

abstract

Oversize – from society to architecture and back to society

Oversize is a multi-university academic initiative addressing the design opportunities and challenges represented by spaces that are too large in regard of current needs, such as empty buildings and structures. These spaces are prominently present in many contexts, and their future is still open to speculation.

If buildings are (at least partially) empty, it is because they do not correspond to existing needs. As a consequence, loosely defined cultural activities and temporary uses tend to be proposed. In formerly blooming cities now in recession, a significant part of the city is concerned. The ubiquity of these situations essentially transforms the issue, as the entire city cannot be transformed in a youth camp or a cultural platform.

Oversize proposes to consider the excess of available space as an architectural opportunity, considering that a reconfiguration of (maybe still existing) uses into existing spatial structures through limited interventions may provide new dynamics and possibilities, while corresponding the limitation of economic means. Society produced opportunistic structures corresponding to a historic reality. Now that the activities dwindled away, how can we consider these structures as gifts, as opportunities to reinforce (existing) collective identities and dynamics?

This paper explores the situation of Charleroi (Belgium), one of the richest areas of the industrial revolution producing coal, steel and glass. The paper will discuss several cases in this context. The refurbishment of the Palais des Exposition de Charleroi (60 000 sqm, to be reduced to 25 000sqm by de Vylder Vinck Taillieu and AgwA architects) has been one of the triggers to the Oversize project. It is echoed by student work on several buildings of the city.

This paper is also a reflection on possible bridges between architecture practices, pedagogics and research topics.

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Oversize – from society to architecture and back to society

Metallurgy has been present in the area around the Belgian city of Charleroi for ages, but it was only in the 19th century that the glass, coal and steel industry started an era of economic bloom. In the 20th century, large buildings and infrastructures overwhelmed the modest city. The development of Charleroi was rather dictated by opportunities than orchestrated with a global vision. Big buildings, mine shafts and factories sprouted next to small scale housing and farming fields. Elevated highways started to fly through this fragmentary landscape. Ambitious proposals and utopian visions responded the optimistic faith in progress and modernity.



Figure 1 the city of Charleroi, photo by Filip Dujardin 2019

However, mines and metallurgy became gradually uncompetitive and the industrial giant collapsed in the eighties. Vacancy, underuse and deficient maintenance transformed the vibrant architectural witnesses of economic power into unmanageable monsters drifting in a decaying city.

In 2013, the city appointed a Master Architect in order to trigger new and alternative urban dynamics. Looking for opportunities, hunting investors and organizing architecture competitions, he started to change the face of the city, partially supported by commercial ambitions (a large shopping mall in the city center), and working hand in hand with cultural and educational actors. In this process, demolition was often preceding the construction of new fashionable architectures.

In 2015, AgwA architects (the authors' practice) and architecten de vylder vinck taillieu teamed up as AdvvtgwA and won the competition for the transformation of the "Palais des Exposition de Charleroi". This architectural giant was built on a hill in the city center along the inner ring road, by architect Joseph André in 1953. It seems that the building housed the largest spans in the world at the time of construction. The use of reinforced concrete was still quite experimental back then. The "Palais", a white concrete ship housing six gigantic halls spread over three levels, punctuated by monumental ornaments, staircases and colonnades, floated between the coal heaps, the factories and the historic city center.



Figure 2 Palais des Expositions de Charleroi, photo by Filip Dujardin 2019

Significantly, the competition brief stated that the central part of the building, hosting the monumental staircases, should be demolished and replaced by a “contemporary volume” and a parking structure. In their proposal, AdvvtgWA departed from three considerations. First, the 60.000 sqm of the existing halls can be reduced to about 20.000 sqm, which is the workable surface for fairs for a city like Charleroi. Second, the budget is almost impossibly low (less than 400 euro/sqm). Third, the building is remarkable in all aspects, amongst them the striking collision of modernist rationalism and an almost romantic monumentalism.

AdvvtgWA proposed to maintain most of the structures and to unveil the spectacular skeleton of the central volume turning it into an open vertical park instead of creating a new “contemporary volume”. Three halls out of the six would house renewed functional exhibition spaces. The reduction of the conditioned spaces dedicated to fairs helps to match the tight budget. The visitor’s cars will colonize the three remaining halls, avoiding building a new structure for the parking. These large surfaces in excess provide unedited spatial experiences and opportunities of use. A way of doing almost nothing but changing everything. The project is now being realized, completion is expected in 2023.



Figure 3 refurbishment of the Palais des Expositions de Charleroi, AdvvtgWA 2017, photo by Filip Dujardin

Parallel to the competition, an architecture guide of the city of Charleroi was published in 2017. Strikingly, most of the buildings in the guide date from the second half of the 20th century. Do you know many European cities whose main heritage is modernist? However, a large proportion of these buildings are on the verge of ruin, vacant. The Palais des Expositions is one of them: beautiful yet empty and in bad condition. Discovering the guide was a revelation. What a fabulous collection of interesting architecture! But it created also an apprehension: will all these treasures disappear and be replaced by brand new marketable buildings?

Oversize as Academic Design Office

In 2016, the faculty of architecture of the KU Leuven developed the ADO label (Academic Design Office) for the master studios, which supports and labels “environments aiming at linking research and education, where a creative collaboration is realized between architects, researchers, artists and professionals”. Triggered by the experience of the Palais des Expositions, by the treasures of the architecture guide, and remembering Viollet-le-Duc’s definition of restoration¹, the authors successfully submitted a proposal entitled “Oversize”, starting in September 2018, forming a collaboration between the faculties of architecture of KU Leuven, ULiège, ULB and UCL.

As stated in the submitted proposal, “Oversize addresses the opportunities and challenges represented by in the conception and the transformation of large spaces, such as industrial halls, and spaces that are too large in regard of current needs (empty buildings and structures...). These objects, like larger sports infrastructures, exhibitions halls, industrial facilities, stocks, etc. are very present in the territory since the XIXth century. Their conception is still open to speculation, and it becomes increasingly important to propose new ways of reusing these structures. In Brussels, it is echoed by several initiatives and reflections, such as “Should I stay or should I go” (bMa). Internationally, we can also refer to field works such as “Reuse, Reduce, Recycle” (Muck Petzet). Project cases are emerging, as among others : Friche La Belle de Mai in Marseille by ARM and Palais des expositions de Charleroi by AdvvtgWA.

This project is grounded in the practice and experience of the team members, both as architects, engineers, critics and academics. It may also be extended to other disciplines, such as photography, sociology, heritage, etc. Oversize is also marked by the conscience of the political consistency of architecture. Not architecture as the instrument of a politic. Not the politics of architecture. But the political nature of an architectural approach. The societal meaning of maintaining oversized buildings, of the acceptance of un-adaptation.”

The present paper traces back the researches and works developed during the first year of the Oversize ADO. During this first year, bridges between the professional practices and the pedagogical experiments appeared and opened up the many potentialities of the issue. The paper sketches then the possible developments of the ADO in the following years and addresses its societal and cultural relevancy.

1 : "To restore a building is not to maintain it, repair it or remake it: it is to re-establish it in a complete state which may never have existed at any given moment." in Viollet-le-Duc E., Dictionnaire raisonné de l'architecture française du XIe au XVIe siècle, Editions Bance Moral, Paris, 1854

A workshop

For the academic year 2018-19, Oversize was proposed in a first bachelor studio at ULB, a third bachelor studio at UCL, a master studio at ULiège, a master dissertation and an elective in the international masters at KULeuven.

In November 2018, a transversal workshop was held in Charleroi with students and teachers from the different universities. As an introduction to the workshop, Inge Vinck (architecten de vylder vinck taillieu) and Pauline Cabrit (Charleroi Bouwmeester team) gave two lectures sharing respectively design experiences from the field of practice and processes from the institutional realm. The workshop was held at the contemporary art center BPS22 which hosted a small exhibition of the ongoing works of each studio to share the first researches and design intuitions. After that, the students divided in mixed groups and were asked to imagine how the total group of about 100 students could occupy the spaces of the Palais des Expositions with the objective to explore the oversized dimensions of the building. A way to experience physically the dimensions, material and concrete qualities of this singular spaces. In small groups, they made proposal which were lately discussed. A few representative proposals were eventually performed and photographed in the Palais des Expositions in the afternoon.



Figures 4-5 Transversal workshop at BPS22, 2018, photo by Arvi Anderson



Figure 6-7 Performances at Palais des Expositions, 2018, photo by Arvi Anderson

Three design studios

The results of the design studios and the ways in which the issue was explored are diverse. They vary according to the specific approach of each studio and the year of teaching. In several cases, design proposals by the students echoes the architectural practice of the authors. They shed a new light on the author's current or past projects and make explicit several design strategies. In this sense, the practice of the studio teachers and the student's works intermingle and enrich each other.

Générale de Banque (ULiège, master 1)

How to address the flamboyant modernism of the now empty Générale de Banque and the worn out hotel still in use on its roof? The bank itself is a very deep set of five floors connected by an open atrium-like space along the front façade. The vertical circulation is limited to a few elevators and enclosed staircases hidden in the dark depth of the servant spaces. In the first stage of the studio, students Mayron Gilles and Manon Piette proposed a "prefiguration" strategy, inspired by the first year of the Kanal art museum in the ancient Citroën garage in Brussels. Informal uses were imagined in the existing building, including almost no architectural interventions. They developed a programmatic strategy to allow the use of the complete building as found. This exercise revealed the potentialities of the building to host a diversity of uses, but also its limitations (light, vertical circulation, etc). In the second stage, they evaluated how a few precise and robust interventions could facilitate these new uses and confer a renewed architectural quality to the whole. The entire project is inspired by Muck Petzet's theoretical work "Reduce Reuse Recycle"²: cataloguing, harvesting materials on site for the new construction and reusing spaces as found when possible. In the first stage of the design studio, the students explored possible programming of the building while in the second phase, their focus shifted to potentialities of materials of the building, without defining specific program.

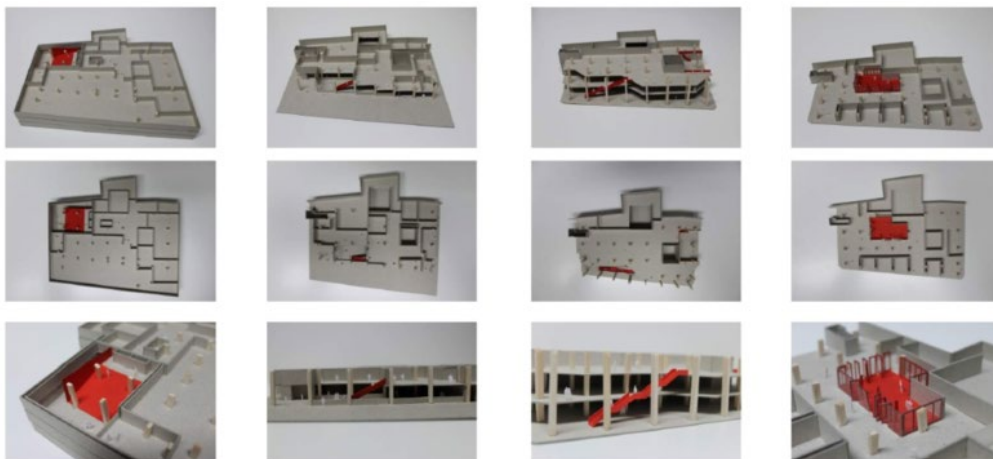


Figure 8 Générale de Banque, Manon Piète, Mayron Gilles, ULiège, faculty of architecture, 2019

Brasserie des Alliés (KU Leuven, master dissertation)

The Brasserie des Alliés is a monumental Art Déco brewery spread over five interconnected buildings in a dense urban context. A huge vaulted production hall covers four levels of vast pillared platforms. Smaller office and service buildings as well as large sheds complete the picture. Nowadays, the building houses a construction material dealer and storage for a car repairing workshop. They only use a fraction of the building. In her proposal, student Lindsay Prat does not depart from an imaginary new program. She rather considers that the building is not apt to house any program corresponding to its scale and status because it lacks readability, accessibility and variety. The project develops around a cross of two perpendicular axis, which provide new staircases, elevators, footbridges and horizontal circulations. The new structures also divide space in smaller, graspable surfaces. It is striking how the developed proposal does not need any specificities of a well-defined program. The precise developed structures embrace the constraints and the qualities of the existing building. Powerful hand drawings suggest the resulting spatial qualities and open the horizon of future uses. Without defining any specific uses, the project focuses on the potentialities of the building and the weaknesses of the existing structures, both spatially and constructively.

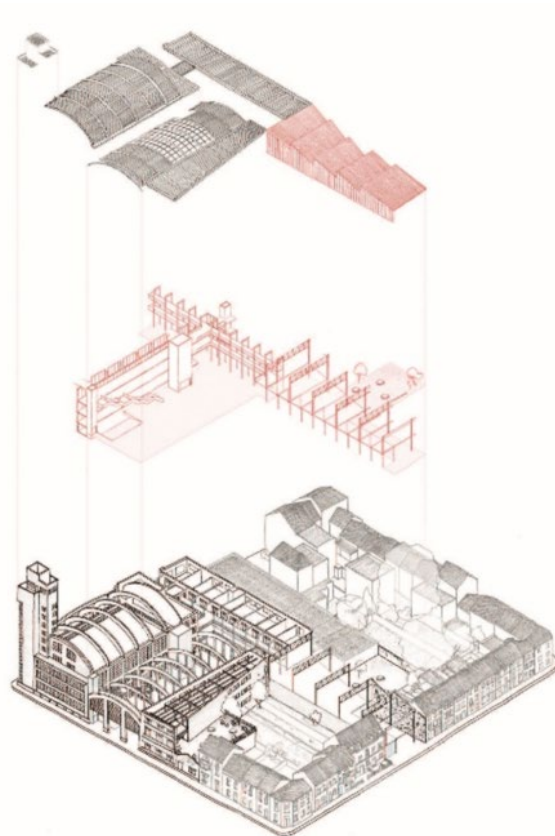


Figure 10 Brasserie des Alliés, design proposal, Lindsay Prat, KU Leuven faculty of architecture, 2019

Helios swimming pool and sports hall (KU Leuven master dissertation)

This sports hall by Jean Yernaux and Auguste Daloze is still intensively used but in bad condition. The neighbouring “Spiroudôme” is a huge white boxed basketball stadium. They are flanked with a large parking lot down a short and steep slope. The concrete roughness of the sports hall has somehow been spilled by poor light weight additions to house a dance room and a fitness room. Student Lorie Elsen proposes to avoid an unpayable global renovation by leaving the sports hall on the second floor as is

(and even to leave it unheated – an interior unconditioned space fit for intensive sports), while the lower part is reconditioned and extended to house the dance room, the fitness room and additional spaces for combat sports. She also proposes to build a new outdoor slab providing additional sports fields in open air on top of the parking lot. The height of about 4 meters allows future evolution such as additional sports spaces, while resolving the difference in levels and anchoring the sports hall in the context.

In the context of Oversize, it may seem strange to add new constructions next to existing structures. We can argue that the additional structure is designed in an “Oversize” way (surplus in height affording multiple uses instead of a limited height apt for a parking lot), that it responds existing uses (no additional program), and finally that the originality of the design also resides in the creation of a layered structure : the ground floor is a conditioned slab with all the needed functionalities, on top of which, next to the exterior space, the sport halls is maintained in its original, worn state : the windows could even be removed in the future, only keeping the structure and the roof.



Figure 12 Sports Hall in Charleroi, Lorie Elsen, KU Leuven faculty of architecture, 2019

From P to G (ULB bachelor 1)

On a walk between the Palais des Expositions and the velodrome of Gilly, first year students were asked to explore specific urban situations they would encounter. The distorted urban fabrics of the northern fringe of Charleroi offers a set of singular situations without specific qualities, forcing the students to change the way they look at what surrounds them. Avoiding any exhaustive analysis, the situations were approached through their specific material qualities and their specific potentials. Through a limited series of photographs, the students had to unveil their reading of the site as well as tracks for possible projects. With a set of simple architectural elements the students developed then precise though unprogrammed architectural interventions, not as solutions for these spaces but as supports for potential uses. No generic flexible spaces but physically engaging interventions, offering new readings of these spaces.



Figure 14-16 From P to G, photo by BA1 students, ULB, 2018

Echoes within the field of practice

All the projects share a renewed engagement with reality, a certain empathy for what exists combined with a precise and detailed approach. Shifting the attention towards the material potentialities of the existing, while leaving the program in the background. Focusing on the possible connections between spaces to trigger new uses instead of functionally defining all spaces. Challenging the questionable notion of comfort and the limits of conditioned spaces. These different approaches and design gestures resonate with the practice of the author's and teachers, in their concomitant projects as well as in their reading of former ones

The project for the Générale de Banque, for instance, echoes a recent project developed by AgwA in which circularity plays an essential role (Takeda: transformation of a former office building in a school³). After winning the competition, there were only 6 months left to finish the works. In order to reduce the cost of the transformation, to be efficient in time but also to achieve an ecological way of working, AgwA proposed to reuse all the existing interior furnishing of the building : partition walls, doors, windows, lamps, ceiling systems, ventilation and heating systems. The transformation of offices into classes eventually required only very little new construction materials.



3 Bouet M., « Du temporaire au permanent », in A+ Architecture in Belgium, n° 276, *Building Sites*, February/March 2019, Brussels

Figure 9 Takeda, transformation of an office building in a school in Brussels, AgwA 2018

Both proposals raise similar questions. How can we use these buildings as they are? How can we transform the building with few interventions reducing the use of new materials? In the project for the school by AgwA the program was given whilst in the proposal for the Générale de Banque, the students deliberately left aside the issue of the program in the second part of the design process. Both projects focus on the existing and available materials and how their reuse could unveil new potentials for architectural interventions.

For the Palais des Expositions, the reduced budget and the high expectations of the clients pushed AdvvtgWA to define spaces whilst leaving them open for multiple uses. Existing spaces are vaguely programmed but by turning the central volume into an open vertical garden, an open circulation hub, the proposal multiplies the access routes and defines independent spaces. This gesture radically changes the nature of the building and its relationship with the city and open new possibilities for uses. As in the project for the Brasserie des Alliés, the design process focuses on the definition of the connections rather than the precise definition of use for the space themselves.



Figure 11 Palais des Expositions de Charleroi, AdvvtgWA, 2017, photo by Filip Dujardin

Similarly to AdvvtgWA's strategy for the Palais des Expositions in which large parts of the buildings are left in their unconditioned state, AgwA's project Verbiest consists in developing a relatively small conditioned housing and working spaces in the heart of the larger unconditioned spaces of a concrete structure. In the case of the Helios swimming pool and sports hall, concessions are made on the comfort level for some activities. In the Verbiest project, concessions are made on the surface to which the comfort levels apply.

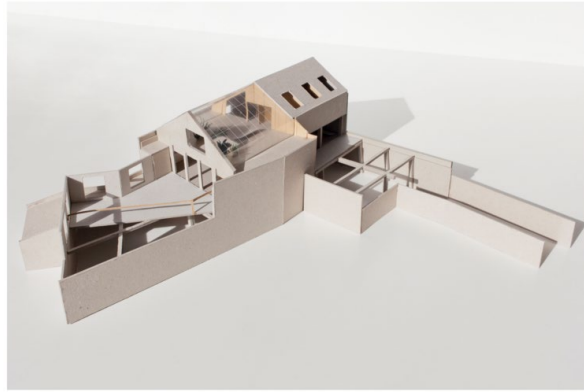


Figure 13 Verbiest house and workshop, AgwA, 2019

Some conclusions

These accounts of a few projects framing in different studios from different universities evoke the diversity of approaches made possible through the lens of Oversize. Considering the existing buildings as mines of architectural richness is both inspiring and relevant on an economical/ecological point of view. It may depart from a fascination for the *unadaptedness* perfectly exemplified by the iconic Michigan building theatre in Detroit converted in a parking lot. It is not mere romantics, however. It is the recognition of a situation, in which structures and buildings are vacant or underused. It is the recognition of the beauty residing in these stones, of their limitations and potentials. It is also the recognition of the socio-economic situation and of its consequences. It makes no sense to heavily and expensively refurbish buildings for imaginary uses. Rather, Oversize proposes to inscribe the design strategies in this double reality, and to explore possible outcomes. The theme Oversize transpired from the practice of the teachers. It was triggered by one specific project, combined with the external factor of the architecture guide being published. In return, experiences and findings in the studio were echoed in new projects in the practice, and former projects were reinterpreted in a new light. A community appeared, consisting of projects addressing similar strategies in a variety of situations.

As teachers, thinking the existing requires to change one's way of approaching the development of a project with students in order to catch the potentialities of an existing structure. Maintaining oversized structures imposes in many ways to reconsider design reflexes: both in response to normative and regulatory aspects. This renewed engagement with reality allows new forms and new uses. Beyond Oversize, the studios and projects show that precision in the project allow freedom in the interpretation of these impositions, with a rich experience of the space as result. For the students, it is often an unexpected situation where there is not so much to "create" but more to "reveal". The outcomes of the studios were considered exceptional by the external juries: the precision of the proposals, the sense of reality and the societal, economic, environmental engagement were appreciated.

The objective is to deepen this first experience for another year. TU Wien is willing to join the Oversize Charleroi reflection group with an architecture studio. In order to close the cycle on Charleroi, we plan to organize an exhibition and lectures, in order to communicate back to society. The exhibitions will first be held in the city of Charleroi. The existing buildings will be photographed and documented. The work of the students will be presented amongst realized or running projects framing in the Oversize strategies. We hope this will participate in the revalorization of the underused architectural gems, converting the mistrust towards the modernist heritage into a renewed belief in its potential.

In answer to Brussels Master Architect Kristiaan Borret asking whether it is still defensible to demolish these 20th century buildings in order to make space for new constructions (“Should I stay or should I go?” debates in 2017), Oversize aims to shed a specific light, resolutely and seriously exploring their re-use and showing promising results.

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