere aiming to make the most affluent lifestyles, they should be able to offer an increased quality of life of the inhabitants of a metropolis.

Technological gain that translates into everyday efficiency must serve a gentler way of living the city. The concept of slow urbanism comes here as a concept to offer a fresh alternative to the traditional urban lifestyle.

During the Workshop each team developed its own vision of the city by targeting specific themes based on specific experiences of the city that everyone would like to share. These thematic appeal to the senses of everyone, a different vision of the city, the mystery and discovery.

These themes, initially rather vague time, have been refined and clarified throughout the Workshop. They are the result of many discussions, experiences and results of the undertaken course.

What makes these interrelated themes of SLOW URBANISM is the opportunity they offer to discover the cultural heritage of a place through places and atypical paths, sometimes known only to the inhabitants of a town. This, in a defined period of time, the authentic discovery of the true personality of a city. Understanding how people really live there.

These themes are therefore aimed to highlight human experience of the city, footprint discoveries and surprises, the goal is to be

guided to be surprised by these multitudes of events that form a rich and vibrant city.

PEDAGOGY

The educational establishment during the Workshop aims to create a new form of education. As the SLOW URBANISM wants to create a sensible way to discover the city, the City Workshop Sen must propose an agreement with the teaching objectives expressed above. That is why we propose to offer a horizontal learning.

First of all, teaching is based on speech. During this Workshop, objectives and means to achieve them are discussed together with the students. It is essential that everyone is involved and that every opinion opens a discussion that could impact on the workshop itself or on its expected. This way of working offers the opportunity for everyone to be accountable to the theme, students interested in it even outside the course itself.

Subsequently Experience Workshop is multiple. The theme is open to many areas, the workshop provides an experiential pedagogy, meetings and debates. The participation and involvement is key to the success of the Workshop and awareness of each involves a sum of diverse and fun experiments.

Students are at the heart of the SLOW URBANISM manufacturing process, it is important that the method used to define the concept so under the basis of exchange and participation.

A visit will be organized for each city studied. Moments of meeting with the consortium of companies will be an opportunity to create a dynamic exchange. These moments of meetings, prepared in advance will get lit and very specific data on the concepts of studies proposed for public housing.

Through their achievements made during their teaching architecture students will be in their ability to save wandering sequence in a relevant way to quantify its own elements: time, distance, altitude... and anticipate their approach notably through the categorization of its quality.

For example: architectural, cultural, gastronomic, hybrid mode ...

The terms of expected records are outside the scope of conventional records requested architectures. Students will be asked to a transcript of their visit to the innovative and inventive. It will be different for each city and thought consistent with each course. They will be asked to adapt the tools used, the rendering modes to the concept of qualification of a specific urban atmosphere.

They will be asked to propose to bring the look on the heritage of a city in a unique way will be highlighted, it will work in an open framework to known peripheries.
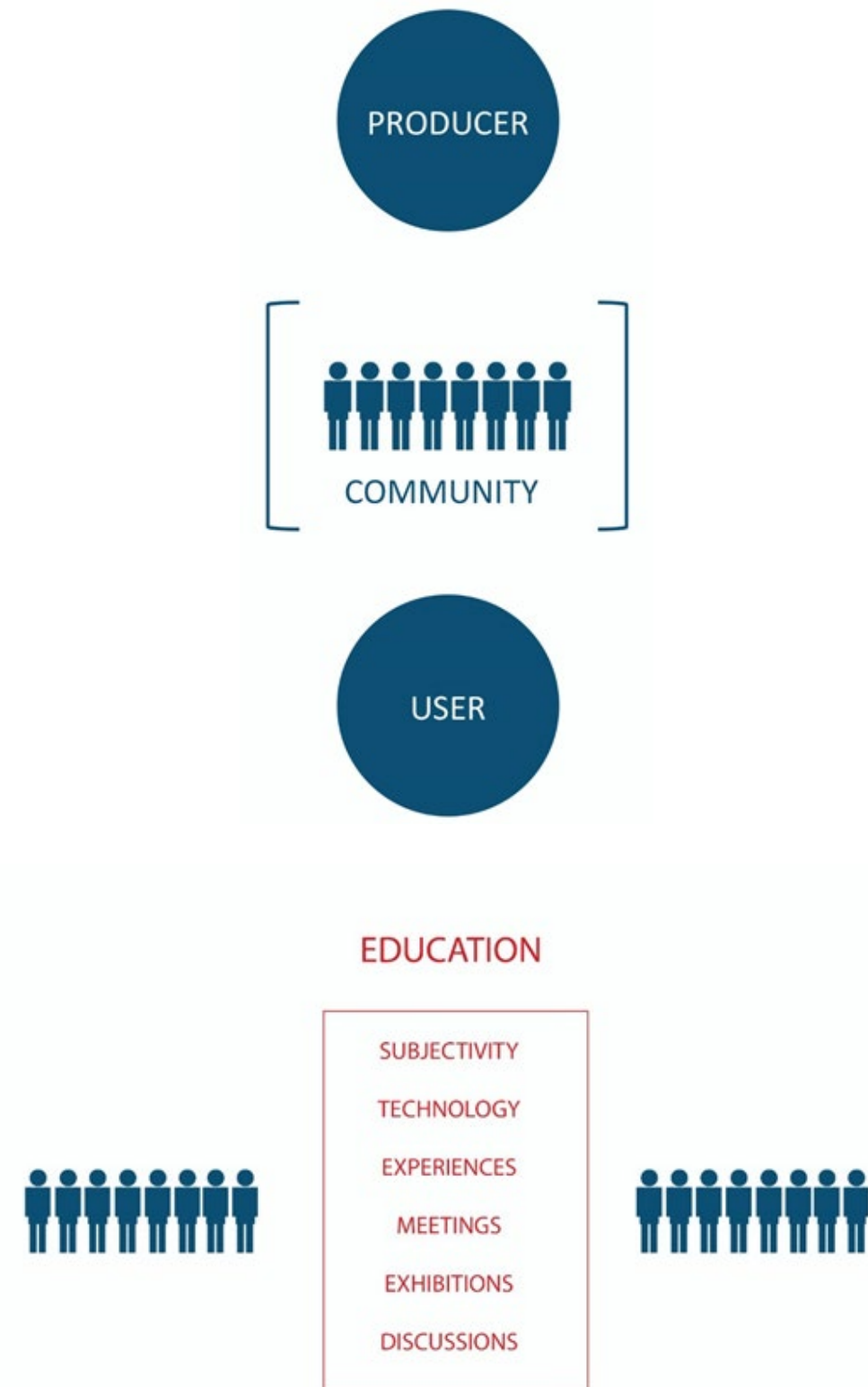
ORGANIZATION

The workshop is carried by a total reflection on the question of the intelligent city, Big dated, the courses in the city and the transformation of these data for their use within the framework of architecture and town planning. This sum of information and concepts to be collected cannot be condensed in only one workshop, this is why the question of the transmission is paramount in the training and the production of elements in keeping with these various concepts.

Workshop is spread out over 3 school years and as much of point of progression around this question of the city and of its future through the prism of the new technological tools. This is why the workshop wants to be evolutionary over the years, nourished by the information and the results provided by the work of the previous group. This pedagogy makes it possible to put forward from a point of view practices the question of a horizontal teaching composed of experiments, discussions and conclusions carried by the students and for the students.

The goal is then to succeed in advancing the reflection which one carries on the intelligent city and the tools which manufacture it by using the concepts and the ideas developed by the students of the year 2015 – 2016 to be used itself about it as a basis

in the question of the development of new contemporary media.

At the time of the previous Workshop we concentrated on a way of apprehending the city through courses and precise sets of themes defined by the students in the wire of their various experiments through three different cities: Montpellier, Lyon and Barcelona. These urban courses create proposals of displacements of the city according to feelings and discoveries. Was the question of the serendipity in the middle of research, how to offer a vision different from the city whereas with new technologies it is possible of all to know about a place before even going there? Coupled to personal discussions, exhibitions, research and meetings with members of the consortium it was possible to offer courses sensitive and surprising in the middle of cities which one thought of knowing.

This database is the first stage and must be used as point of hangs for the development of the Workshop 2016 – 2017. The information collected and developed by the students of the previous year is shared to offer a total panel of reflection understood in an overall diagram over 3 years.

workshop 01 → workshop 02 → workshop 03 → SEN CITY
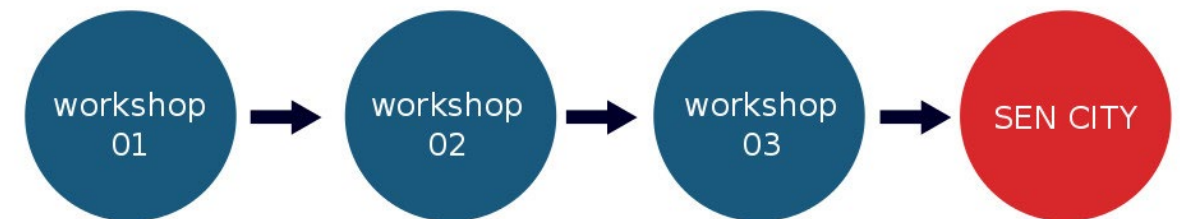
Workshop 01
Discovering of base notions
Definition of theme
Urban experimentation
Data collect

COLLECT

Workshop 02
Deepening of notions
Needs and challenges analize
Data transformation
Strong relationship with partners

TRANSFORMATION

Workshop 03
Definition of notions
Elements assembly
Transmission support
Proposal ending

TRANSMISSION

PROGRAM

TIME 01

Workshop Montpellier
22 january 2018 – 27 january 2018

Production of 5 A3 presenting the reflexion about
new way of conceiving ephemeral architecture
with an impact on social, ecological or urbanistic
paradigms.

TIME 02

Presentation
15 june 2018

Public presentation of projects and discussion with
members of the KAAU and visitors during the 2018
Lively Architectures Festival.

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1. PRODUCTION / MONTPELLIER

The Sen city 2017 - 2018 Workshop aims to highlight the reflections of students from previous years to create new contemporary media in connection with the cultural city, serendipity and new technologies. The framework is not fixed and evolve according to discussions with companies, discussions between students and after analysis of the needs and issues of the ideas retained.

The Workshop takes place in the form of putting into practice the concepts developed previously. Just like a true product development, the idea is to use the comments of different companies to turn the experiences of Slow urbanism into tools that would transform the experience of the city, the construction of the city or the way we think about architecture.

The goal is to succeed in transforming the stored data to give them a utility, alone and isolated they have no strength, once crossed, it became a new tool for the city and their inhabitants.

The themes to consider will be those of the pathway in the city, but not from a point of view, rather in a slow drift, a stroll that would surprise the visitor. Therefore, the tool is as important as the projected idea because it is also one of the mechanisms that must learn to fade, directly or indicatly according to its function.

Its function is also independent from its form, it can be immaterial, composed as an application on smartphone, it can be static or mobile and participate in the dynamics of a public space, it can transform new or old buildings and become a tool for manufacturing the city in its own way. The aim is for each team to develop, based on the previous year, their own vision of Slow Urbanism, so it can be directly inspired by a pathway created by a student previously, from all pathways or only to grasp the meaning to bring it elsewhere.
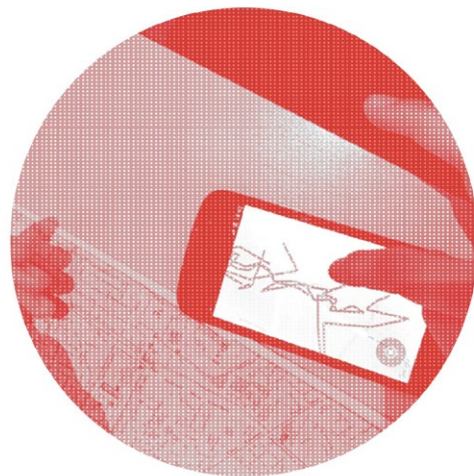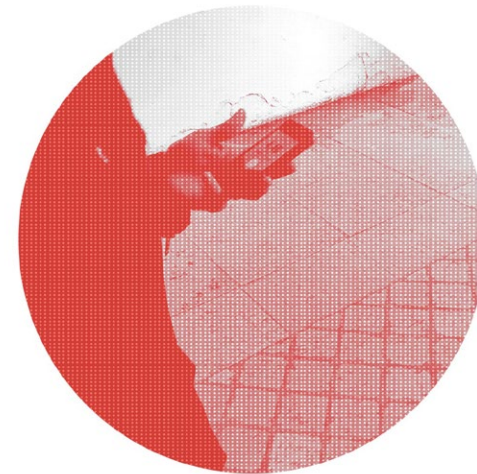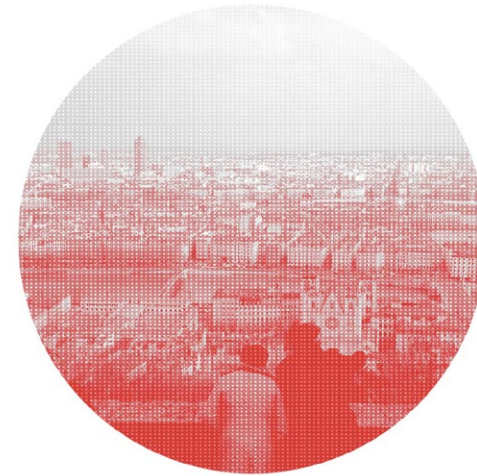
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OUTPUTS

**2.PRESENTATION/FESTIVALOFLIVELY
ARCHITECTURE 2018**

Time 02 of the workshop consist of a public presentation of the different projects.
It is an interesting work around the question of the presentation of complex elements in the clearest possible way. Students were able to interact with

KAAU members as well as festival visitors who took part in the discussion.
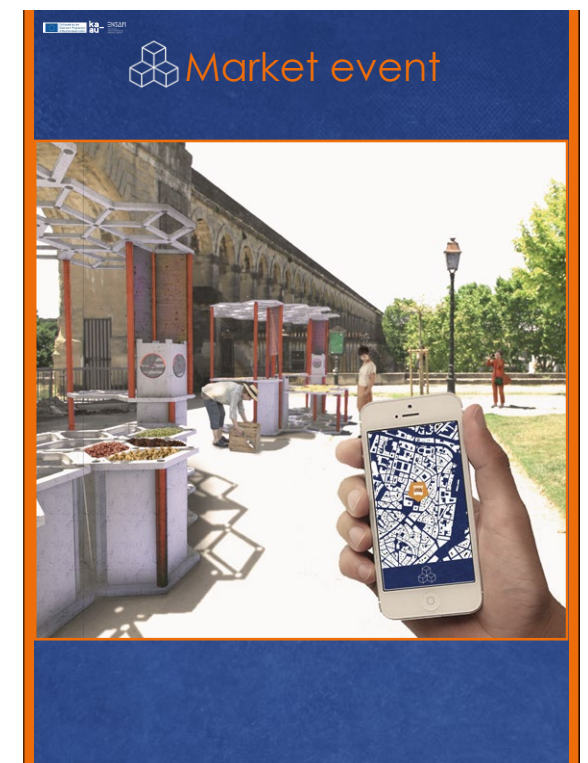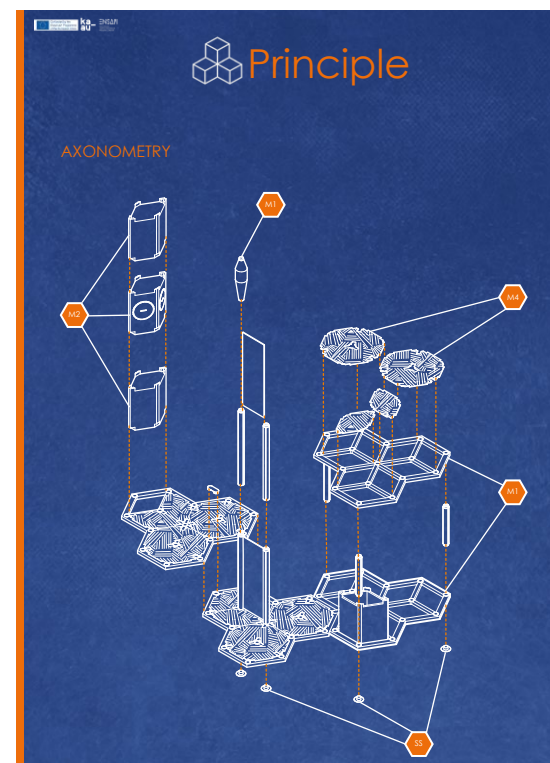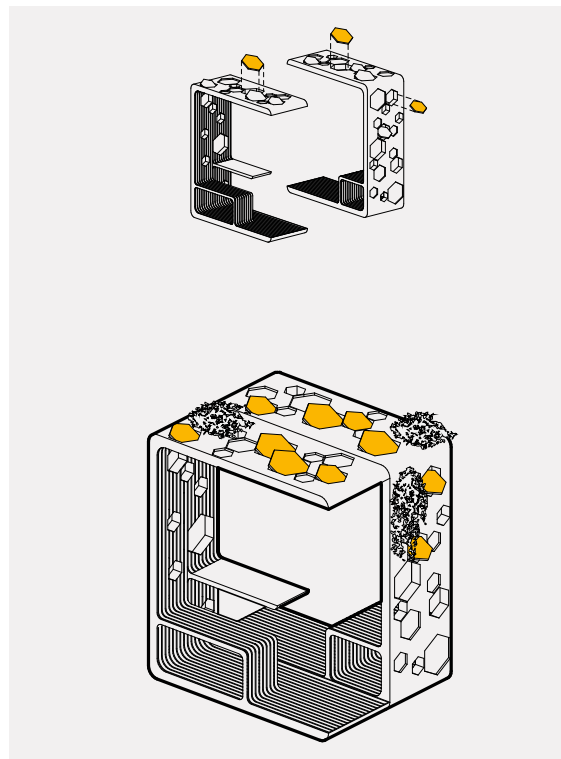
GROUP 01

Blot Julien, Chanvin William
SPOT

In the historic center of Montpellier as in other large cities, some spaces were designed for use that is no longer relevant. At present they are obsolete.

Revitalizing these places through the event is then the solution around which we think " Spot " .

This project would allow the habitants to organize events in the street and to take advantage of them in the form of adaptable infrastructure to wish the users to create their own thematic thanks to already integrated material (sound, light, seat, protection ...) and self feed by piezoelectricity.

The application allows when it to the user to locate, and / or interact with some modules located in the city. These infrastructures would change thematic and location based polls created and voted by users about every two months.

Principle

AXONOMETRY

Market event

GROUP 02

Eberle Nicolas, Lubeth Samuel, Thibault de Chanvalon Samuel
IRAE

We often hear about renewable energy in many sectors, but this notion still vague and their use stil) small. The idea is to work with three different landscapes (the sea, the mountain and the city) and establish only one way of energy production per place. Ta understand their functioning, explanations are presented by small interactive screens, directly integrated in the furniture, in order to raise awareness the users on the energy production within the module. Concerning the form, we built a project very flexible, the idea is to have different type of predefined modules (the seating module, the table module, the bench module..) and to assemble them according to the needs of the place where they are implanted. For the mountain landscape which is the one of the Pic Saint Loup, the modules are mainly adapted for the hikers, they consist of rest stops and picnic areas with benches to sit but also tables to eat. The renewable energy which is put forward here is the one of the wind with the small wind turbine (directly integrated in the furniture) which supply electricity to the phone charger and the interactive screens.

On the modules are also joined rainwater collection systems and filters that give to the hikers, drinking water. In the downtown of Montpellier, our facilities are smaller than those of the Pic Saint Loup, they consist of simple seats with at times a small tablet and the renewable energy which is highlighted is the one of the sun. Solar panels collect light rays to provide in electricity the phone charger, the interactive screens and the heating benches. A moisture collection system to be able to spray in summer is also installed.

Finally, concerning the seascape of Carnon, we chose to create a module consisted of a floating portion and a portion on a dike. This installation aliow us to sit (both in summer and in winter) or also to dive. The energy highlighted here is the one of the waves, with the articulated floating chain that provide in electricity the interactive screens and the heating benches.

The different modules each implanted in their landscape, will all have their own identity but by keeping a common base.

GROUP 03

Fromentin Maxence, Rubio Manon, Lahondes Romain
MOOV

Overweight :
In France, 36% of the working population was overweighted in 2016. In Montpellier, 45% was. This problem seems to be more important in the largest cities such as Montpellier, due to a different lifestyle (lack of time, lack of sport facilities, unhealthy diet, sedentariness).

Sedentarization :
The diversity of new technologies gradually spread sedentarization, reducing social relationships and exchanges. This trend mainly affects young adults (18-25) and minors, we might notice a decrease of late-night outing for the benefit of other activities, related to new technologies (social networks, streaming, etc.).

Sustainable development :
Nowadays in France, we tend to improve our respect for the environment, our energy management and our social development. Therefore, government tries to highlight sustainable modes of transport like electric bikes (green bonus, tramways, electric cars rent, etc.).

Free sport spaces at the core of the city :
We offer to create a spot to practice sport completely free within the city. Wa are seeking to solve the problems of overweight and sedentarization.
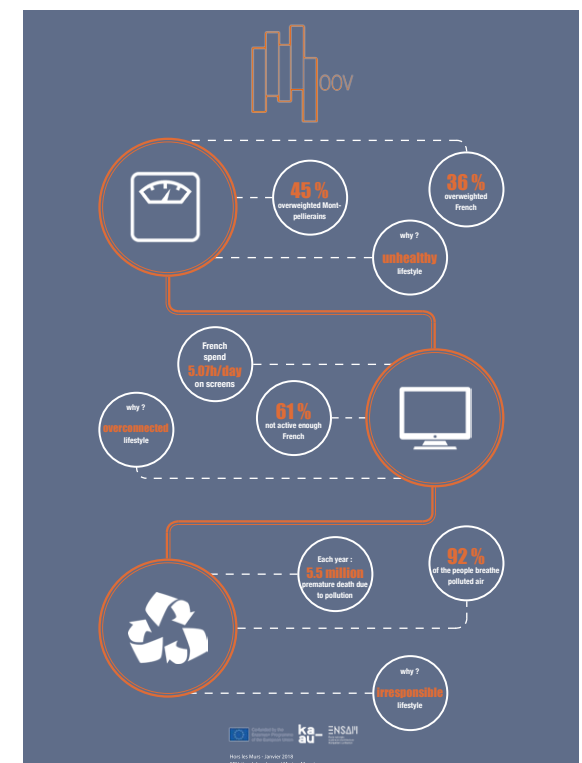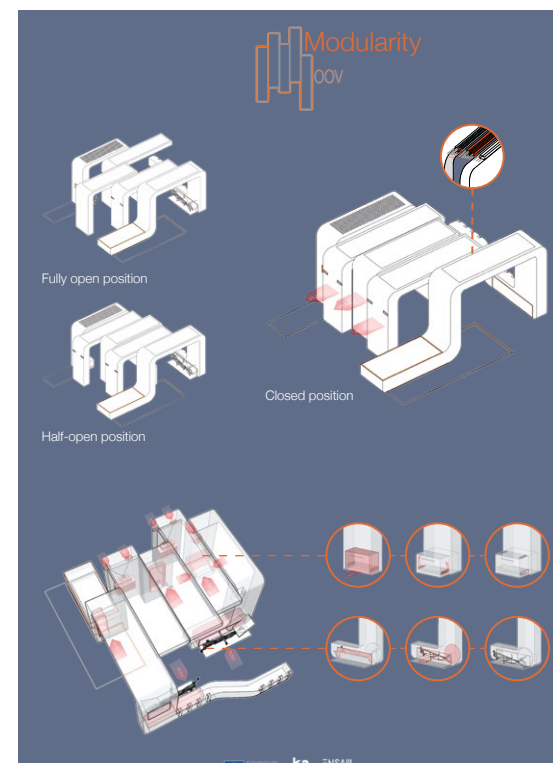
Self-su ciency :
In a context of sustainable development, our aim is to create a fully self-su ciency space. Everything is though out to produce energy, sport equipment and materiality (solar panels). It explains why it's free.
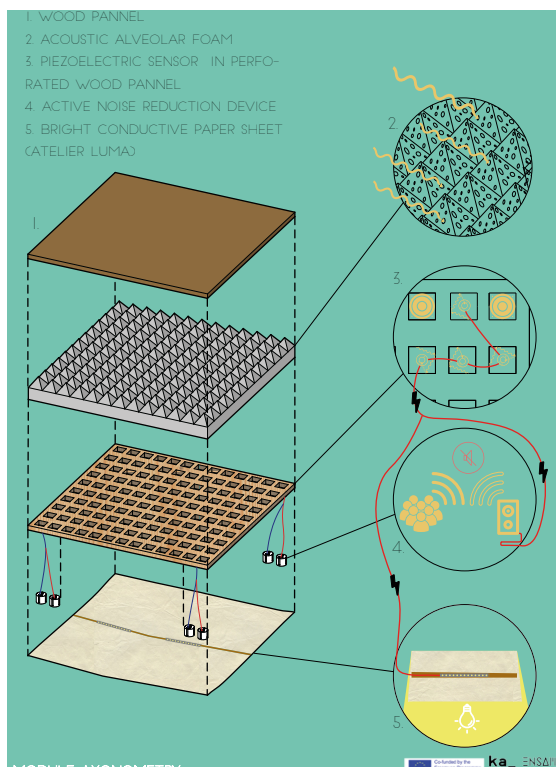
Enrollment in the city :
Currently, in France, the « green bonus » rewards those who buy electric bikes. Therefore, we will use the energy in excess to refill bike batteries of the coming persons to support their utilisation.

An adaptable social space :
That space will have to adapt to several uses, everything is transformed to satisfy the users needs (meet each other, partake sport, rest, etc.).

1. WOOD PANNEL
2. ACOUSTIC ALVEOLAR FOAM
3. PIEZOELECTRIC SENSOR IN PERFO-
RATED WOOD PANNEL
4. ACTIVE NOISE REDUCTION DEVICE
5. BRIGHT CONDUCTIVE PAPER SHEET
(ATELIER LUMA)

MODULE AXONOMETRY

GROUP 04

Gay Fabian, Clemencon Anaelle
IRAE

In Europe, 10 000 premature deaths caused by stress, hypertension causing cardiovascular problems, insomnia, etc., cause noise pollution every year. In addition, 75% of the inhabitants of Île de France suffer from its nuisances, and more than 70,000 million city dwellers around the world. The noise pollution is then, today, a real public health problem. According to OMS, one in five Europeans is regularly exposed to noise levels that exceed the average annual exposure limit in 2009. For example, we know that noise levels start from a noise level of 55dB. But the tram already emits a sound higher than 70 dB. Noise has therefore become the main environmental nuisance in Europe, and people are complaining more and more often about excessive noise. This is one of the first causes of individual complaints in Europe.
problematic
We therefore wondered how to make the noise pollution in the city of Montpellier less important.
We therefore want to reduce these noise nuisances to increase the comfort of life of city dwellers, allow them to accept the density of the city without being subjected to the high stress. The project is therefore to have acoustic "skies" through the noisiest spaces in Montpellier. We have made a sound map of the city, thanks to a mobile application, to determine the noisiest places. Our module is an object composed of several layers. At first, a wood panel covers acoustic foam. Then a perforated wood panel is placed under it. Finally, a sheet of bright conductive paper is laid. The perforated wood panel is equipped with microphones, piezoelectric sensors and loudspeakers, allowing active noise reduction. Indeed, the pickups pick up the noise and then transmit the opposite frequency to the sound received, through a speaker, to cancel the latter. In addition, the perforated wood allows sound resonance, vibrating piezoelectric sensors, and able to produce a certain amount of electricity. The illuminated conductive paper is thus active at night thanks to these and allows responsible lighting. Finally, acoustic foam reduces street noise by using passive noise reduction by absorbing the sound produced.
Intervention areas

GROUP 05

Jessica Bérard, Gauthier Peiny, Axel Saponeondes Romain
CULT'U

According to an article of the observation's center of the society, in 2014, 61% of the French didn't visit museum in the past year. If we focus on the growth of these visits since 1973, the curve remains stable, despite the growth in supply and events that should have led more visitors in front of the doors of museums. Several explanations may explain this lack of access to culture. At first, the fact of enclosing this culture in museums repels certain populations to cultivate themselves, to discover. they don't take the initiative to go to invest these places. In a second time, a large number of people dare not go to museums. They think that these places aren't reserved for them. They don't feel good in this kind of places.

After this observation showing that French people are struggling to invest the places which are proposed to them, we decided to reinject culture and its learning within the city and facilitate its access to the greatest number. Our desire is to encourage French people to go to museums and to run through these places that are intended for them.

For that, we targeted different places; places that already have a tourist's attraction and others more neglected that need to be reinvested. «Cultural» modules will come to take place in these places which, assembled, will create a cultural route. The creation of the application «Cult'U» will show the positioning of the different modules. Users could see the different activities and register for the various workshops offered.

Modules that will take place in these places will be managed by neighborhood's associations that will decide which activity they wish receive in their module. Each module can accommodate a different activity such as poetry, music, a vegetable garden, creative workshops, screenings, ... The goal is to allow the walker to discover easily and quickly while walking around, where the museums require initiative and investment. In addition, modules can offer creative workshops to share the knowledge of each stakeholder.
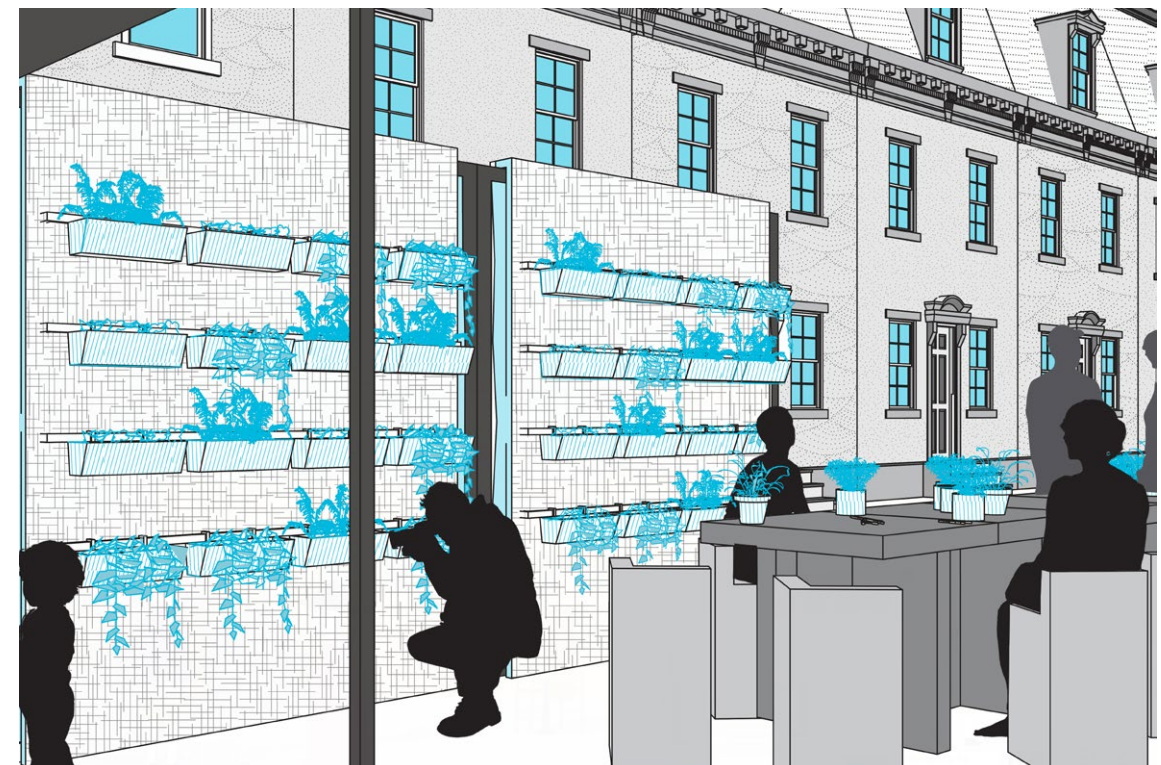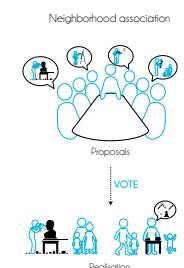

THE MODULE

FINDING

WISH
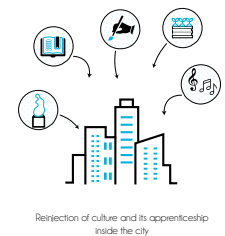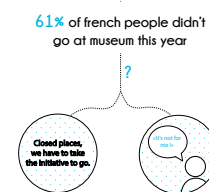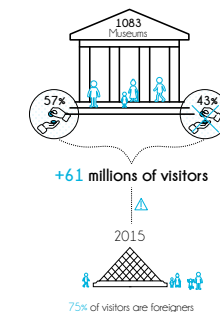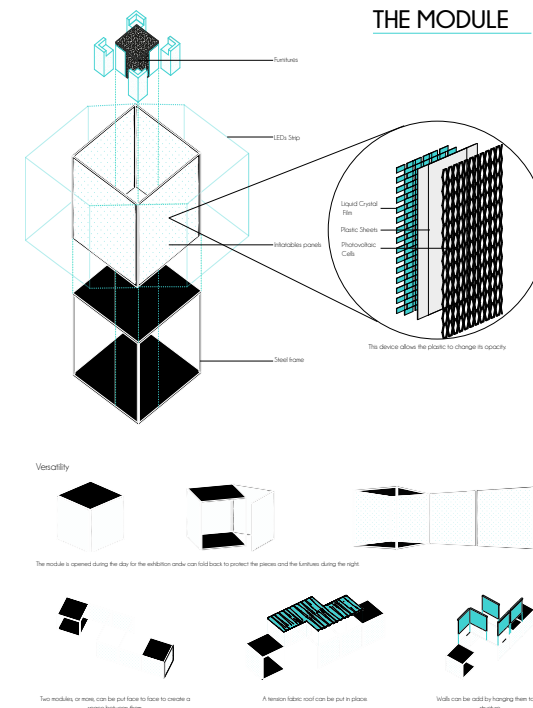
MANAGEMENT

5

CONCLUSIONS
AND RECOMMENDATIONS

This event organized by the École Nationale Supérieure d'Architecture de Montpellier offered a precise and graphic vision possibilities that offer microarchitectures to reveal places. Various practices were put ahead, that they are assistances with the people in a difficult situation, knowledge interactive on the history of the studied places or the question of the treatment of air. The sets of themes put ahead during this workshop make it possible to target important paradigms of our contemporary company. The developed projects considered each one certain solutions, temporary or perennial, to mitigate a request, a lack or a need. The fact of returning these solutions physics gives the opportunity of being projected in these microarchitectures and of evaluating the relevance of it. The various answers given by the students are precise while giving way to a future trend of these concepts. It would be then interesting to vary the proposals to give certain answers of an urban nature and to confront these problems with architectural elements which make our town planning with the daily newspaper (solar frontages, roofs, protections…). These proposals are thus a base of reflection to think of interventions on a large scale.

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CREDITS

ka au_ Knowledge Alliance for Advanced Urbanism
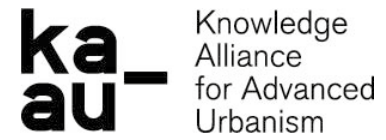
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