



TURAS

TRANSITIONING TOWARDS URBAN
RESILIENCE AND SUSTAINABILITY

Case study report on the **BRUSSELS CROWN BARRACKS**

*Connecting local actors with urban
dynamics, resource use and the demands
of future users.*



Brussels University Alliance

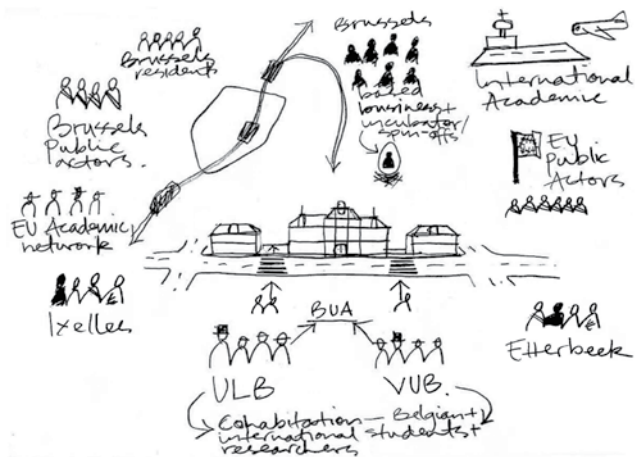


UNIVERSITÉ
LIBRE
DE BRUXELLES



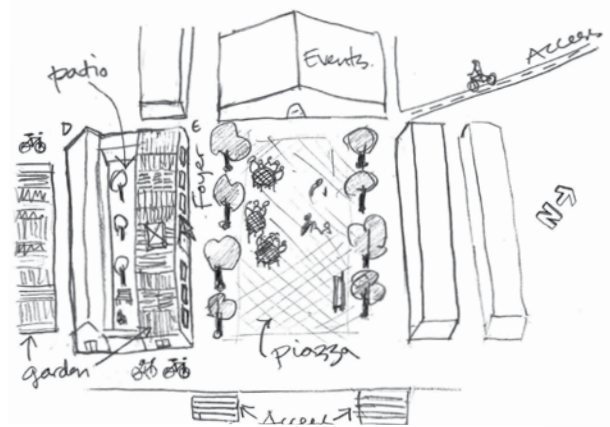
bruxelles
environnement
leefmilieu
brussel
brussels

Transversal Planning



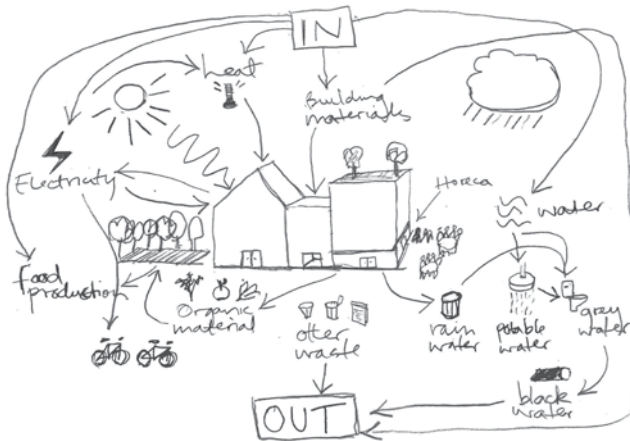
The landscape

The larger environment around the two buildings.



Common space

The technological problems related to the circulation of water, energy, food, waste and people around the site and beyond.



Circular flows

The specific quality that the private areas dedicated to housing will have to offer.



Intimacy

The quality of the publicly accessible areas such as restaurants, exposition spaces etc.

Document Properties

Project Acronym	TURAS
Grant Agreement No	282834
Nature of Document	Report
Related Work package	WP6
Task Leader	Brussels Environment

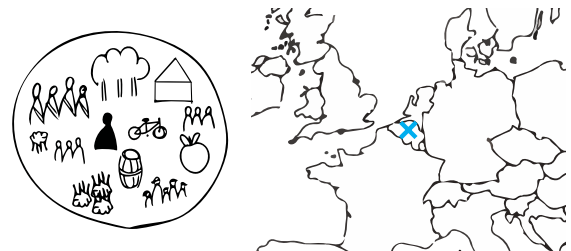
Authors This report was prepared by Stephan Kampelmann (**Université de Bruxelles / University of Stuttgart / OSMOS**) and Adrian Vickery Hill (**OSMOS**) on behalf of and with contributions from the funding partners: **Bruxelles Environnement / Leefmilieu Brussel** - Patrick Van Den Abele (workpackage coordinator), **Brussels University Alliance** - Cécile Sztalberg.

Dissemination level Public report

Version 11/12/16

Status of Document Final

Images Adrian Vickery Hill & Stephan Kampelmann, unless noted. Reasonable attempts have been to credit copyright holders for images used in this document; if there are any inadvertent omissions, corrections can be made in future adaptations.



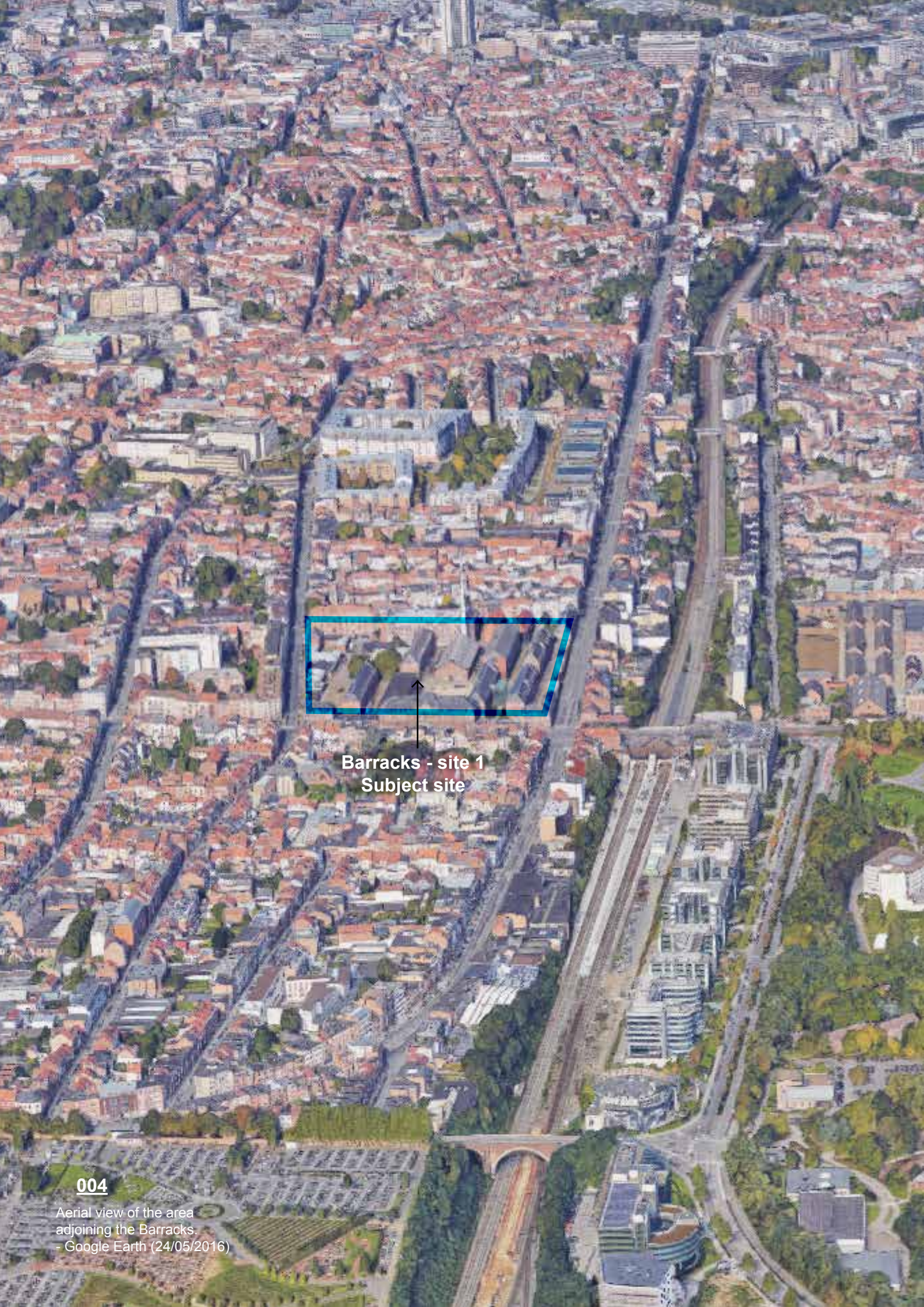
OVERVIEW

This report documents how the transversal planning approach was applied to the reconversion of a highly sensitive student housing project in Brussels involving numerous high profile actors and important public organisations. The objective for our contribution to the project was to navigate conflict and diverging interests while bringing together expertise and local knowledge to improve the quality of the overall project before a concrete architectural tender was released.

The site consists of two buildings within the Brussels Crown Barracks. The barracks are a 44,000 square meter complex in the South of Brussels, a significant example of late 19th century military architecture, which currently is home to the police headquarters. The federal government have begun selling of underused assets, while the Brussels Region has taken responsibility for purchasing the site and managing the redevelopment process.

An early masterplan dedicated a significant portion of the site for university related use (a condition of the sale of the site) and thus approximately €12 million from European Structural Funds was granted to the Brussels University Alliance (ULB & VUB) to adapt two buildings on the site. The two buildings are to host a variety of functions, including student accommodation, common learning and living areas, commercial space, restaurants, a business incubator, exhibition areas, spaces for urban agriculture and other functions. The ambition has been set very high. Firstly the project promises to offer excellence in building technology and explore the 'circular economy' at a building level. Secondly there is an ambition to run a consultative and co-creation based process involving academic specialists within both the French speaking ULB and the Flemish speaking VUB. Finally there is an ambition to develop this project independently of the regional government - contrary to development advice to the government.

The project involves a high level of complexity, both technical and social, and therefore was perfectly suited for the transversal planning approach. The conclusion of the report is the development of four key themes, noted below. These themes were described and then tested in order to avoid foreseeable long term conflicts and issues while defining the most feasible steps forward. This report is not the final project deliverable but a description of the process taken.



Barracks - site 1
Subject site

004

Aerial view of the area
adjoining the Barracks
- Google Earth (24/05/2016)

An aerial photograph of a dense urban cityscape, likely a European city, showing a mix of residential buildings, green spaces, and infrastructure. A white rectangular box is overlaid on the center of the image, containing the table of contents text. The text is centered and uses a clean, sans-serif font. The box is framed by two horizontal black lines, one above and one below the text.

CONTENTS

INTRODUCTION

METHODOLOGY OF
TRANSVERSAL PLANNING

1. INCEPTION

2. RESEARCH

3. FRAMING

4. EXPLORATION

5. DIALOGUE

6. DOCUMENTATION

7. IMPLEMENTATION

METHODOLOGY OF TRANSVERSAL PLANNING

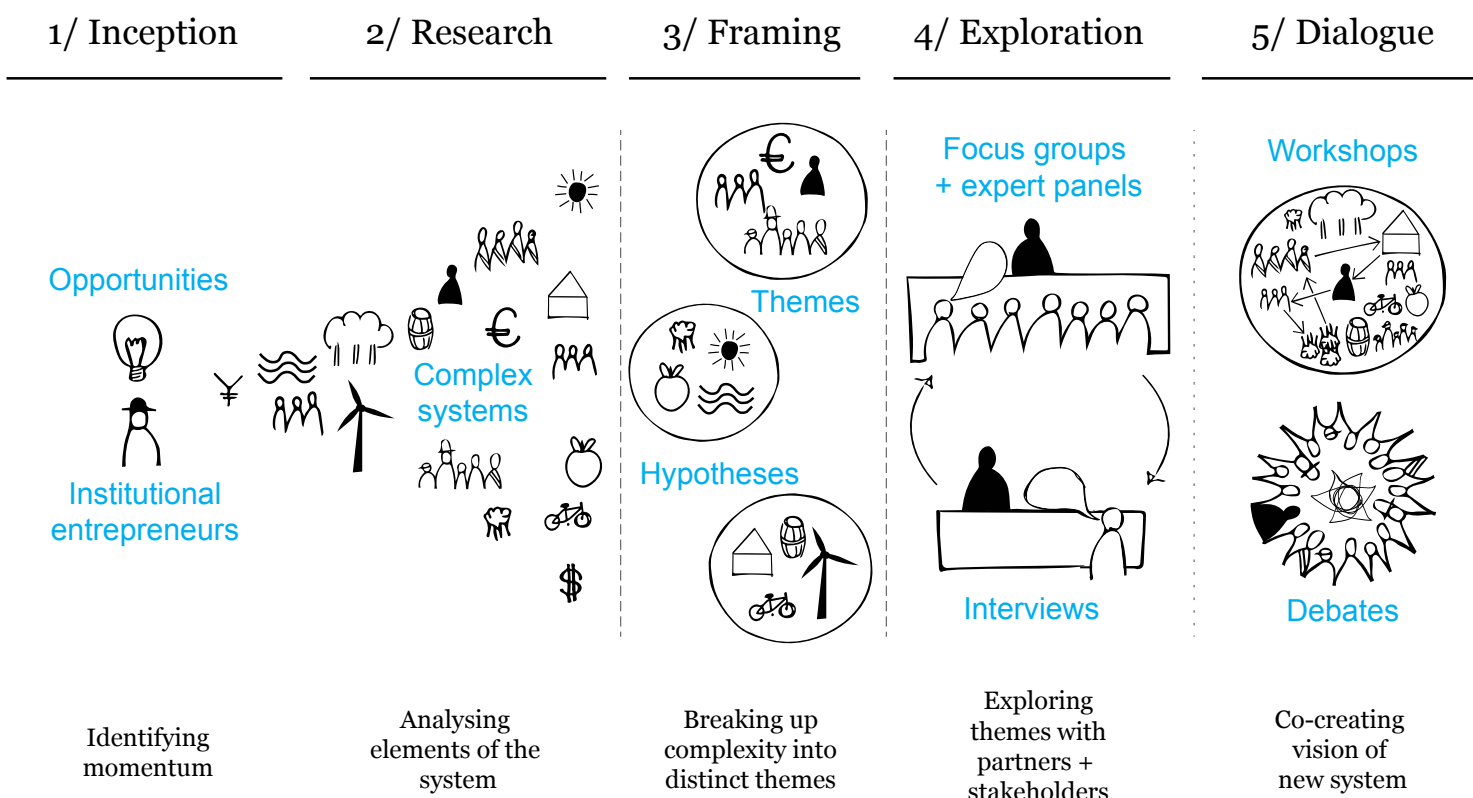
What is transversal planning?

The reconversion of a large site like the Crown Barracks in Brussels is an extremely complex process. In a nutshell, transversal planning is about rendering this complexity manageable without running into the pitfalls of oversimplification and silo thinking.

Planning the transition of the site from its current use (essentially as office space and communication infrastructure for the federal police) to new functions involves answering a multitude of questions that are usually addressed by different specialists including structural engineers, architects, business developers, housing experts, landscape designers, procurement administrators etc. Besides these specialists, there are other actors with valuable knowledge who are often not at all integrated into early stages of planning, like user groups, neighbours, municipal authorities

etc. The programme will also affect the wider neighbourhood and even metropolitan dynamics that are difficult to anticipate and incorporate.

Along with the increasing attention to network oriented concepts, much of planning scholarship, training, and practice have shifted from a conception of planners as technical experts on the spatial arrangement of land uses to a view of planners as intermediaries in public processes. Under the process oriented view, planners manage interactions among networks of stakeholders involved in planning processes to support more widespread and meaningful communication and collaboration (Forester 1989, 1993; Berke, Godschalk and Kaiser 2006). Conceiving of planners as mediators, facilitators, consensus builders, conveners, and shapers of attention (Forester 1989 and 2006, Innes and Booher 1999a and 1999b; Innes 2004; Berke, Godschalk and Kaiser 2006) implies that



more often than not planners have substantial involvement in – if not primary responsibility for – a planning process and engaging a network of stakeholders in the process.

From Lyles, W. (2015). Using social network analysis to examine planner involvement in environmentally oriented planning processes led by non-planning professions. *Journal of Environmental Planning and Management*, 58(11), 1961-1987

Our approach to the complexity of the reconversion programme is to provide straightforward knowledge management tools that allow for a structured and oriented dialogue about the future of the site. We see our role similar to a “curator” in the art world who collects ideas and visions from creative minds in order to combine them in a meaningful statement.

Why is it likely to lead to better results than other planning methods?

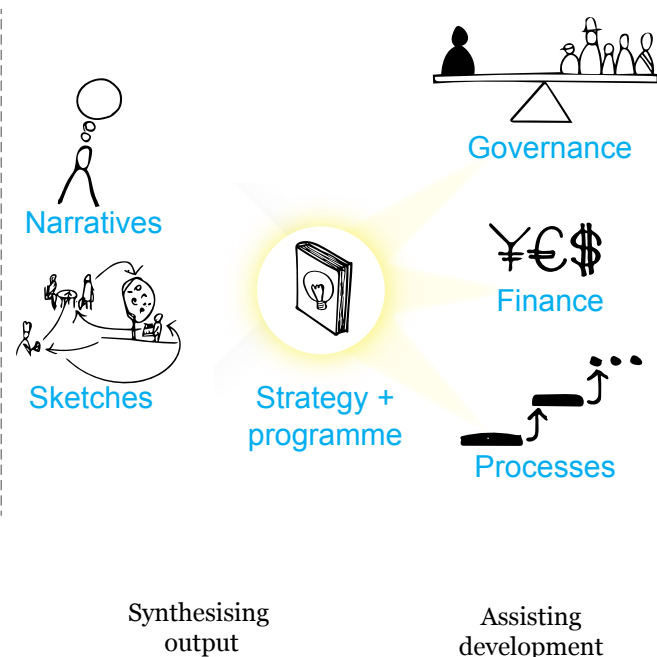
Post-war planning methods were exceedingly top-down, with decisions being taken by a small circle of powerful actors who consult specialists on specific technical problems. This approach has shown its limitations and there are numerous accounts of failed urban interventions that it produced. One reason for such failures is that without an effective dialogue between specialised experts, developers are often tempted to focus on individual aspects of a programme rather than a more “systemic” reading of the project site: this can lead, for instance, to technologically sophisticated interventions that are not accepted or properly maintained by users.

Moreover, a more transversal vision of the development can help to anticipate and attenuate conflicts that normally appear at later stages of the planning process, when changes to the initial programme come at exorbitant costs or are even impossible (see, for example, the hefty confrontations between planning authorities and citizens sparked by the overhaul of the train station in central Stuttgart).

Two alternative planning methods that can avoid some of the pitfalls associated with top-down planning are the market-driven approach and the consultative approach. The former is mainly driven by actors with access to resources who will only reach out to other actors if this is commercially interesting. This approach has often led to uncoordinated interventions and socially undesirable outcomes. The latter aims at consulting as many actors as possible and seek their opinions, but in practice this approach has often not been able to integrate them effectively in the planning process. Although consultative planning has aroused initial enthusiasm from stakeholders that had so far not been solicited, it rapidly runs into different forms of “participation fatigue” as stakeholders are frustrated that their views are prompted but only rarely find their way into final outcomes.

6/ Documentation

7/ Implementation



We created the transversal planning method to strike a balance between incorporating diverse views and remaining operational and result-oriented. We noted that constructive dialogue with user groups and other stakeholders arguably makes the most sense when many decisions are still in flux – but it is also at this early stage when such a dialogue is the most difficult to implement.

In the specific context of the Crown Barracks, transversal planning helps both universities to demonstrate their ability to integrate broader societal concern and visions into the reconversion of a site of strategic long-term importance for Brussels’ higher education, the surrounding neighbourhoods in Ixelles and Etterbeek and the city-region in general.



How does it work?

The complexity of reconversion projects like the Crown Barracks thus requires bringing together knowledge on the different functions and their ramifications for the buildings. The opposite sketch describes the process that we followed. After an initial **RESEARCH** phase, we disentangled the development and **FRAMED** them in distinct themes that are connected to initial hypotheses about the future of the site. For this site, the four themes are described as “landscape”, “circular flows”, “intimacy” and “common space”.

During the **EXPLORATION**, concise summaries regarding each of the four themes are informed through focus groups with users, expert panels, in-depth interviews and a synthesis of research. This step is the main input for the subsequent **CONVERSATION** about the potential complementarities and tensions between the different themes, i.e. their integration into a systemic vision of the site’s reconversion.

The short thematic briefs described in this document are notably used to work on the “edges” between each of the other three themes, to use a term borrowed from Christopher Alexander’s A Pattern Language. Working on the edges provides at least two advantages. First, it forces stakeholders and experts to leave the comfort zones of their

respective specialisations and contributes to a better understanding of how a specific element will behave when it is inserted into a larger system. Second, looking at the same interactions from two different perspectives yields “early warning” alerts whenever different specialisations provide conflicting solutions for the same type of interaction. For instance, it is not uncommon that engineers view the interaction between technological infrastructures and commons space differently than the business or residential community. This method is a way to articulate potential conflicts at a very early stage in the planning process.

What is the outcome?

The outcome of transversal planning is a programme that is co-created with a much larger constituency of experts and stakeholders compared to conventional interventions. In the **DOCUMENTATION**, the output of this co-creation is condensed in a meaningful narrative, describing the philosophy and conceptual cornerstones of the vision, as well as sketches of the reconversion. The narrative and sketches are presented in the form of a comprehensive document including a strategy and programme for the reconversion that can then be used in the **IMPLEMENTATION**.



No cafe, no pub, no doctor in London's most isolated suburb

In Barking Riverside, where the opening of a Morrisons Local was cause for celebration, residents have been waiting for a rail link since the 1990s



Examples of well resolved and attractively presented buildings that remain disconnected from their contexts.

LEFT - Top + bottom: Nottingham Trent Basin Waterside (UK). The redevelopment of Nottingham's industrial precinct began with exclusive apartment housing that was disconnected from transport, parks, shops or other residents.

Top - Google Maps, accessed 29/05/2016.

Bottom - Riverside Crescent, Waterside Way, Nottingham.

THIS PAGE - Top + bottom: Barking Riverside east of London has been built under high-tension powerlines and a great distance from public transport while offering no parking spaces and a dependence on London for employment. The site may have considered a long-term plan however in the short-term, existing have almost no services or mobility choice.

Top - architectural montage (Gustafson Porter)

Bottom - “No cafe, no pub, no doctor in London's most isolated suburb”. The Guardian 17/08/2015.

1. INCEPTION

The inception is about defining the launching point, in terms of the socio-economic environment of the problem or project, the main driver of the project (what we refer to as the ‘institutional entrepreneur’) and the institutional context upon which it is grounded.

In this case the project was being carried by a collaboration between the two Free Universities of Brussels (ULB & VUB), representing two language groups and a diverse range of interests and expertise. The site is owned by the national government, to be transferred to the regional government thus involving numerous scales of government and political interests too. Some €12 million has been secured from European structural funds. The project ambitions are high.



011

View of the only at-grade entry
from Avenue de la Couronne /
Kroonlaan.

Setting the scene

Exploring the narrative of a project such as this requires standing in the user's shoes - in this case those of the Brussels University Alliance (BUA). As such it means drawing key details into the narrative that make it relevant to the end-users. This story may be a very different one if it were focused on the eyes of the immediate neighbours or the regional government.

The starting point

Reconverting the three barracks that lie on Boulevard Général Jacques in Ixelles and Etterbeek and using them to create a more coherent neighbourhood around Brussels' large universities is not a new idea – in fact it emerged as soon as the federal police started to consider leaving the site more than a decade ago. Didier Viviers, who oversaw much of the progress in recent years while he was rector of the ULB, recalls an interview many years ago that he gave in a tram that happened to be passing the Ancienne école royale de gendarmerie. His improvised remark to the journalist about the high potential of the barracks for the universities gradually turned into a structured and coherent plan for the reconversion of the site. Under the supervision of the Brussels University Alliance (BUA), which federates the ULB and VUB, a transformation concept was elaborated and approved by a wide range of stakeholders, including political decision makers at different levels.

In 2014, the BUA applied for financial support from the European Union through the programme for regional structural funds, with success. Paul de Knop, who as rector of the VUB very early recognised the potential for improving the visibility and image of research 'made in Brussels', looked back in May 2016 on the protracted but continuous progress that has been made since the inception of the project: "It is certainly a very long time now that we talk about converting these buildings. But while the progress appears to be slow, in fact many things have been already achieved. With the FEDER programme and the subsequent work we are now firmly on our way."

The site and the city

The "Ancienne école royale de gendarmerie" on Boulevard Général Jacques 210 in Ixelles was built in 1909 on a plot of around 50.000 square meters. Today the site adjoins the Plaine and Solbosch campuses of the two main universities of Brussels, the Université libre de Bruxelles (ULB) and the Vrije Universiteit Brussel (VUB). To the Northwest, Flagey is within 1.5 km. The European institutions around Schumann are 2.5 km to the North.

It is expected that the current tenant, the federal police, will move out of the barracks in 2016, freeing the complex for a new use. This unique opportunity has been identified by the authorities of the ULB and the VUB, jointly represented by the Brussels University Alliance (BUA). With broad political support from all parties and at different levels, the idea emerged to dedicate the site to the integration of the academic neighbourhood through an audacious urban intervention that would also reinforce – and potentially redefine – the relationships of the universities with the city-region of Brussels. The leverage of this intervention is potentially enormous, notably because the slightly older Caserne Lieutenant Général Baron de Witte de Haelen (on Boulevard Général Jacques 292) and the Caserne Major Geruzet (on Boulevard Général Jacques 294) will also be in need of a new concept in the foreseeable future.

The programme for the reconversion of the Barracks will need to provide a concept as to how the site can become a meaningful place that connects it to the identity of Brussels. It should notably clarify the ambitions for redefining its relationships with and position in different urban networks and the surrounding neighbourhoods.

The site beyond the city

The reconversion of the Barracks means nothing less than weaving it into the urban fabric of a city that has gradually become a (small) world city with continental and global functions. This means that Brussels is closely connected to larger trends like globalisation and the urbanisation of contemporary societies and their economies. In many cities, including Brussels, this has led to more diversity and above all to more mixity. The urban society is not anymore shaped by multi-cultural or international relationships. It lacks a clear "reference community" into which people from other communities can integrate. Rather, urban society

is about living together in a novel, inter-cultural reference system.

In the international context, “Brussels” is often synonym for the European Union. But in a time when the European project experiences profound crisis, the image that many people around the world associate with the Capital of Europe is also in crisis. The deadly attacks from March 2016 have further deteriorated the city’s reputation.

The reconversion programme is an opportunity to promote other realities and strengths of the city – including its large universities and knowledge economy – in order to avoid being limited to the seat of the EU and the proverbial “beer, waffles and chocolate”. It needs to explain how the project can redefine the identity of Brussels and transport it onto the international stage.

The evolution of the site

The history of both the design and the reconversion of the barracks echoes the close relationship between Brussels and her cousin, the city of Paris. The initial architecture and layout of all three barracks on Boulevard Général Jaques were inspired by the military academy at the Champs-de-Mars in the French capital. The initial ideas for a reconversion programme that would turn the barracks into a *Cité Internationale Universitaire* were also inspired by the Parisian *Cité Internationale Universitaire* that developed between 1925 and 1969 in the form of 40 individual buildings, blending different architectural influences from all over the world. The spirit of this idea emerged from John D. Rockefeller’s utopian vision that would breed multicultural compassion and avoid conflict like the two World Wars earlier in the century. Finally, the idea to turn the barracks into a focal point of a Brussels version of a “quartier latin” makes reference to Paris, too, this time to the lively neighbourhoods under the influence of the Sorbonne.

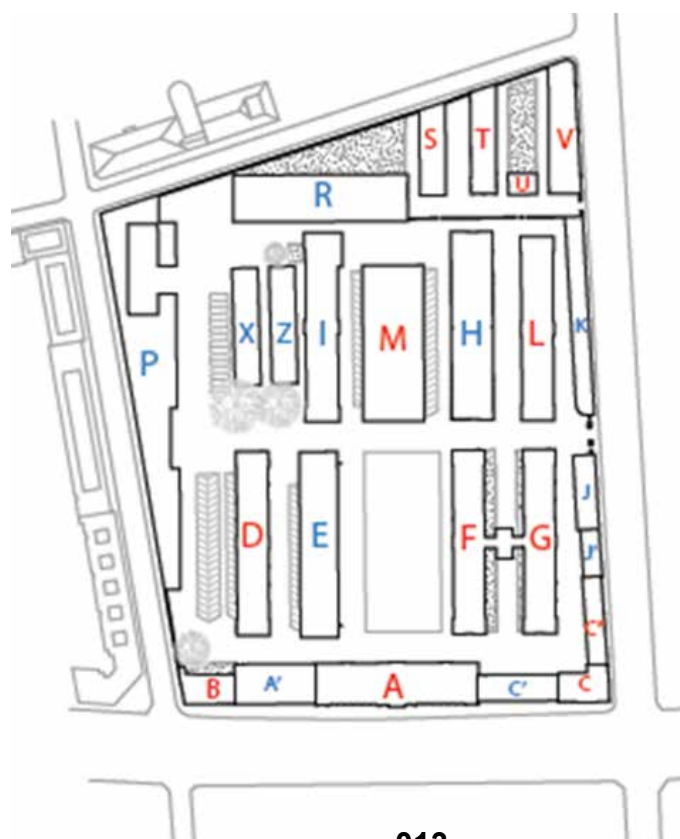
But Brussels is of course not Paris, and the future use of the site will have to overcome these parallels and develop its own interpretation of what the place should become. The context in Brussels is very different. For instance, the position of the universities in the regional landscape is much more prominent: they are the biggest public employer in the region and their role is further amplified by the key importance of research and knowledge in today’s globalised economy.

The site is part of the city

There is pressure for new urban functions to be accommodated in the Barracks: the project will provide much needed housing, but also a focal point for new types of work in the knowledge economy. It can be a laboratory for the transition towards more sustainable living. Given the ‘glocal’ position of Brussels, the reconversion also provides the grounds of a laboratory for new forms of cosmopolitan urbanity in which individuals and groups from different social, cultural and economic contexts jointly create new interpretations of a cosmopolitan neighbourhood in the 21st century.

Project organisation

The project was coordinated by the BUA - consisting of a small team consulting directly with relevant staff, public and technical actors. A project steering committee consisting of experts, academics and management staff from both universities was created to review the contents of work. Smaller working groups were formed based on specific issues. The outcome of the work was subject to approval by the BUA committee.



013

The building numbers - buildings D & E are the focus of this project.

LE MINISTRE NATIONAL
NATIONALE GENDARMERIE

NEW 42
DOUG



2. RESEARCH

The research stage involves exploring documents, reports, plans, speaking to experts, interest groups and users or residents in order to understand the larger system.

In this case there were numerous projects developed by both universities surrounding possible architectural and urban design opportunities for the barracks in addition to sociologists and historical knowledge of the site within the universities. There is archived information and a recent masterplan commissioned to value the site. The project proposal for the EU funding also describes key objectives.



Building the story

In many cases, a lot of foundational work has been done or knowledge is available which can be drawn on to identify leverage points within the system. On the one hand this is about researching reports, literature and documentation. On the other hand it is about identifying key individuals or expert groups that can be interviewed. The University community is a rich source of knowledge and therefore many of the academic staff were ideal reference points. The challenge here was to consciously decide both what fits into and what is left out of the story.

Sources

There have been a range of studies and projects that have explored development opportunities on the site and include:

- Student projects from 2014 and 2015 on the site within the ULB and VUB.
- The description of the FEDER project submitted by both universities playing a role on the site.
- A workshop in 2015 hosted by the BUA and associated documentation.
- The master plan drawn up by the private office MSA and approved by the government of the Brussels Capital Region was used to evaluate the site for purchase by the Region. It proposed that a significant portion of the site would be dedicated to university-related functions.
- Heritage classification studies. In short the buildings on the site are considered of heritage value but, as we are aware, have not been classified. The MSA masterplan researched the heritage value of a range of buildings and categorised them in terms of façade and internal value. The three buildings along Boulevard Général Jacques are considered of greatest value.
- A number of other internal strategic documents and meetings based on internal expertise.

The result at present is that no masterplan or legal land-use change has occurred.

This material was used to frame four themes that are described in the next step.



016

Grande légion mobile. En arrière plan, manège de l'ancienne école royale de gendarmerie d'Ixelles, 1927, Archives du Musée de la Police intégrée.

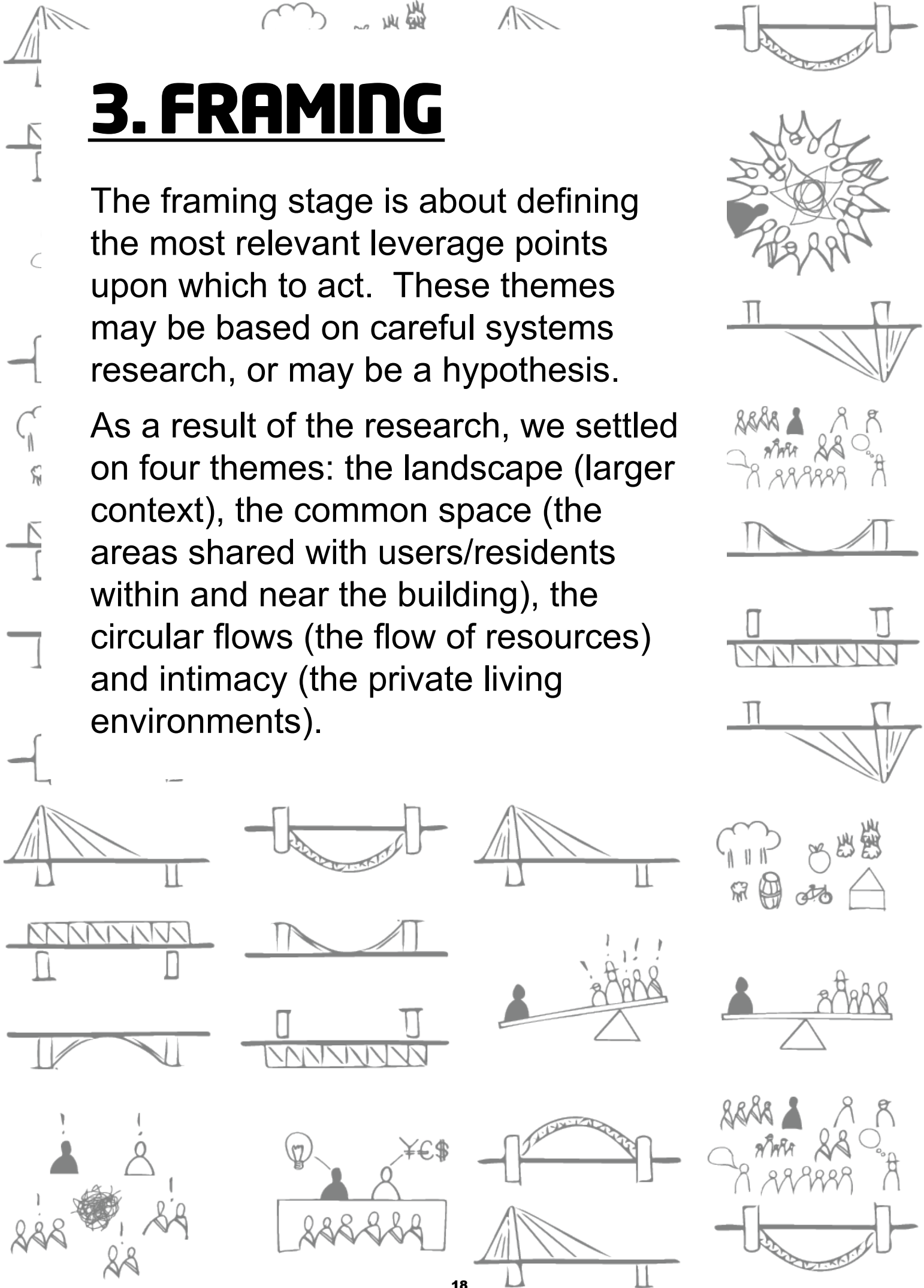
017

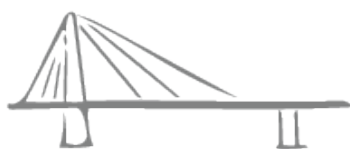
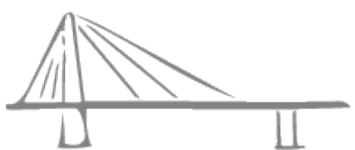
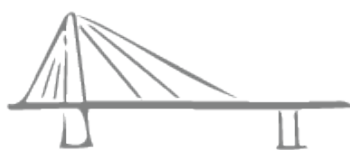
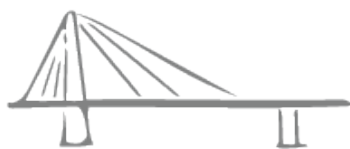
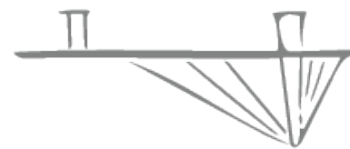
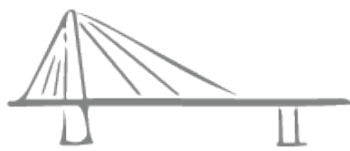
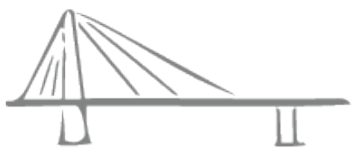
Top left: building E outside. Middle left: between buildings F and G. Bottom left: building D outside. Bottom right: the cover of the successful EU structural funds application. Photos: BUA.

3. FRAMING

The framing stage is about defining the most relevant leverage points upon which to act. These themes may be based on careful systems research, or may be a hypothesis.

As a result of the research, we settled on four themes: the landscape (larger context), the common space (the areas shared with users/residents within and near the building), the circular flows (the flow of resources) and intimacy (the private living environments).





Defining the leverage points

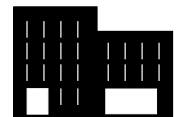
Defining the leverage points for action means having an understanding of the larger system within which the project or site is situated. Technically it could mean mapping out the system and defining the most effective issues to focus on. Where the complexity is great, it could be done through identifying the most relevant themes raised in the research phase (step 2) and then presenting these themes as a hypothesis to be tested in step 4. In this case, the four themes selected emerged from internal discussions, ambitions of the project by the universities' governance body and the objectives laid out in the EU funding application. To simplify the four themes, They contained simple one or two word titles and an icon which meant that it was easy for anyone to refer to the concept regardless of language or expertise. The themes were validated by the working committee.

Four Themes

Based on the material studied during the research phase, we framed the different dimensions of the reconversion project using four distinct themes: landscape, common space, circular flows and intimacy. This helped to break down the complexity of the project and allowed us to focus on particular aspects during the focus groups, expert panels and interviews we conducted. The four themes are briefly introduced below.

The landscape

The landscape is about the larger social, physical and economic environment in which the two buildings are embedded. The landscape looks at how the site itself relates to the city and users beyond the site of the barracks and therefore reads the two buildings as elements of the larger barracks development project.



Circular flows

This theme is concerned with technical questions related to the circulation of water, energy, building materials, food, organic materials (possibly recycled on site), other inorganic materials (recycled remote from the site) and waste. The on-site reuse of dismantled building materials will also be considered. It is also about how people interact with the buildings.



Common space

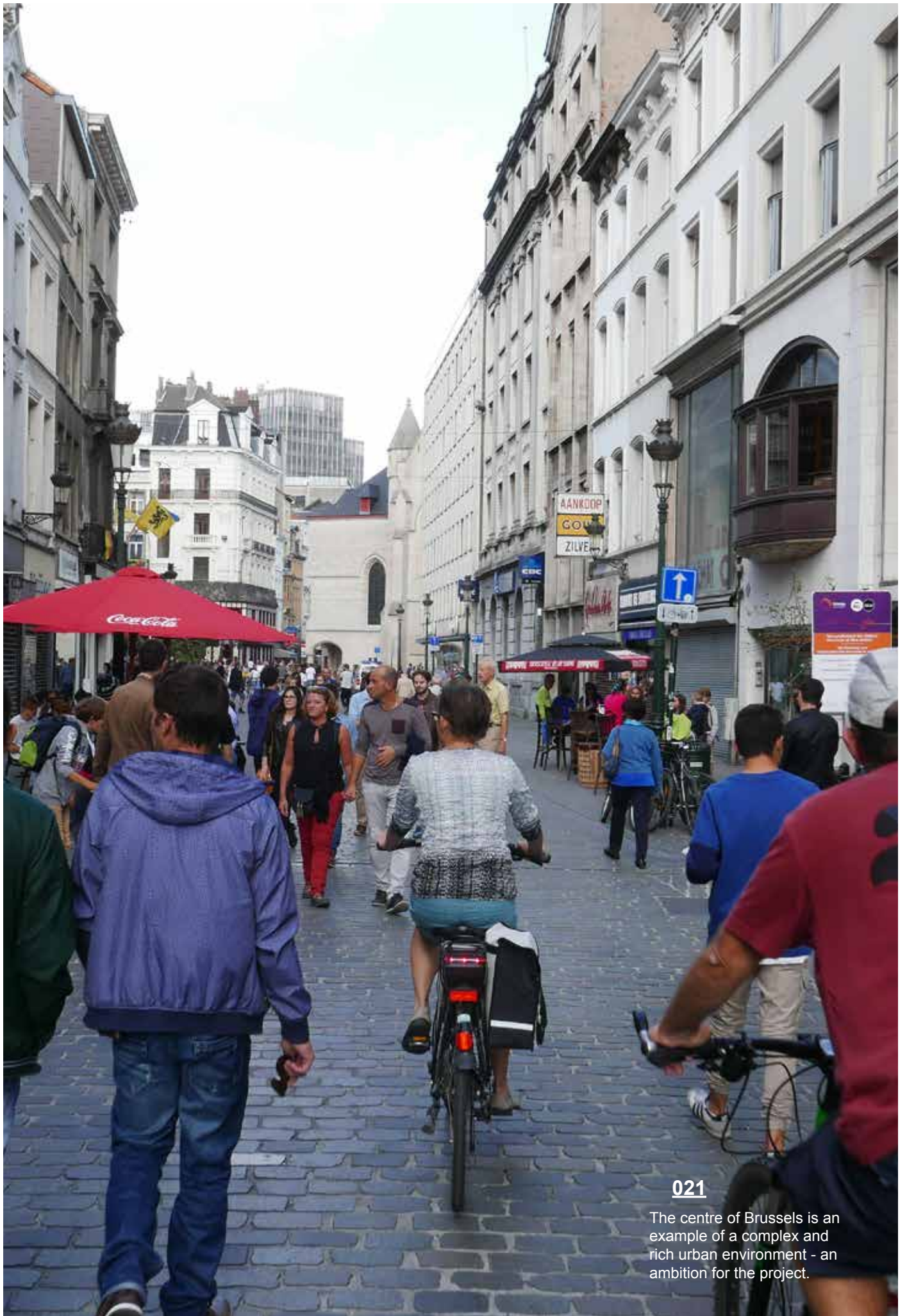
The common space is about how the site fits within the context of the surrounding neighbourhood and their richness and complexity. It is, for instance, about the character of the publicly accessible areas such as restaurants, exhibition spaces, outdoor areas and other public spaces.



Intimacy

Intimacy focuses on the quality of the private areas dedicated to housing. There are a number of housing types which are being proposed and thus it looks at how design affects living conditions, how shared housing is related to single unit housing, how space and facilities are shared (such as kitchens and toilets), security issues, selection processes and so on.





021

The centre of Brussels is an example of a complex and rich urban environment - an ambition for the project.



4. EXPLORATION

Exploration involves testing, elaborating and refining the themes that were chosen in the previous step. It may involve interviews, expert groups, focus groups and surveys in order to better define the selected themes.

In this case a range of meetings, interviews, focus groups, feedback moments and so on were provided, all building a stronger image of the four themes. This process took advantage of the expertise within the university on a range of issues that are often costly or difficult to access.



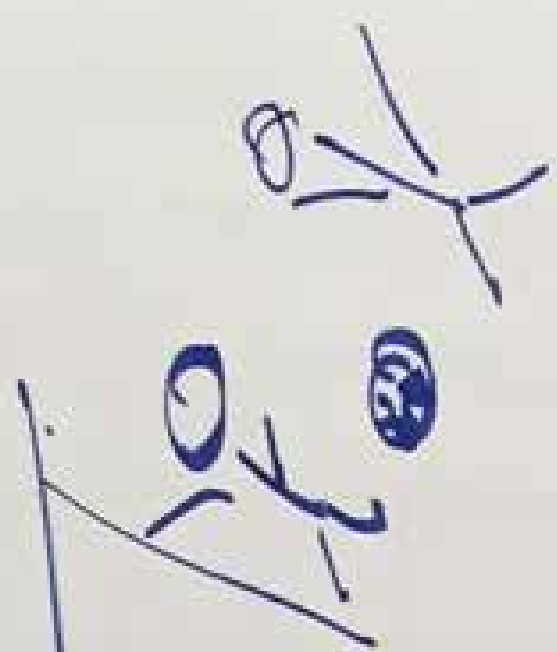
WELCOME

WELCOME

WELCOME



US WHERE





Building the themes

Once the general concept of the themes are accepted, they need to be fleshed out and defined. It is about framing the themes enough such that they are easily understood, without describing them too precisely to ensure that changes and adaptation is possible. This does not need extensive research and can be done easily through discussions and consultation with relevant stakeholders. Stakeholder involvement is also integral as it creates value.

The consultation and development process

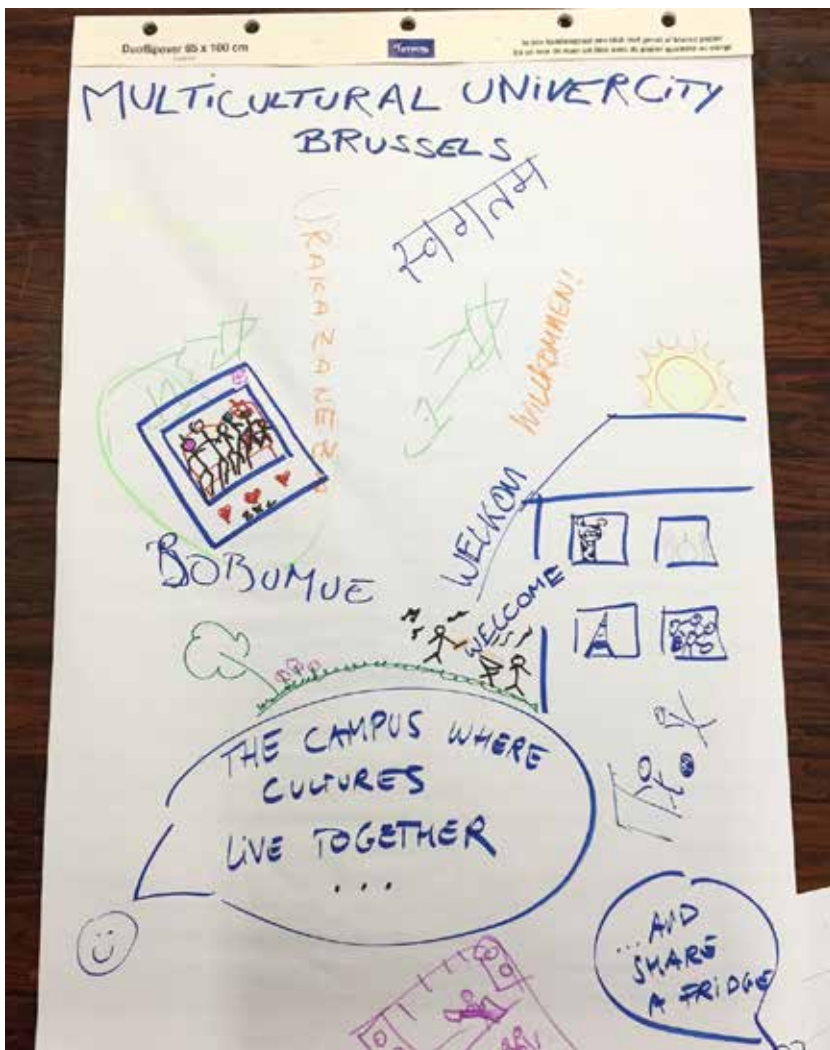
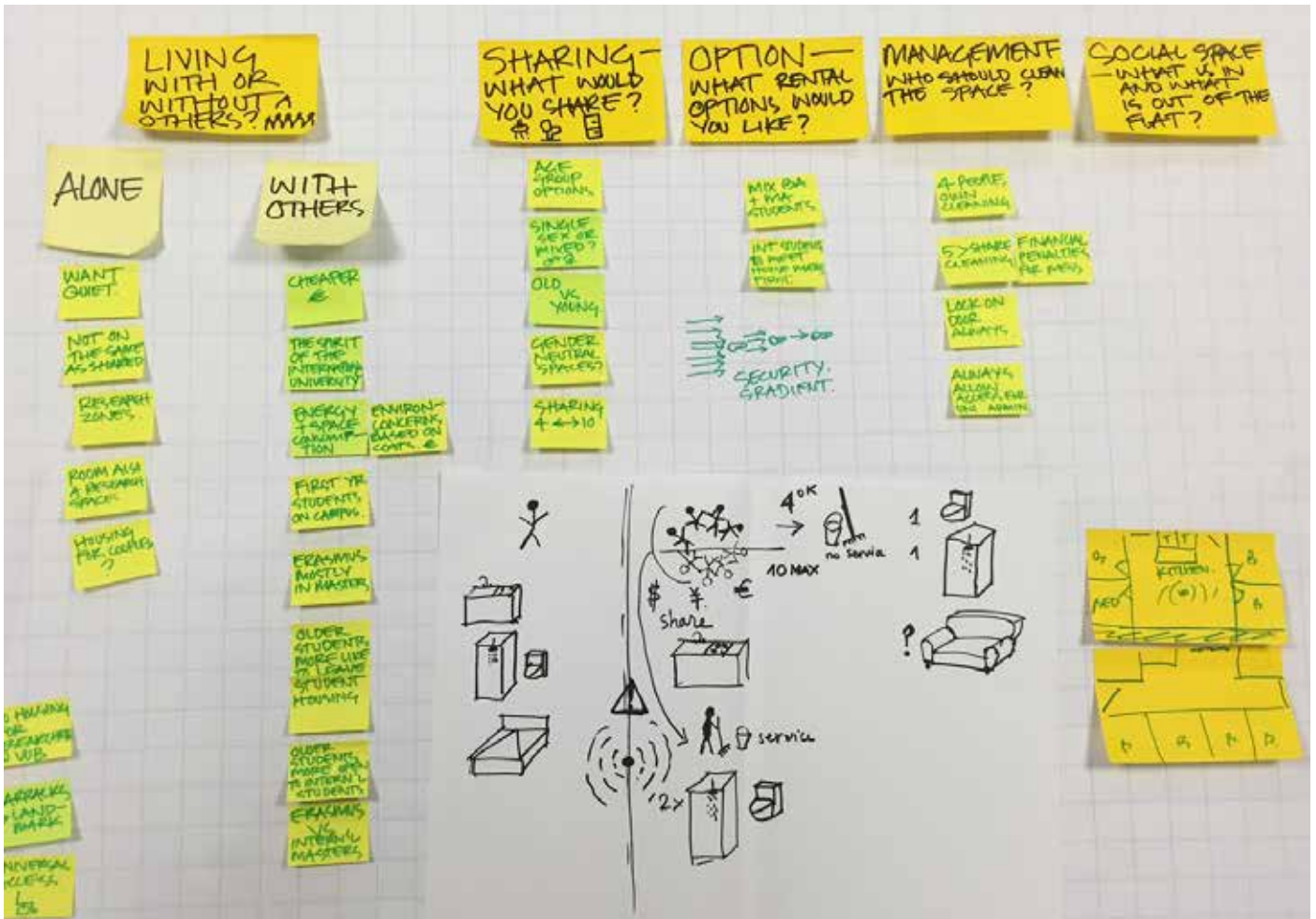
The exploratory process was developed from February to May 2016 culminating in the workshop with stakeholders on the 26th of May. The process involved expert meetings, a focus group and expert interviews.

University academic staff were both stakeholders, interest groups and had expert knowledge that

could be essential for the project. The project could tap into engineering and technology, sociology, history, design, planning and economic skills. Such a diverse range of skills are uncommon within a single organisation. Access to knowledge thus was not the challenge, identifying the most applicable knowledge was. Expert groups were split into the four themes noted earlier in the document: landscape, common space, circular flows and intimacy. Taking into account the size of the groups, smaller groups were organized to allow all participants to express their opinions.

Consequently, and to tease out information relevant to the four themes of the project (landscape, common space, circular flows and intimacy), we conducted interviews with six experts from within and outside the universities. This allowed for information to be checked outside of a group discussion where sensitive information often can be concealed.

Finally, for the intimacy theme, we organised a focus group involving local and international students and academics that live or have lived together on campuses around the world. Intimacy was the most subjective of the four themes and we were looking for real personal experiences rather than facts and figures. We wanted to know how people felt living on campus and around people that didn't necessarily know each other very well.



024

A presentation at a focus group with (local and international) students and staff on the topic of housing.

025

Top and bottom. The outcomes of the focus group on housing.

THE NEW EXPERIMENTAL
DYNAMICS:
GIVE THE CLASSIFICATION
NOT IN THE
TERMS.

LA RAISON
TO OFFER

URBAN

INCORPORATE STUDENT:
GIVE AND TAKE → ACADEMIC
CREDIT!!

AUTHENTIC
IDENTITY

IDENTITY
IN URBAN
ARCHITECTURE

INTIMACY

"LACK OF

BRUSSELS → BAR
(REPRESENTATION)

QUESTION
"GAME BRUXELLES"
UNIVERSITÄT
SPACE

5. DIALOGUE

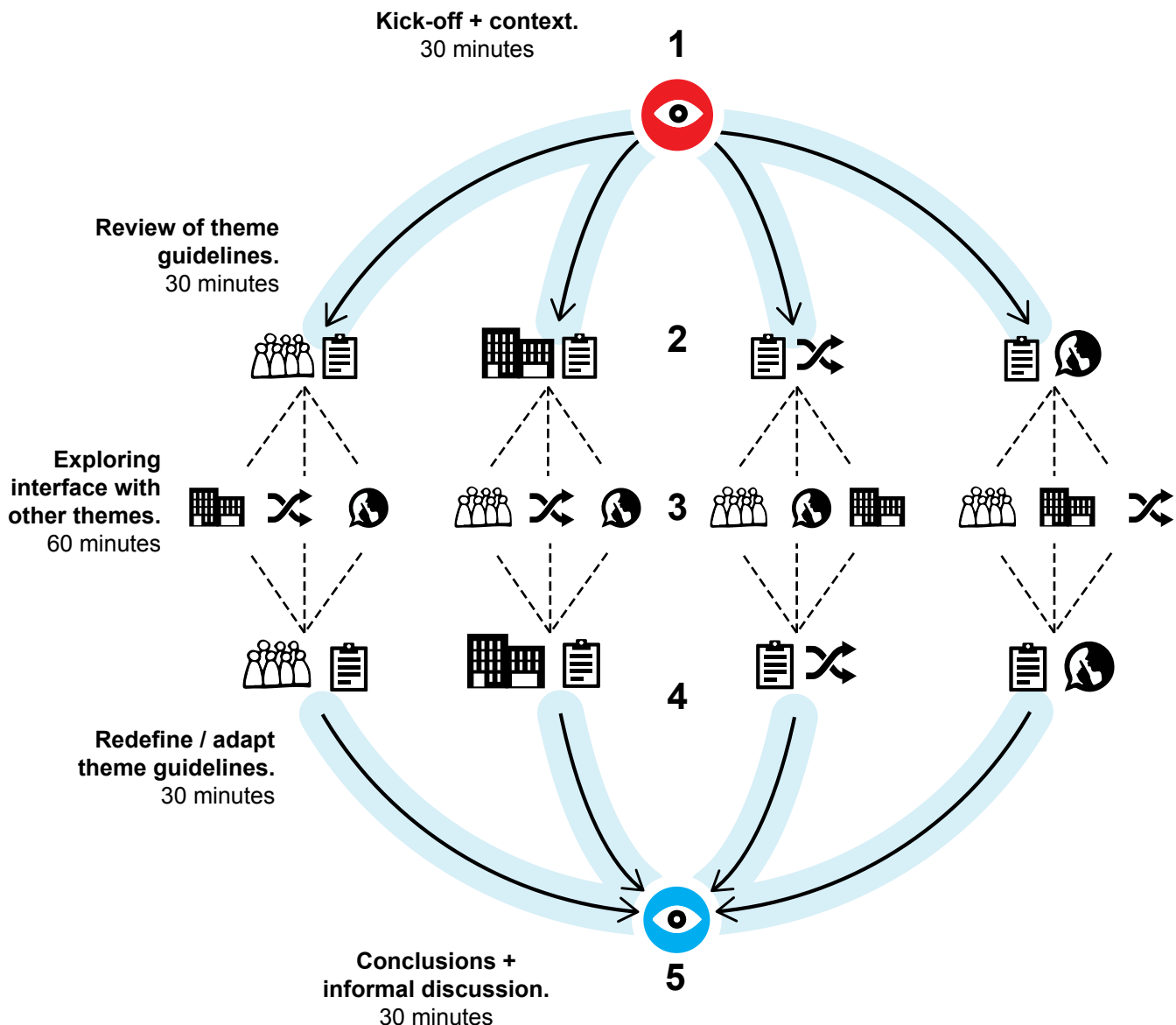
The dialogue moment is where the co-creation occurs. Co-creation is based on strong background research to avoid confusion and discrepancies, however opens the horizon to test the themes within multi-disciplinary discussion and co-production. In this way participants are encouraged to actively communicate through a range of mediums – through words, writing, drawing or even acting.

In this step, limited time forced a creative approach to co-creation by exploring complementarities and frictions between the themes using a 'dialectics' exercise.

Co-creation workshop

The co-creation process is essential for two reasons. Firstly it helps to test the material developed and secondly (and possibly more importantly) it builds empathy quickly by ensuring actors can appreciate different perspectives/interests and explore possible practical solutions within the space of workshop.

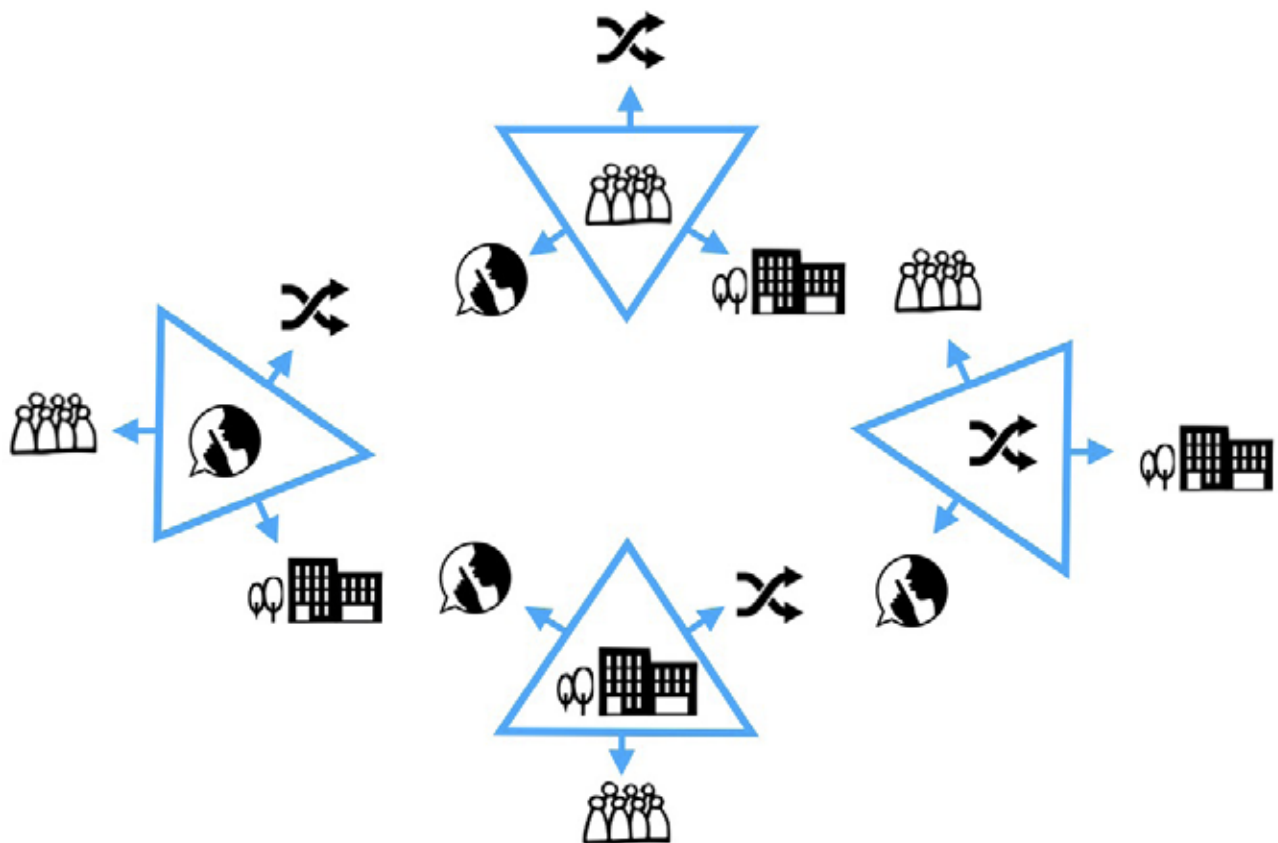
The method is based on the 'curatorial method' for dealing with complexity in a workshop moment. While the curatorial approach ideally requires a day if not a number of consecutive days of work to refine topics, there was only a very limited time available for this workshop and thus we needed to use the time as effectively as possible. The complexity of this programme required a way to bring together knowledge on the different functions and their ramifications for the buildings. We decided to address this challenge by NOT focusing on specialised knowledge in each area, but by explicitly engaging experts and stakeholders in a reflection on the [INTERACTIONS](#) between four themes that together capture a large portion of the project's complexity.





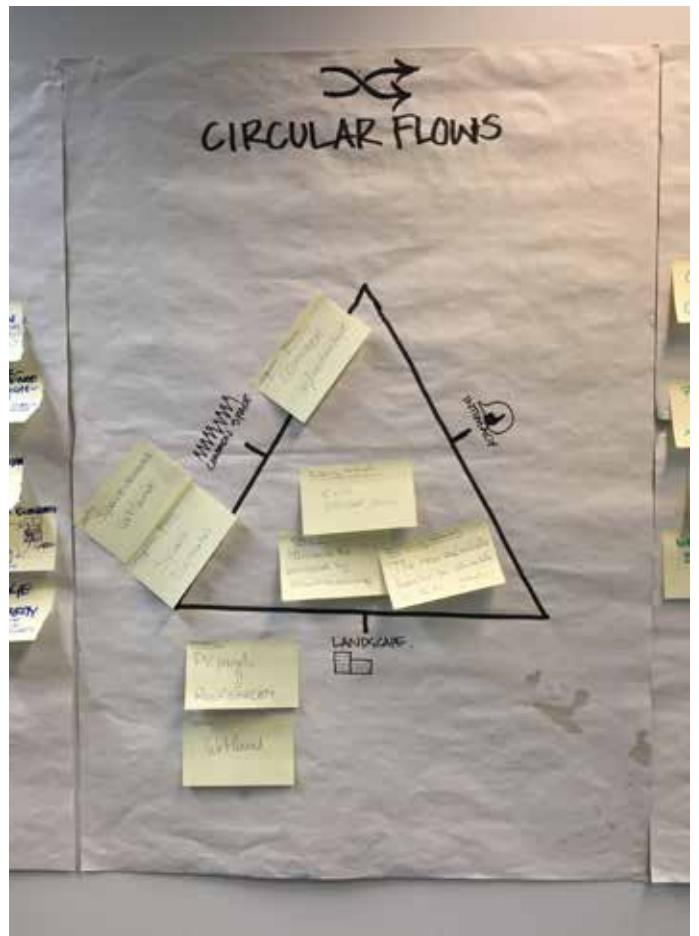
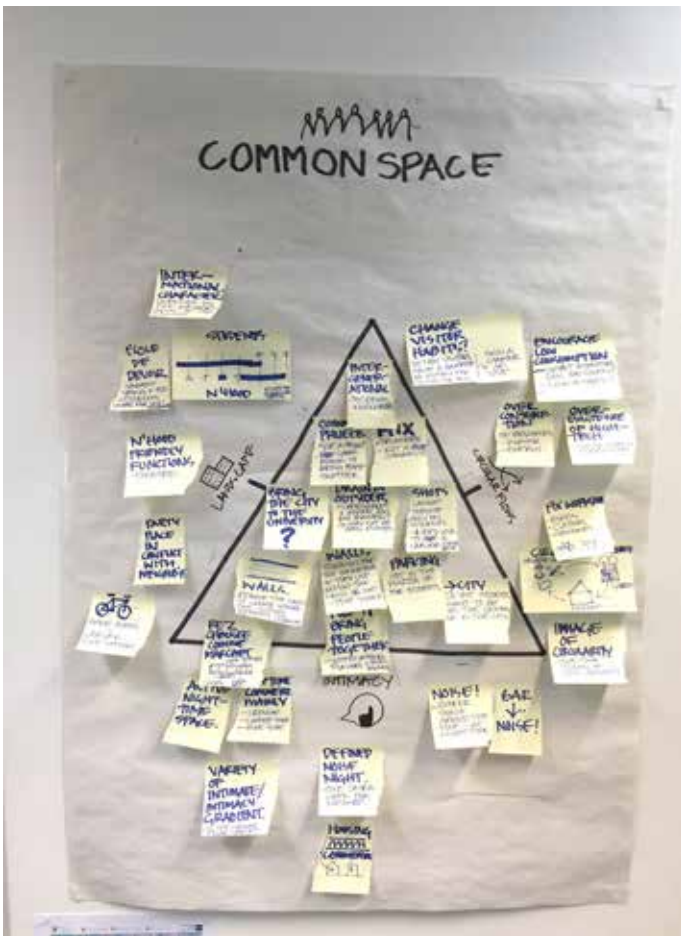
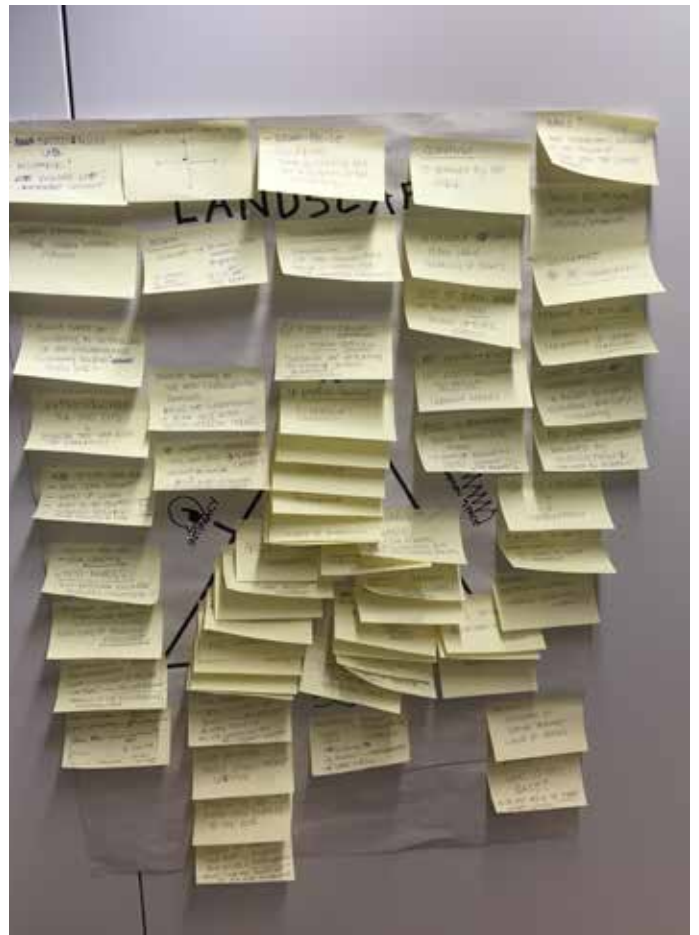
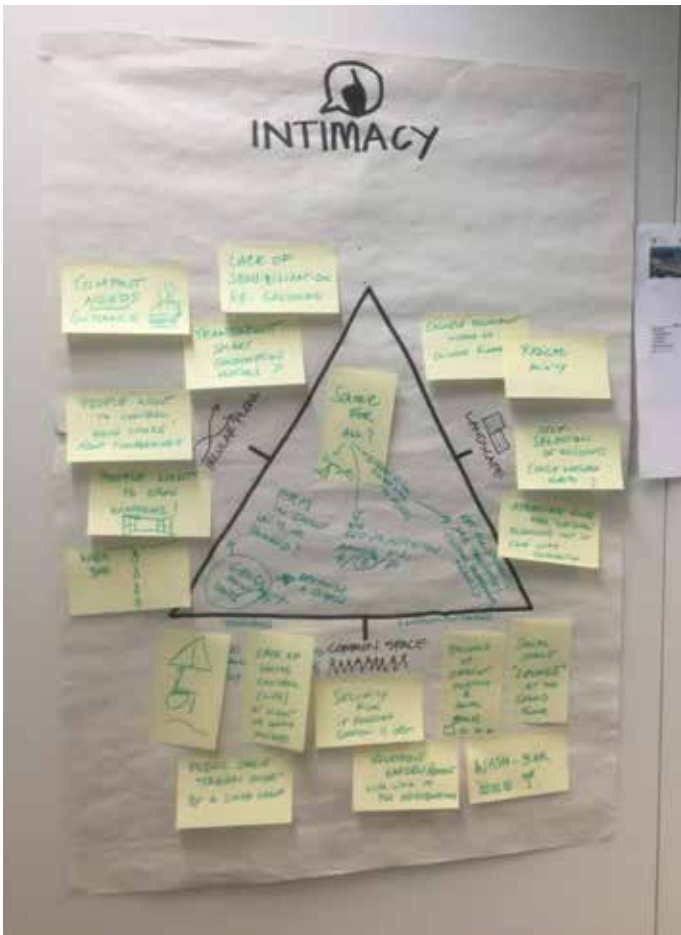
Thesis – Antithesis – Synthesis: Applying Hegelian dialectics to an urban project.

Ultimately the workshop is an integrated approach. The Theme Guidelines will be used to work on the “edges” between each of the other three themes, to use a term borrowed from Christopher Alexander’s A Pattern Language. Working on the edges provides at least two advantages. First, it forces stakeholders and experts to leave the comfort zones of their respective specialisations and contributes to a better understanding of how a specific element will behave when it is inserted into a larger system. Second, looking at the same interactions from two different perspectives yields “early warning” alerts whenever different specialisations provide conflicting solutions for the same type of interaction. For instance, it is not uncommon that engineers view the interaction between technological infrastructures and commons space differently than the business or residential community. This method is a way to articulate such potential conflicts at a very early stage in the planning process.



The analysis of the interactions between the four different themes of the programme can be summarised in terms of a thesis (in this case a statement or hypothesis from a theme x), an antithesis (describing a potential conflict between the thesis in light of theme y), and a synthesis that could overcome the tension between the two themes.

The theses have been developed in the **EXPLORATION** phase. The Antitheses have been collected during the **DIALOGUE** phase. We indicated suggestions on how syntheses could overcome the tensions between theses and antitheses, but their resolution needs to be studied further on a case-by-case basis and should be seen as part of the challenge for the future planning process.



031

Output from the workshop showing the Hegelian dialectics.



6. DOCUMENTATION

Up to this stage, the themes and ideas converge until they are synthesised into a vision document or masterplan. This is about committing to certain ideas so that all new work can be well founded and a range of different actors with different interests and expertise can contribute to the project. The output could involve text, drawings, plans, schemes and processes diagrams.

In this case we used text descriptions and 'naïve' hand drawings to describe the themes. The drawings were meant to be simple enough to understand the main concepts without designing an architectural project. It was meant to inspire the next steps through clear guidelines but without committing too much detail. Here we include a few examples from the final output.

From: Brussels Crown Barracks

To: Grounded universities

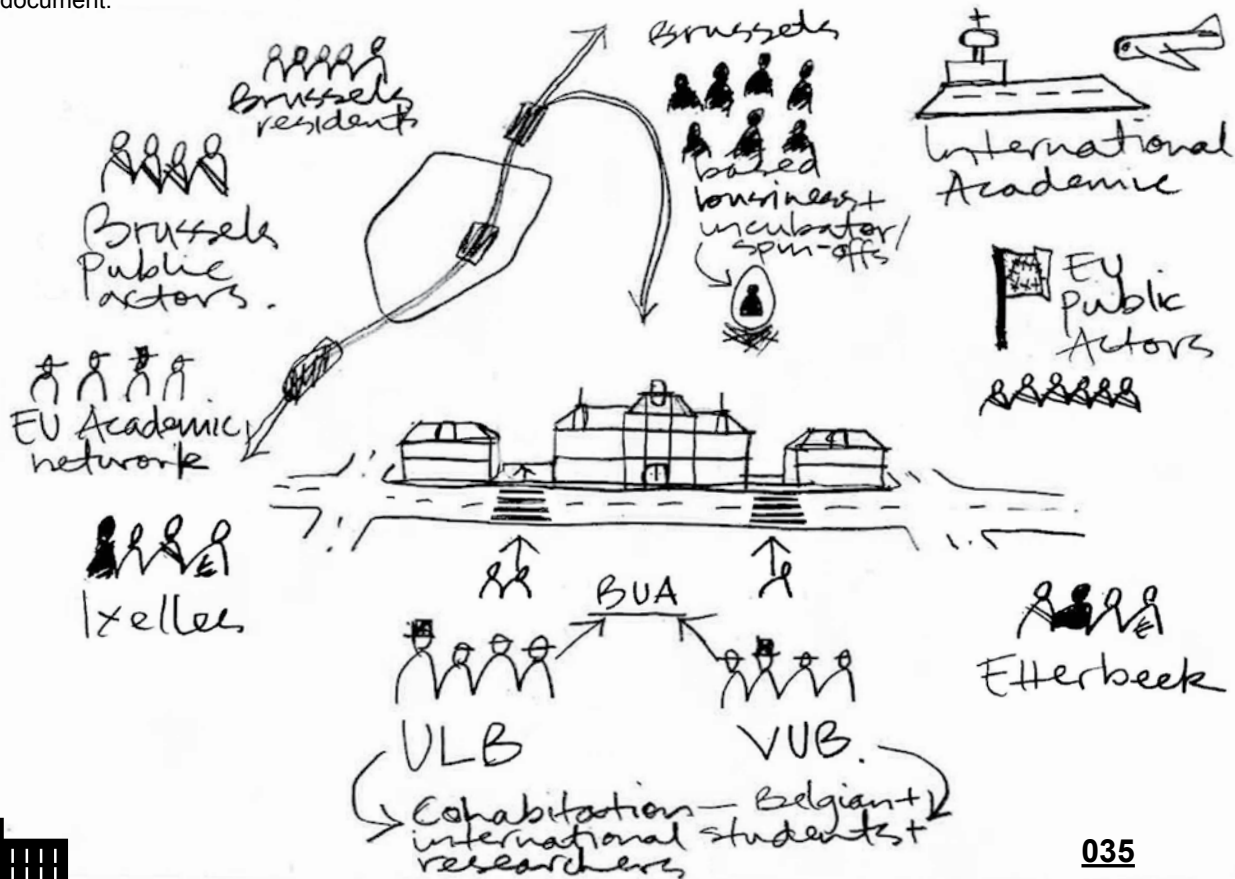
This chapter presents the final outcome of the transversal planning process. The results of research, framing, exploration and dialogue are summarised in two ways.

- Firstly playful and intuitive sketches provide a quick overview of the hypotheses that have emerged during the process, capturing both specific ideas and general atmosphere of the reconversion project.
- Secondly a narrative regarding all aspects of the reconversion project puts into plain and coherent language what was previously a scatter of text fragments. The narrative relates the statements and concepts we collected from experts, previous planning documents and other sources.

The general purpose of this section is to inform the future planning process, and especially to improve the quality and clarity of the tender documents that will accompany the selection of planning professionals.

The presentation of all output is structured into the four themes. For each of these four themes, we first present a brief headline that captures the overall concept for each theme and show an overview sketch. The working hypotheses that have emerged during the process are then described in more detail. Finally, during the dialogue phase we have worked on the dialectics between the different themes. The results of these discussions are presented in the form of dialectic bilateral relationships between themes: a thesis on theme a is confronted with an antithesis on theme b. The underlying tension between thesis and antithesis could be overcome by a synthesis between theme a and b.

The cover of the final vision document.



035

Sketch of the Landscape concept.



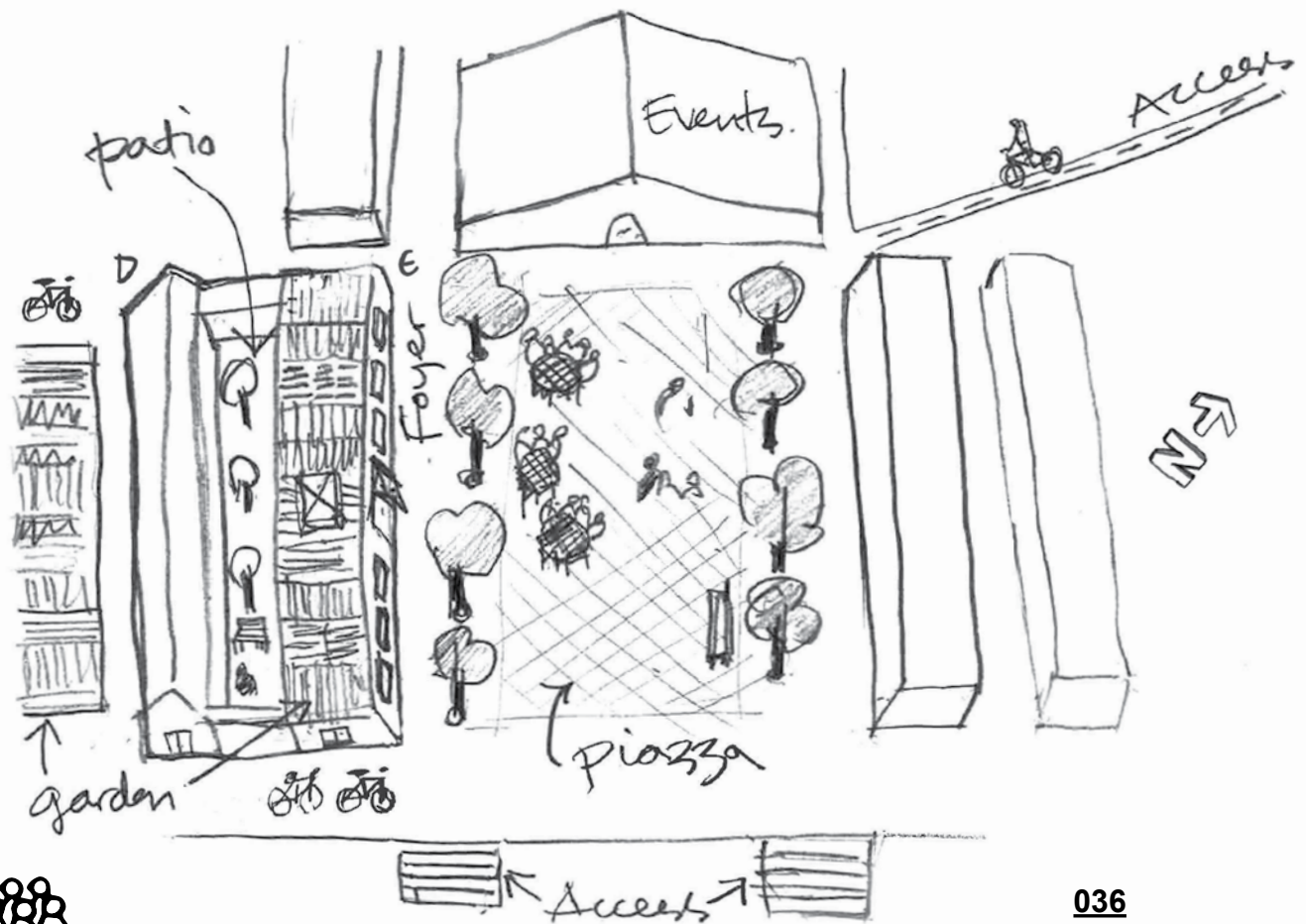
The landscape

In order to be successful, the reconversion requires anticipating, imagining and creating the future dynamics between town and gown communities at different scales.

Today the VUB and ULB are situated in close vicinity, but so far the different campuses and academic communities are highly fragmented. The surrounding neighbourhoods are marked by the presence of students and researchers, but they fail to provide coherent and identifiable places associated with the knowledge society. The reconversion programme for the Barracks is seen as a strategic opportunity to provide a physical focal point for the relationship between the academic community and the city. To be sure, the universities have already formulated their vision for this relationship. The ULB and the VUB see the service to the wider community as one of the three pillars of their mission. But so far this relationship has lacked a tangible place in which this service to the wider community can be fostered and observed in practice. The site can be the ground for numerous research projects with visible applications and results, so that neighbours and visitors can more

easily interact with the academic community. Especially the municipalities of Elsene/Ixelles and Etterbeek as well as the entire Brussels-Capital Region stand to gain by having a privileged and non-bureaucratic access to the knowledge and creativity of several thousand researchers from all disciplines, allowing them to work closer with the academic community to find solutions to social, economic and environmental challenges. The project can bring research ideas and labs closer to urban communities and their realities so that Brussels' large research institutions can gradually become "grounded universities".

Interpreting the Barracks as ground for research not only provide value for its residents and the neighbouring communities – it also helps to ensure that academic research remains highly relevant in the knowledge society and stands up to the test of practice. In the context of a more general trend towards co-creation, science shops and action research that has made inroads in the most prestigious universities around the globe, the project can become both the lab and demonstration site of grounded research in Brussels.



Common Space

This theme explores the structure of common spaces in the project that are dedicated to green spaces, restaurants, cafés, culture, entertainment, leisure, study or sports. These common spaces serve the residents and the wider community.

The values, the underlying values of the private spaces, are varied. It includes the liveliness, conviviality, attractiveness and openness vis-à-vis the neighbourhood. It is about the respect for architectural heritage and existing spaces. It includes participation of residents and neighbours in shaping the common space. It involves high value of urban vegetation (especially trees). Finally it is about sustainable decentralised water management.

The consequence is that certain actions will need to take place. This includes defining a participatory management model and functions of the publicly accessible ground floors and exterior spaces. It will involve analysing the repercussions of the ground floor use on the overall financial model of the buildings. Finally it is about defining the use and atmosphere of the exterior spaces around the two buildings.

036

Sketch of the Common Space concept.

The concrete output is will focus largely on the ground floor areas. It will involve the concept for the atmosphere and uses of the ground floor of the two buildings and adjacent exterior spaces: “foyer”, “piazza”, “patio”, “garden”, “manège”, “parvis”, etc. It involves a strategy for successive activation through participation and openness to the neighbourhood and residents. Finally it involves trees on the “piazza”, a small vertical garden on South-West façade of the D building and rooftop garden on the E building.

Finally it aims to lead to the affordable student accommodation that caters a variety of needs. It aims to be a reference for innovative housing in line with circular economy principles. It aims to have long-term financial sustainability and housing that stands up well to the wear and tear of time. Finally it aims to showcase the capacity of the ULB-VUB to lead the development of the site.



037

Sketch of the concept for Intimacy.



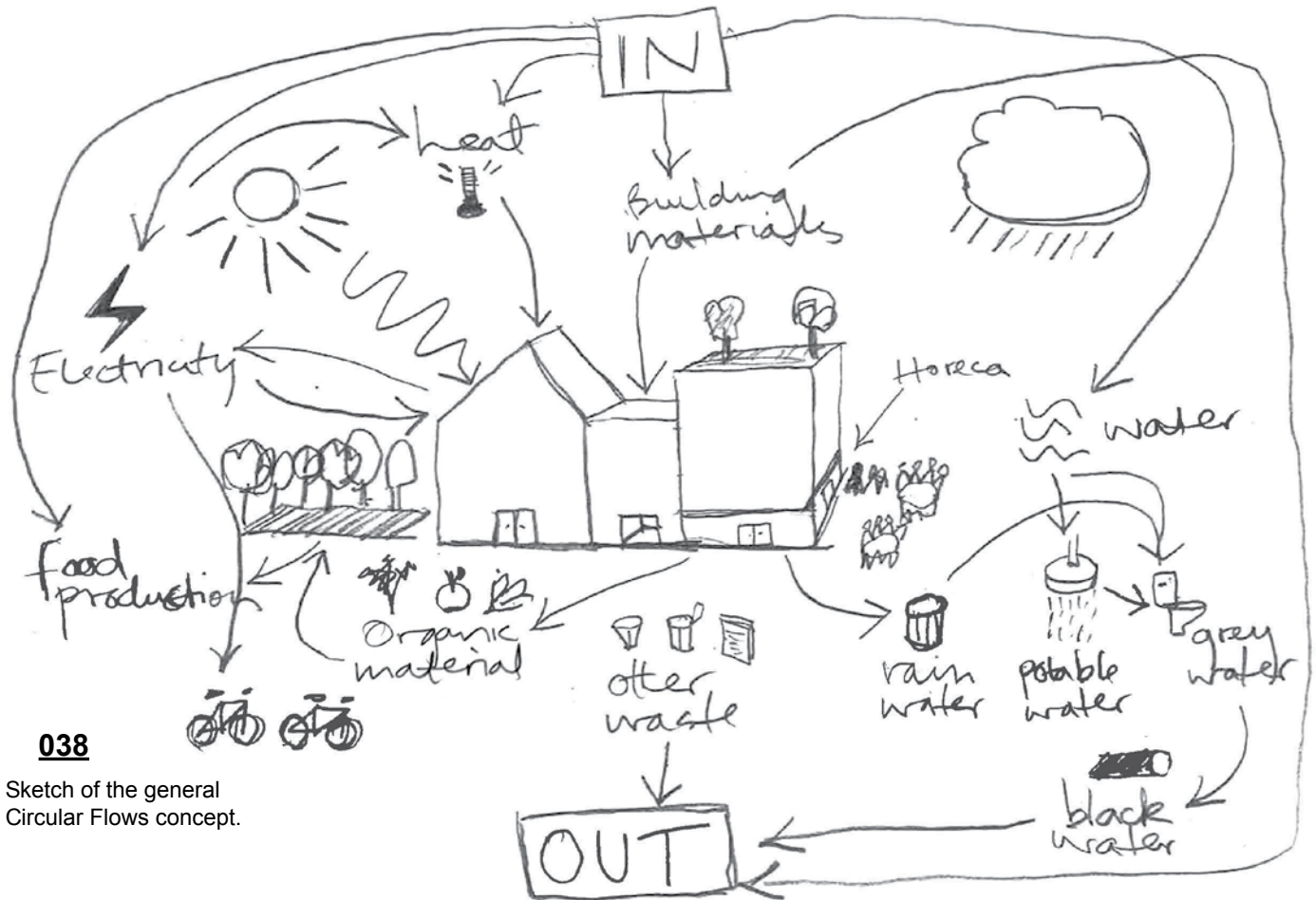
Intimacy

The underlying values for the common spaces involve balancing the local and the international, the intimate with the convivial. It firstly requires social, environmental and economic exemplarity. It will showcase a unique experience of Belgian conviviality and culture for foreign visitors. It is about long-term viability of the housing offer. It will need to contain a variety of housing units to match the needs of different residents. Finally it involves housing that fits within the context of the site and the neighbourhood.

The actions needed to be done to achieve this, involves both the technical architectural design and the governance strategy. It means identifying the housing needs for students and researchers of the VUB and the ULB. It will need to ensure that the conception of the housing units responds to the housing needs and reflects the values of the involved partners. The architectural design will need to define the spatial layout of the housing units. Finally the management model of the complex (housing + common spaces) will need to be developed.

The physical interventions will require space for 120 housing units for Belgian MA students (55%), international MA students (36%), visiting researchers (7%) and PMR units on the ground floor (2%). It will require student housing in units of 6 or 8 sharing bathrooms and multiples of 2 or 3 sharing kitchens. Studios for researchers with 2 to 4 units sharing kitchens. Finally it requires a Management concept for the residence.

The result will be affordable student accommodation that caters differentiated needs. It will also be a reference for innovative housing in line with circular economy principles. In the long-term it means financial sustainability and housing that stands up well to the wear and tear of time. Finally, it means showcasing the ability of the ULB-VUB to lead the development of the site.



038

Sketch of the general Circular Flows concept.



Circular Flows

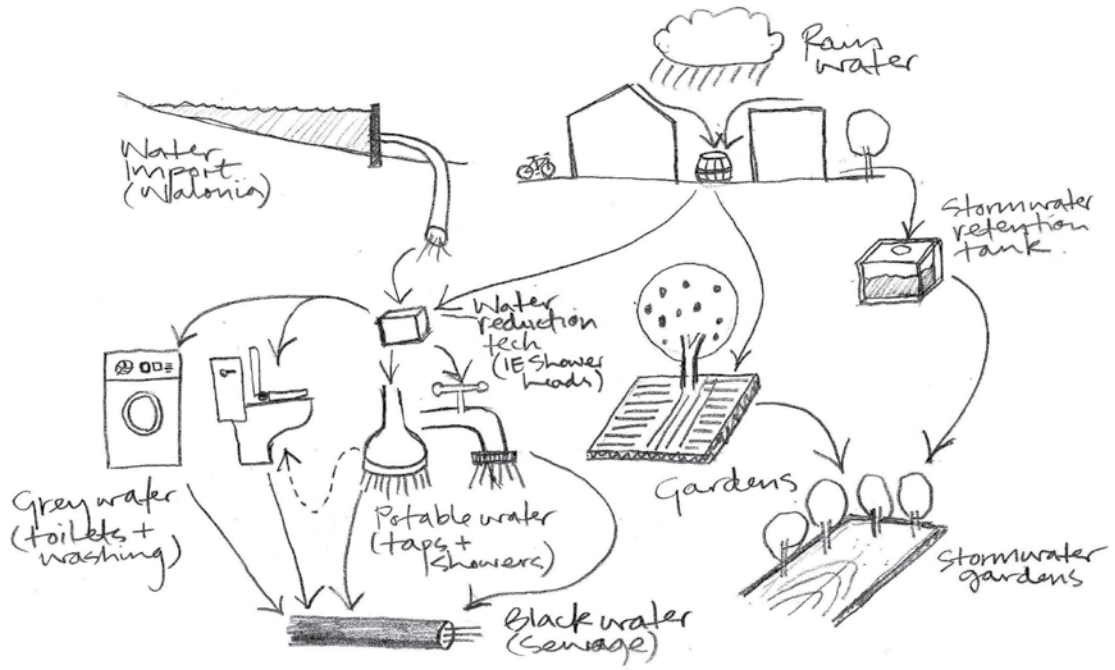
Circularity can mean many things depending on one's perspective. Here we are focusing on exploring Circular Economy as it places emphasis on the value of resources. We are not simply creating a bubble in which an organism can operate independently of the outside world. We are aiming to make design decisions that have the lowest impact and the greatest value. However there is quite a lot of ambiguity over the definition of Circular Economy.

Over the last five years, the Circular Economy has become common vocabulary - for anyone working in industry (with an interest in environmental impact), in public services (with an interest in recycling waste and job creation), in the environment (with an interest in the economy), public policy and research institutions of many stripes. However until now the Circular Economy has been a concept spearheaded by consultants and non-government institutions (particularly the Ellen MacArthur Foundation) and embraced by a number of large private organisations worldwide.

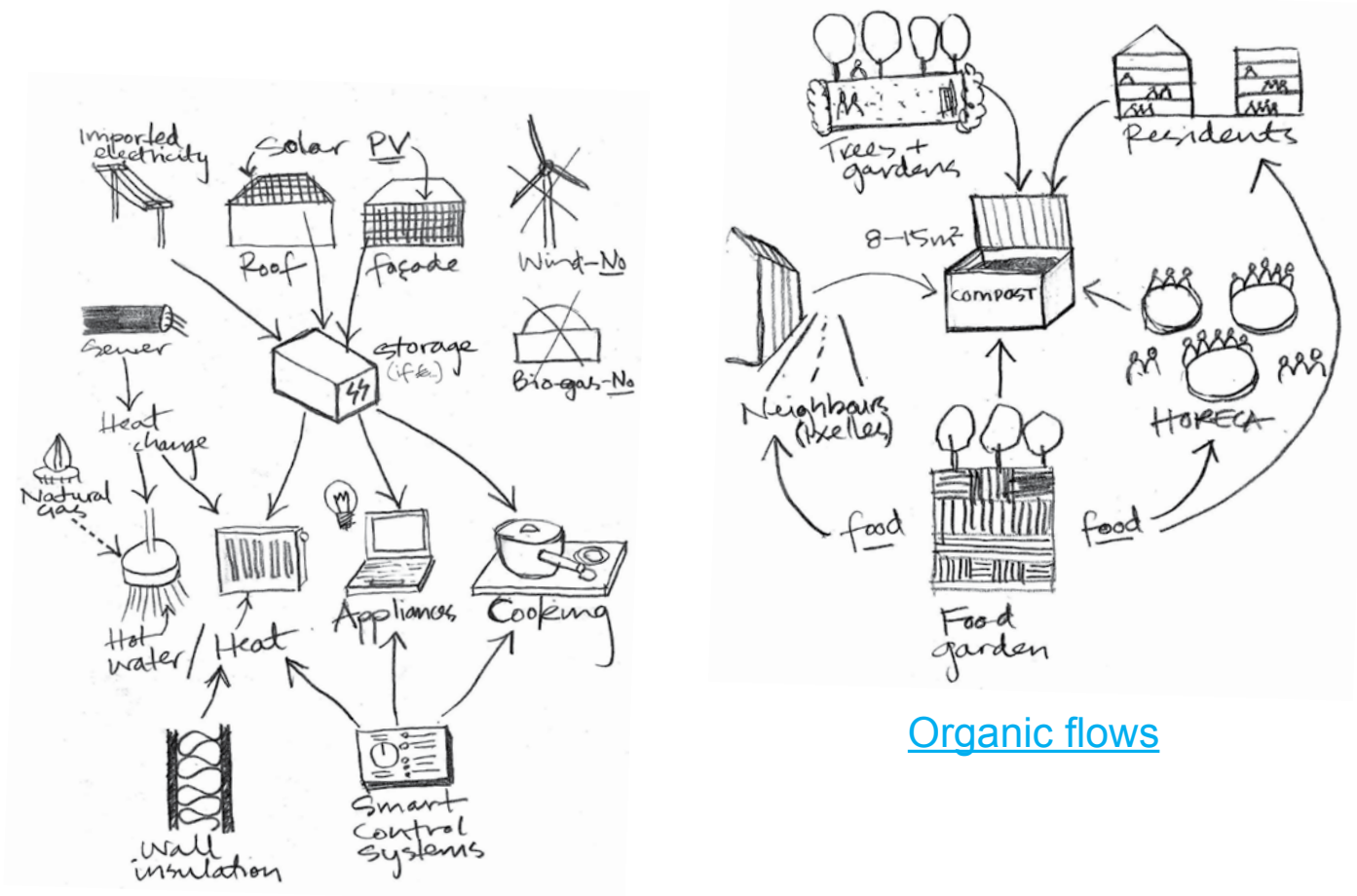
The result in many cases is 'circular business' where the business model changes to replace material consumption with value added services however the business itself has little impact on the industrial ecology surrounding it.

Between the industry-driven, privately focused initiatives and larger scale policy agenda at EU level, there is a gap emerging in terms of the systemic application of the circular economy. While certain cities and regions have begun to dive into the topic (particularly in Brussels with the Regional Plan for the Circular Economy) there certainly remain a number of red flags that force us to question what Circular Economy really means in practice, in cities filled with many other levels of complexity.

In this case circularity is focused on the circular flows of water, of energy or organic matter and the re-use of materials (either on-site or within the region).



Water



Organic flows

Energy

039

Sketches of particular sub-themes within the Circular Flows concept.



040

The richly vibrant Place Bethléem in St Gilles (Brussels) with a simple water installation that draws children from all over the neighbourhood.

7. IMPLEMENTATION

Transversal planning is about facilitating change and transitions. Therefore the implementation stage is a critical step to help the ideas to move.

In this case we explored scenarios for the development process, but also the governance structure for promoting the vision and the responsibilities associated with it.



What is next?

There is no clear end of the transversal planning process as it is impossible to define when the complexity in the process has been dealt with. Ideally those involved with the development of the vision should bring continuation to the project so that it is not entirely a fresh start for the next stage of the process. This is one of the biggest challenges with the built environment to date and where a lot of cost is invested on defining precisely what is in the project and creates inflexible outcomes, deadlocks and path-dependency. In other words, often those designing buildings have limited involvement in the building process and therefore need to design every detail to avoid confusion.

At this step we have set out the very basic building blocks for the following stage included the governance structure and the development approach (not shown here).

A unique opportunity to strengthen the profile of Brussels' as global hub for higher education

Ever since ideas about their reconversion emerged several decades ago, it was clear that the sheer size of the Barracks in Etterbeek and Ixelles holds enormous potential. By collecting, collating and synthesising these ideas, however, the participatory planning process that is documented in this report rendered the potential of the site even more palpable. It documents a rising awareness that it is not only the size but a series of other factors that make the place so exciting: its prestigious architectural and quality, the cultural legacy it represents, the valuable materials incorporated into buildings and spaces, its geographical location with respect to the existing campuses and the city, the great opportunity to implement circular economy principles at neighbourhood scale, the possibility to redefine the relationship between the academic community and the residential neighbourhoods... The project has such a high leverage that it will undeniably help the universities to strengthen their role in the metropolis, in Europe, in the world!

Planning with complexity

Any reconversion project is a planning challenge. Instead of filling a clean slate, existing structures need to be understood, evaluated and reinterpreted in light of their new use. This involves solving problems that relate to a large number of

specialisations, ranging from architectural and urbanistic competences over economic, financial, technical, sociological, organisation and many other fields of expertise. While no commercial planning office is able (or can afford) to work with such a diversity of specialisations, Brussels University Alliance – the organisation at the helm of this project on behalf of the ULB and VUB – saw the opportunity to mobilise the academic community for the planning process. The challenge is to continue with this spirit of knowledge and pragmatically getting the best value result.

It cannot be emphasised enough what a great asset it is to be able to tap into the knowledge and creativity of academic community. We feel that it not only improved considerably the content of the reconversion concept, but also provided the intellectual resources and critical reflections to avoid the pitfalls to which commercial reconversion projects are often prone, including a chronic weakness for buzzwords and a blindness for hidden costs and social tensions that appear only after the project is implemented. We hope that the results synthesised in this report provide a faithful echo of the stimulating and extremely knowledgeable input that was contributed – free of charge! – by the members of the academic community who participated in the process.

The ongoing challenge is to set up a governance structure that can deal with both the needs of the project and is cutting edge. This will require to different positions that can focus on firstly the vision and secondly the project.

The reconversion concept in a nutshell

Similar to the four work-streams that structured the participatory process, the reconversion concept for the site is presented in this document in four complementary themes.

Landscape. This theme explored the overarching vision for the project: it concerns the philosophy and ambition of the project, questions of access and functions at the scale of the Barracks in Ixelles, as well as its relationships with the neighbourhood, the city and the world. The synthesis of the reconversion concept is that the project will be a landmark for the engagement and inter-national ambition of the VUB and ULB as key actors in society, providing much needed housing for local and international researchers and students in the form of an urban laboratory for inclusive communities and environmental solutions.

Common space. This theme explored the set-up of common spaces in the project that are dedicated to green spaces, restaurants, cafés, culture, entertainment, leisure, study or sports. These common spaces serve the residents and the wider community. The process of participatory planning led to the conclusion that the heritage of existing structures should be reinterpreted to gradually activate distinct areas marked by vegetation and that are shaped by diverse needs of residents and neighbours. We notably discussed concept for the atmosphere and uses of the ground floor of the two buildings and adjacent exterior spaces as “foyer”, “piazza”, “patio”, “garden”, “manège”, “parvis”, etc.

Circularity. This theme explores how the flows of building materials, organic matter, water and energy in the project can be rendered circular so as to avoid unnecessary consumption or waste. Building on the technical knowledge collected through interviews, expert panels and workshops, this document includes schematic representations of the concepts rendering the flows circular.

Intimacy. This theme explores how the residents’ need for intimacy is met in the project through the layout of sleeping rooms, bathrooms, kitchens and communal areas. The result of the participatory process is that the buildings provide for social cohesion and efficient use of resources and allow exemplary forms of cohabitation to foster well-being and interpersonal/inter-cultural bonds with simple and affordable spaces.

Outlook

Developing the hypotheses that are compiled in this document further and eventually implementing the reconversion programme in reality will be more like a marathon than a sprint – it requires efficient management of the available resources, organisational capacity and above all perseverance and leadership. The almost proverbial complexity of Brussels’ institutional landscape render projects of this size extremely challenging, and it is a great success for the ULB and VUB to have shown their ability to produce a credible and feasible reconversion concept under these circumstances. But to make sure that the concept is further developed and implemented, the BUA requires unequivocal support from all departments and hierarchies of both universities. Moreover, the BUA has shown that its strength is to coordinate the operational aspects of the close cooperation between the universities. These operations need to be complemented and framed by the leadership of the ULB and the VUB, especially vis-à-vis the different political partners at the local and regional level who play a decisive role in the reconversion process.

The biggest challenge for implementing the ideas compiled in this document comes from the uncertainty that still looms over the reconversion project. The participatory planning process has led to a first proposal of what the site could become. This proposal can now be the support for discussions within the wider academic community, but also and especially for discussions at the political level with the municipalities of Ixelles and Etterbeek as well as the regional authorities and agencies with an interest in the site.

