

Case Study: MAD

The Center for Fashion & Design in Brussels, Belgium

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Abstract

This paper provides an insider view on the design and realization process of MAD, from the first competition concept in 2011 to its completion in 2017, narrated by the project leader for the Rotor team, architect Melanie Tamm. The original competition pitch suggested the demolition of all existing buildings on site, deemed not noteworthy, and the construction of a new complex. Rotor, teaming up with the architects V+, suggested a design based on keeping the existing buildings, which won the competition. The paper reflects on those moments where either the team members or the commissioner found themselves struggling with the starting point, namely that the acceptance of the existing is in itself an act of design. On site stood an abandoned wallpaper warehouse, comprising four heterogeneous buildings connecting two façades in a dense inner-city block. An early modernist building on one side, a post-war pastiche of a medieval house on the other. In-between, behind a neoclassical façade, a 19th-century storeroom with slender cast-iron columns which had been raised several times to increase storage space. Followed a frantic process of mediating between conservation, additions and subtractions in which conventional architectural tools were confronted with the ever-resisting material reality of the original buildings. Existing spatial incongruities were consciously exploited; hitherto inconspicuous materials were explicitly showcased. Coherence was sought by cladding the whole, inside and out, with a library of whitish materials. The essence of the approach was captured in an image featured on the cover of French architecture magazine *d'architectures* (no. 253, May 2017): the zoomed-in photograph of a floor showcasing the delicate blending of different polished concretes: the old concrete of the existing building, the new concrete with carefully selected, light aggregates, bridging repairs in between. Everything neatly readable, but melted together to form a new whole.

Keywords: Cladding, Negotiation, Polished Concrete

Introduction and Context

This case study discusses the Brussels centre for fashion and design MAD, a project started in 2011 and brought to completion six years later. It focuses on lessons learned about design strategies, tools and aesthetics as well as regarding the shifting role of the architect in adaptive reuse projects. This will be done by analysing the decision process of four specific exemplary interventions, after a first introduction into the context of the commission, the nature of the existing buildings and the description of the architectural project itself.

The 2011 competition envisioned a new hub to promote the local fashion and design scene, by bundling several former initiatives in this sector.

The author of this paper, Melanie Tamm, was project architect for the Brussels-based group Rotor, who teamed up with the architecture office V+ (Vers plus de bien-être, Brussels), joined for tender and execution phase by the technical design consultancy Bureau Bouwtechniek (Antwerp). Rotor is a non-profit research and design practice founded in 2005 around shared interests in material flows and waste in industry and construction. In 2010, a year prior to the competition for the MAD building, Rotor had set up *Usus/usures*, an exhibition on how building materials wear off under the effect of use for the Belgian Pavilion at the Venice Architecture Biennale. Two other Rotor exhibitions took place in 2011: *In Limbo* for the Prada Foundation in Milan, and *OMA/Progress* for the Barbican Art Gallery in London. At the time of the competition for MAD, our focus was on design projects incorporating salvaged materials, as well as on the study of construction and demolition waste flows in Brussels. The latter research would lead to *Opalis*, a still existing online platform for the promotion of reused building materials.

Our conviction, back then, was that waste management principles such as Lansink's waste hierarchy should equally be applied to the construction industry. During these years, the debate on sustainability in architecture was still largely dominated by emission reductions through reduced energy consumption, insulation and improved HVAC technology. We were convinced by the necessity to shift attention to questions of resource depletion, embodied energy, life cycle impacts and the necessity of an overall more thoughtful management of material resources. Since then Rotor founded the spin-off Rotor DC in 2016, a cooperative company specialized in the reclamation and resale of construction materials. The non-profit Rotor is still active today as an internationally recognized centre of expertise on building component reuse.

The site that had been chosen for the MAD project is situated in the historic Brussels city centre. The 2011 competition brief strongly hinted at a demolition-reconstruction project. Since the 1960s Brussels is sadly famous for the practice mockingly referred to as *bruxellisation*: ruthless, large scale urban demolitions, as well as for the tendency to indulge in *façadisme*, the gutting of heritage city blocks where nothing but exterior walls are kept in place. MAD fits in a series of architectural projects that have tried to turn that tide.



Fig. 1. Transformation central building (a+b: Melanie Tamm, 2011+2015, c: Maxime Delvaux, 2017)

The Existing Buildings

The former wallpaper company consisted of four different buildings connecting two sides of a dense inner-city block, with each street façade facing a public square. They represented a typical Brussels mix of styles, even as one property and partly designed by a single architect, Marcel Anneet. None of them were considered historically or culturally precious enough to be listed, an assessment officially confirmed by a study of the local heritage department in 2010, prior to the competition.

A modernist building from 1960 served as the first address on one side, with a spacious showroom and retail space on ground level and offices on the upper floors.¹ Surprisingly it had been built directly on a medieval vaulted brick basement. Its early curtain wall façade behind four storey high concrete columns was certainly of some architectural value, but it contained asbestos. The ceilings of the office levels were low, but their concrete structure was quite appealing and unusual.

The central building from the 19th century comprised five levels of storeroom behind a neoclassical façade in poor condition and bearing the traces of numerous adaptations. The building had been raised repeatedly to increase storage space, while relocating the original glazed roof, an essential source of natural light, as all other exterior walls, facing neighbouring properties, were windowless.

On the other side of the plot appeared a post-war pastiche of a small medieval house, executed in concrete by the same architect as the modernist building. He later flanked that low building with a four-storey building imitating the same medieval style (Fig. 2a). Both buildings served as entrance to a large garage and delivery space on the ground floor, while the upper floors were used for housing.



Fig. 2. Transformation post-war pastiche (a: Melanie Tamm, 2011 b: Maxime Delvaux, 2017)

As said, these buildings did not present officially sanctioned heritage value. But why, was our reasoning, should only notable heritage be maintained and restored? Couldn't we be inspired by the way heritage deals with buildings? And what is possible if dealing with an existing building and re-designing it, when one ventures away from heritage and conservation logics? There was something deeply inspiring about the multiple pragmatic interventions inscribed in these buildings, resulting in a richness of layers.

While structurally in good shape, the buildings were far from up to date in terms of energy performance and other regulations and the entire technical systems were obsolete. Abandoned for years, the interiors were in a state of decay that was not charmingly aged. There was no ideal state to be restored, nothing glorious to be discovered, no nice and

beautiful ‘old’ to be contrasted with modern “new”.

From our first visit on, we spotted strong features with high potential for transformation which we termed our *coups de coeur*. These could be either materials, construction elements, spatial situations, or whatever represented a quality or a promise of later quality, as for example the interstitial space between the modernist and the central building (Fig. 3). Somehow we saw double, as if with X-ray eyes: the existing situation and the potential future, being directly inspired by what was already there. As soon as possible, these visits became real explorations of the building’s material reality. We myopically analysed layers, details and modes of construction, as, obviously, detailed knowledge of the building is crucial in any adaptive reuse project. We also conducted a detailed inventory of potentially reusable materials. Probes and tests in situ were done, as soon as possible and in preparation of the planned interventions, followed later by a detailed structural analysis.



Fig. 3. Transformation interstice (a: Melanie Tamm, 2012 b: Maxime Delvaux, 2017)

The Project

During the competition phase it was not easy to convince everybody to take the risk and put forward a project based on maintaining the existing. It was considered important that at least one or more of the buildings ought to be demolished to create a recognizable formal gesture, like an oversized entry, that would showcase the new activity. Ironically the final project of reusing the entire buildings was internally called “no construction”.

Adaptive reuse projects undoubtedly redefine the architect’s role. They mark a paradigm shift but also tickle the fear to lose artistic freedom. The “grand architectural gesture”, the explicit dialectics of “the new and the old”, current trends and the expression of a corporate identity tend to dominate architectural design. Heritage projects and their intrinsic rules are instinctively perceived by architects as a threat to creativity. And the reuse of existing structures, on the other hand, “was most often associated with renovation and refurbishment, previously considered as a bread-and-butter staple of architectural practice not meriting design recognition” (Wong 2017, 30).

So what do we do, as architects, when the building is already there?

In the case of MAD, from the position of Rotor, we felt very much comfortable in the role of defending the building itself and developing design solutions starting from the existing construction itself, which we didn’t perceive as a bridle of creativity. This role could be described as that of “curators of the existing building”, as Manuela Raitano would call it, evoking the new “inglorious” role of architects in adaptive reuse projects.² Other notions that have been used at the time to dissociate our approach from that of a “real architect”

were that of a “lawyer”, a “translator” or an “archaeologist” (Dars, Menon 2015, 73). Our approach might today also be associated with the notion of *care*, as it could be traced back to William Morris. Or as one of the team-members from V+ stated afterwards: we learned from Rotor how to “listen to a building”.

Our final competition proposal invited to accept all existing buildings as they were, with all their incongruities. The project was lauded by the commissioner and the authorities and won the first prize in 2012.

As the initial programme asked for more square-meters than the former buildings could provide, we developed several strategies to align the programme and the existing buildings. We reviewed and merged functions, we used leftover spaces between the buildings, extended some buildings below street level and the modernist building at its top. All our interventions are legible as strategic answers to the programme and the specific needs and desires of the client. Because of contemporary requirements for fire prevention, safety, acoustics and energy performance, cladding was a central topic, both on the inside and outside. In regard of the future use of the building as a centre for design and fashion, cladding materials were also a grateful topic to put at the conceptual centre of our proposal. As a theme, it allowed us to pursue questions we had studied during *Usus/usures*, the Venice project about the wear on surfaces. As we knew, eternal pristine white is an illusion, while the ageing process of façades can be beautiful, as shown in Mostafavi and Leatherbarrow’s *On weathering*, which features the rain-worn façade of Rotterdam’s *Bijenkorf* on its cover. For the exterior cladding we choose to make a statement about the ubiquitous ETICS systems, most often white plaster on a base of PS insulation foam. In our façades small shiny enamel tiles like the ones used in Brussels subways are placed in a delicate pattern to become increasingly visible while the plaster itself turns slowly grey through pollution.

The interior claddings constitute a library of white materials, to form a backdrop that provides heterogeneity and unity at the same time. They were always chosen in a meaningful way, suitable for a specific situation, and evoke, in their context, a story, underlying theme or a good practice or detail solution of the past. For example: the entry hall in the modernist building hints at Brussels subway station design schemes, in its combination of precious Carrara marble as wall covering on the new elevator with a classic Pirelli rubber floor, concrete and polished inox. The concept for the interior cladding was also a strategy to implement the potential use of reclaimed materials later on, as the material variety enabled flexibility in available quantities and choice of materials.

With these strategies we created one new building with a strong recognizable character inside and outside. These design concepts, as developed already within the competition, turned out to be a solid backbone until the final delivery in 2017, while being discussed and redefined during the whole realization process.

Four Interventions and Conclusions

We will take a closer look at four specific interventions to highlight the negotiation process and the design decisions: the goods lift, the glass roof and the double-height space in the central building, as well as the transformation of the former garage (Fig. 4).

The goods lift exemplifies the decision to keep an existing element against architectural common sense. Because of its odd position, detached from the walls by not more than a metre, in the only corner of the central building where a large opening for a glass façade

would be possible, it was doomed for demolition. The common architectural gesture would have been to replace it by a more discrete and functional solution in a circulation block next to the exterior walls and together with a staircase, separated by fire-resistant partition. Moreover: because of building regulations and liability issues, technical equipment will mostly be considered obsolete in any adaptive reuse project. But we had early on commissioned a technical report proving that it was still perfectly usable, joined by a detailed estimate of technical elements that would have to be updated or replaced. Furthermore, we also knew through prior examination that the elevator shaft, then still covered by plaster, was in fact built in brick masonry and not in concrete, a peculiarity considering it was built in 1958. It was eventually at tender stage, and not least for reasons of cost reduction, that everybody agreed to keep the existing goods lift and redesign the circulation system according to this element. Finally, this lift became a strong iconic presence, both inside, as a major element for orientation in a mostly windowless interior space; and outside, where the lift shafts breaks through the roof and protrudes like a little rooftop house that contains the lift's engine and creates a recognizable element for the whole building. As an *objet trouvé* the old goods lift anchors the whole building in a historic and material reality.

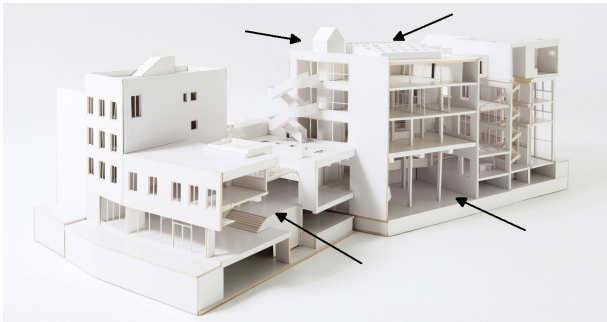


Fig. 4. Final model by V+ (Maxime Delvaux, 2017)

The glass roof exemplifies good reasons to demolish an existing element, even if it might have a certain historic and aesthetic appeal. Both the client and our architects team liked the idea of a 19th century style room under the huge glass lantern. But the panes of single glazing held in slender wooden profiles had been covered with insulation foam and roofing. Truth is that it would have been a complete new replica anyway, most probably less delicate, with double glazing in stronger profiles and requiring even the replacement of the primary structural elements. Moreover: originally this glass roof was meant to cover a triple-height atrium, today the risk of overheating this last level was increased and the fractured form of the old lantern in contradiction with any strategy against that. A new modern flat roof made much more sense to prevent overheating, ensure performative ventilation and effective sun-shading. Furthermore, it could be integrated in the existing structure and contributed to unify the different buildings as one whole, by repeating the same design as the other glass roofs of the project.

The central double-height space exemplifies a major, heavy structural intervention. Before construction began, the client had used some of the rooms for temporary exhibitions. It was deemed that the existing buildings lacked a huge multi-purpose event space, suitable

for exhibitions, conferences, projections, presentations and the like. One level of the central building seemed convenient in size, but had only maximum four metre high ceilings and a dense structural system with three rows of three columns each. To get rid of the central row of columns, the three upper floors of the building were placed on a new steel frame over the height of the basement and the ground floor, linking them together to create the double-height space. The original columns of the basement level were quite impressive: each one a single solid block of Belgian blue limestone, handcrafted, executed and positioned in absolute perfection. No doubt they held architectural value. The columns of the upper floors were in slender cast-iron, covered with concrete on all but the uppermost level in the 1950s for fire-proofing. It would have been possible to maintain the two exterior rows of columns, thus keeping the limestone on the height of the basement and the concrete on the former ground floor, while reinforcing each single one with two new steel columns, but we rejected this as a mannered approach that would display enormous effort in conserving an historical element, while being impractical, space consuming, expensive and visually chaotic. What we definitely didn't want at that time was what Liliane Wong would later describe as the "Frankenstein syndrome" in adaptive reuse projects. We considered it a better solution to replace the exterior rows of columns directly by new lean double-height steel columns, thus executing one coherent structural intervention. As a result, the limestone columns of the basement were demolished. Finally adaptive reuse is always a negotiation between existing structures and new purpose, which should in any case be carefully defined in regard of successful interventions.

On a structural level the transformation of the former garage space was much simpler, a discreet but distinct intervention. We suggested to open the different spaces by essentially taking away the bricks between the concrete columns, while keeping the different floor levels and polishing the existing concrete floors. Somehow this is close to the essence of the whole project: a cautious approach of doing all the work that is necessary, but as little as possible, by being inspired by what is already there, by sustaining the existing form, integrity, structure and materials, which are valorized as such. For these former industrial spaces it was convenient because the future purpose was again a multi-purpose space, to be used for exhibitions, events, pop-up stores and temporary creative workplaces. The result is a rough and clean, spatially rich series of rooms with different proportions, a sort of as-found ruins, a space that definitely contributed to the oft-used labelling of MAD as a "dirty white cube" (Dars, Menon 2015, 69). As evident as this intervention seems today, we faced strong contradiction from the client's side, who disliked the idea of different column dimensions in one space, suggesting us to study their entire demolition and reconstruction in a strictly organized way. The clients' desire for order, clean- and newness, their irrepressible urge to spend money in exchange for a tangibly new result, is certainly an aspect not to be underestimated in adaptive reuse projects.

For the polishing of the existing concrete floors, we had done a test *in situ* early on, that gave us a terrazzo-like result, much to the satisfaction of the client and thus approved. Even if the outcome was finally not the same in every single space, we accepted the result of different concrete colours and textures. This was also due to our overall concept, as already announced during the competition: to be very tolerant towards the existing and to accept its imperfections; to ask for perfection and performance only in newly added materials. Where new concrete had to be executed, such as for new stairs or floors, where there were no prior

concrete floors, or after the demolition of a ramp, we did it with carefully selected light coloured aggregate and clear mortar. In case of reparations, as for the filling of holes from former pipe-passages and joints, we had asked for simply pouring similar coloured concrete before the final polishing of everything.

As a result, the different interventions are all neatly readable, but everything is melted together to form one new whole surface. This was featured through a zoomed-in photograph on the cover of *d'architectures* (Chabard 2017) as it is symbolic for our entire approach: to reveal, to repair and to complete and to form one whole new building inspired by what already existed before.



Fig. 5. polished concrete floors in the MAD building (a+b: Melanie Tamm, 2016)

Notes

1. This modernist building has been co-designed by one of the very first female architects in Belgium, Eliane Havenith, rediscovered in 2021 through the *Wiki Women Design* project of the VAI (Vlaams Architectuurinstituut).
2. Manuela Raitano: “The re-edition of the existing: an ‘inglorious’ condition for contemporary architecture”, lecture at the International Conference on Adaptive Reuse, Pisa, 16th september 2025.

Bibliography

- Chabard, Pierre. “Un White Cube perversi: Le MAD, centre de la mode et du design de Bruxelles”. *d'architectures* 253, 58–69, 2017.
- Dars, Sophie, and Carlo Menon, eds. *V+ Architecture: Documents on Five Projects*. Brussels: Lannoo, Bozar and A+, 2015.
- Demeure, Quentin. *Etude historique: Immeubles place du Nouveau Marché aux Grains 10, Rue du Rempart des Moines 48 à 52*. Bruxelles: Ville de Bruxelles – Cellule Patrimoine historique, 2010.
- Mostafavi, Mohsen, and David Leatherbarrow. *On Weathering: The Life of Buildings in Time*. Cambridge, MA: The MIT Press, 1993.
- Raitano, Manuela. “Progettare per l'esistente: L'architettura è guarigione”. In *La seconda vita degli edifici: Riflessioni e progetti*, edited by Pisana Posocco and Manuela Raitano, 17–46. Macerata: Quodlibet, 2016.
- Rotor (Tristan Boniver, Lionel Devlieger, Michaël Ghyoot, Maarten Gielen, Benjamin Lasserre, Melanie Tamm), Ariane d'Hoop and Benedikte Zitouni. *Usus/Usures: État des lieux - How things stand*. Brussels: Éditions de la Communauté française Wallonie-Bruxelles, 2010.
- Wong, Liliane. *Adaptive Reuse: Extending the Lives of Buildings*. Basel: Birkhäuser, 2017.