

Living with externalities

The refurbishment of Charleroi's *Palais des Ex-* *positions* in a post-growth context.

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As a part-time collaborator with the association of the architectural practices *architecten jan de vylder inge vinck* and *AgwA* (further referred to as *AjdvivgwA*), I have been involved for four years in the refurbishment of the *Palais des Expositions* in Charleroi, a post-industrial city in the south of Belgium. At first, I was the project coordinator, then, when the construction started, I took the role of following and controlling the construction site. In my other part-time, I am a doctoral student in architectural history. In line with this situation, the article is divided in two. First, I develop a reading of the construction site based on the concept of ‘externalities’ borrowed from the environmental humanities, a disciplinary field that I explore in the context of my research.¹ Secondly, I use this conceptual framework to describe the development process of the project, during which I noticed that some decisions were consciously outsourced. By interpreting this observation, by linking it to my reading of the construction site, I seek to open the debate on the posture of architects in a contemporary post-growth context.

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Charleroi's *Palais des Expositions*, 2019, ©Filip Dujardin

An old colossus in between the city center and the metropolitan landscape



Charleroi's *Palais des Expositions*, ©collection Archives Ville de Charleroi

The frenzy of the great popular fairs during the years of the *Trente Glorieuses*

Externalities :

‘damages caused by a company’s activities for which it does not pay, or something positive created by it for which it does not receive payment.’

Cambridge Business English Dictionary ²

Reading the construction site

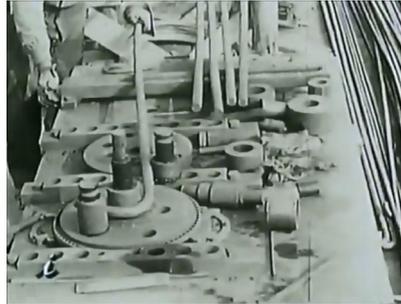
In 2013, Céline Pessis, Sezin Topçu and Christophe Bonneuil, three French environmental historians, published the book *Une autre histoire des Trente Glorieuses*.³ The publication deconstructs the French expression invented by the economist Jean Fourastié and the idea it conveys of a joyful modernization, in which the artificialization of the territory, the use of new technologies and the mass production of goods are presented as profitable for all and infinitely applicable. Among their methodological advices for a counter-history of the period, the authors call for the reintegration of the environmental and social externalities of the postwar de-

velopment model into the historical narrative. They focus on the industrial nuisances and pollutions. They tell the story of those who put these externalities on the table and therefore contested the consensual visions of progress and growth. Borrowed from economic sciences, the word *externality*, is turned upside down here. From being a secondary, supposedly marginal, collateral effect, it reaches a central position: it is a marker of the failures of the capitalist industrial economic system and an anchor point in the deconstruction of the myth of exponential endless growth.

Obviously, the construction sector has played a key role in this postwar western model of development. In Europe, the fifties, sixties and seventies were a booming era for the building of large-scale infrastructures, as well as for private and public architecture. Today, the physical presence of these constructions manifests the frenzy of the period, and explains why architecture, as a part of the construction sector, is frequently charged with the burden of having been complicit with this predatory attitude towards the environment.⁴ Moreover, architecture's burden is doubled as materiality is accompanied by a cultural influence. By shaping new monumentalities or by inducing transformative spatial experiences, a significant part of postwar architecture has promoted consumerist lifestyles and thus led to the sedimentation of the *Trente Glorieuses* myth.⁵

Charleroi's *Palais des Expositions* constitutes a perfect embodiment of this material and cultural burden. A 1950s documentary film by René Richir shows the worksite of this 60,000m² mastodon.⁶ It highlights that the building was

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Film extracts, René Richir⁶

The construction site as a demonstration of the strength of the secondary sector in Charleroi

designed as a showcase to demonstrate the local industry strength. A list of superlatives accompanies the images: 70.000 m³ of infills, 25.500 m³ of concrete, an equivalent quantity of reinforcing bars and a steel roof structure with a record free span. According to the filmmaker, the mass of materials used is frightening but also constitutes a source of pride. Being big, demanding materials and work force was exactly what was asked of the building. Once built, the site was quickly devoted to popular events that showcased modern lifestyles and leisure. These included domestic arts fairs or holiday fairs where people could buy a new car, a mobile home, a fridge or a good vacuum cleaner. The advertising pictures of the fairs testify to the unbridled proliferation of manufactured objects that - this time through consumption - continued to transform the building into a symbol of productivist ideology.

Today, the postwar boom is over in Charleroi, which has become a post-industrial city. But construction materials have accumulated and left traces. Once extracted and used, they remained on site and constitute today a stock that can only marginally be recycled.⁷ These stocks, accumulated over the last 75 years of frenetic construction and consumer culture will not magically disappear. They condition today how we can work as architects, as well as the effectiveness of future policies regarding societal and environmental issues such as climate change.⁸ Postwar buildings thus implied a vertiginous inertia that we only start to get to know and deal with. Within this dynamic, some of the conceptual tools developed by environmental historians - such as unravelling externalities - might be helpful.

Week after week, as I follow the work in progress in Charleroi, I cannot stop thinking about this situation. As soon as my train starts to follow the Brussels-Charleroi canal, the landscape itself becomes a manifest of externalities: rubbish dumps in the foreground, slag heaps in the distance, abandoned gas pipes running between the canal and the motorway, the dismantling of a warehouse, but also Quechua tent camps under the bridges, torn mattresses and forgotten objects that litter the ground.

On the worksite too, we faced externalities at first. Almost two years of work were dedicated to emptying the building and to dismantling and demolishing the leftovers of its first sixty years of activities, reversing René Richir's list of superlatives. Kilometres of insulated asbestos pipes and tons of fibre-cement panels were removed. Old carpets, broken furniture, faded advertisements were evacuated. The demolition workers were the ones who tidied up the site when the party was over. Trucks came and went, simply transferring elsewhere what was no longer desirable here.

The description could seem pessimistic, but what happens on site is also fascinating and contains its own kind of poetry. It echoes the interrogations raised by environmental humanities: how can contemporary society deal with the legacy of productivist ideologies and their material traditions;⁹ how can reflexive interventions be developed on the basis of the material and imaginary traces produced by the existing constructed infrastructures? On the fringes of the emerging practices of material recycling and building adaptive reuse, the issue I intend to address here is rath-

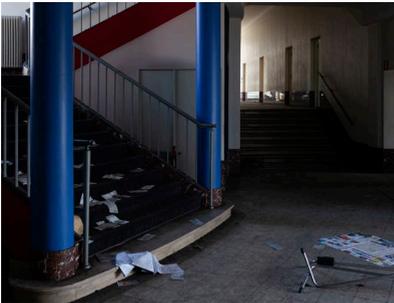
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Charleroi's *Palais des Expositions*, images extracted from an undated advertising booklet.

The building transformed into a temple of consumption

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Charleroi's Palais des Expositions, 2019, ©Arvi Anderson

First part of the works: traces left behind by sixty years of fairs to be 'cleared'

er: which potential cultural identities and imaginaries are shaped by living *with* externalities? How could that change the design process of a project and the posture of a team of architects?

The process of the project

How does the refurbishment project for the *Palais des Expositions* address these issues? A first answer that comes to mind is the reduction of the building size and the poetry of the ruins. Selected demolitions allow to create a smaller building, easier to manage, to heat and to occupy. The demolitions, in the center of the building, are only partial. The primary concrete structures are maintained and transformed into pre-ruins among which the visitors will circulate. The work of the first architect, Joseph André, created for and by a society of affluence, is dissected to face a new context that is defined by scarcity instead. Future visitors, by walking between the unveiled structure of the building, will physically experiment it. But the strategy of re-activating post-industrial ruins by transforming them into contemplative or recreational parks is far from being innovative, nor is the idea of compacity.¹⁰

It is thus another particularity that I would like to discuss here: the seemingly abusive use of conceptual externalities to make choices in the project. Beyond this first cen-



Demolition of the central part of the building, 2020, photo by the author

tral intervention, a lot of further decisions in the internal design process were outsourced. They were not defined by the decision of an architect-composer, nor by the necessity to fit with a 'winning concept' but rather by the hazard of a discovery on site, the literal application of a regulation and the budget restrictions.

Infills

The site occupies an edge of the city center, straddling its old city wall. Opening up the central part of the building, transforming it into a 'garden of ruins', made it possible to create a connection between the upper and lower city, and by extension, between the city center and the metropolitan landscape of Charleroi that appears beyond its ring road. In the first steps of the project, a new topography was created to embody this link. A slope extended throughout the whole garden and incorporated the structure's upper floors. Later, during one of the many explorations on site, we discovered some existing embankments, hidden behind the peripheral walls. The building had been built on an already disturbed ground, raised several meters in height thanks to the addition of infills, most probably taken up from a nearby slag heap.¹¹ To avoid building retaining walls, the first contractors had simply kept and covered the slopes of the infills as they were, along the building, ready to be unveiled. They were steep and not walkable, but were available without heavy nor expensive interventions. They were thus kept as found, first welcomed as a matter of fact, then enjoyed as a way to sharpen the project by helping to contrast the garden as a continuous ground with the concrete

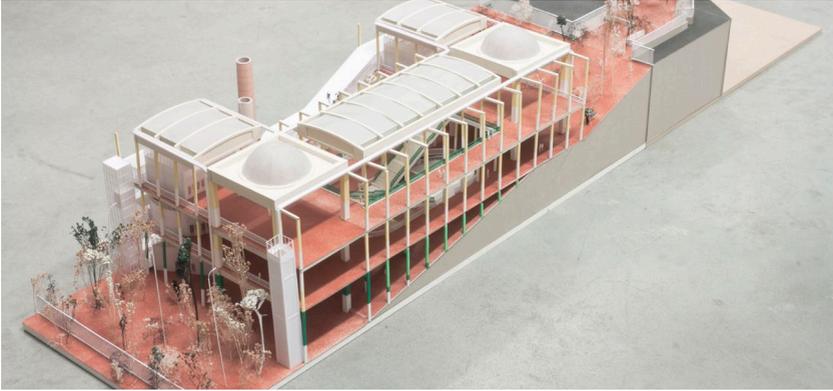
structures floating above it.

Then, an existing basement in the lower part of the garden was transformed into a planted moat with a narrow bridge to cross over it. By avoiding to cover up the basement completely, we induced an entry sequence. A small staircase was spared from demolition to be reused as a technical shortcut for the main exhibition building. Concrete columns were kept along the street, to manage the interface and support the fences. Although the choices of keeping some construction elements were led by opportunism, we appreciate the character that these elements give to the site.



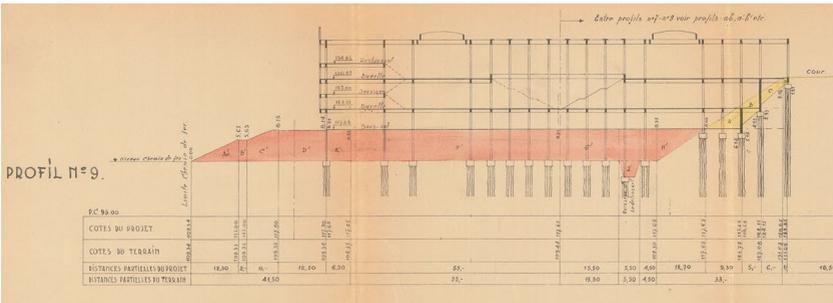
The discovery of the infills, 2017, © AjdvivgWA

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Models by *jdviv* and *AgwA*, 2017, ©Filip Dujardin

The evolution of the garden's topography



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The existing basement, staircase and columns along the street, 2020, ©Filip Dujardin

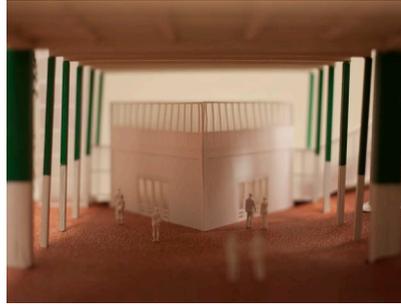
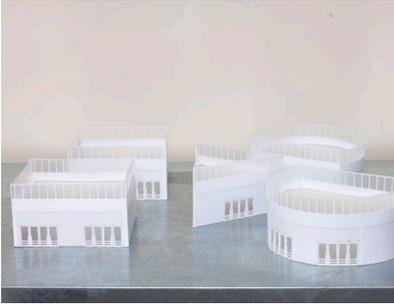


New railings and steel reinforcements superimposed onto the existing, 2021, ©Filip Dujardin

Energy performance regulation

The demolition of the central buildings to create the garden revealed new facades. Some walls that were previously inside the building, became exterior. According to the energy performance regulation in Wallonia (PEB), these walls are the only ones for which insulation works are compulsory as their atmospheric context is changing. The already existing facades, on the other hand, can stay as they are. The regulation induced, in this case, a thermal aberration with randomly positioned insulated surfaces. We had no other option than to literally apply the rule as it was financially impossible to insulate the entire building and as the regional authorities had refused our request for a derogation. However, from this apparently confusing situation, something appeared: by insulating only the old interior walls, a pattern was created. New white plasters called 'sparadrap' punctuated the façades in the spots where the building needed reparations. In the end, we found a formal pleasure in the mismatch of singular rationals that the building brought together. The 'sparadrap' – alongside other punctual interventions such as the new railings adjoined to the old ones to conform to the new standards or the metal reinforcement structure – interacts with the existing building. They reveal it - not by contrast nor in a patrimonial approach - but by frontally superimposing themselves on the existing, like in a building-size collage.

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Scale models, 2017, ©AjdviwgWA

Evolution of the design for the vestibules

Trial and error

The solutions adopted are preferably punctual, plural and fragmented, which makes the architects' intervention difficult to trace. Yet defusing the overall decision-making was not easy. Most of the time, we attempted several designs before realising that an element did not really need to be designed. Small vestibules in the entrance of the exhibition halls, for example, were conceptualized at first as autonomous volumes (a circular, a square and a triangular plan), then as a set of large glassed walls before being finally reduced to the minimum requirements: the entrance doors were replicated five meters further and the space in between covered.

The process was never linear or absolute. Sometimes the lack of choice was strategically overplayed to fit into the conceptual framework that was progressively being defined around the project. Non-choice paradoxically became a choice. Because the process was extensively debated and carefully developed, it was far from being a sign of resignation from the architects. The experience could rather be seen as an open exploration of another posture towards the architectural project. We tried to distance ourselves from the idea that, as architects, we should define a general guidance able to orientate *a priori* the shape, the structure, the details and the technical aspects of the project. We also gradually abandoned the idea of finding a mediation between these different constraints. Instead, from my point of view, we accepted and appreciated to be in the fray, dealing with the network of multidisciplinary actors surrounding

the project, trying to find new allies, or to understand and accept the multiple rationalities that surrounded us. The existing building, like Tim Ingold's definition of landscape, or like Bruno Latour's actor-network, was neither a totality observed from outside, nor a passive, static object. It was always inclusive and active. All actions and opposing forces, including those coming from the building itself, were to be understood as an intersubjective immersive dialogue, from which the project is the direct result.¹²

Of course, the economic system's externalities as explored and defined by environmental historians is not the same externality as the one stemming from decision-making processes in architecture. But the architects' relinquishment towards keeping all the pieces of a flawed puzzle together could maybe be interpreted as a critique of the technocratic authority that we are still professionally asked to represent. In the context of Charleroi, where it is difficult to deny the omnipresence of the material and social externalities of the *Trente Glorieuses*, and where the reinvention of a collective imagination around these is urgently needed, a small change in the way architects work is, at least, an interesting attempt to shake things up. It is not sure yet if this experience will create a meaningful object. But it allows us to grasp the work in progress differently.

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