



## **ABSTRACTION AND PRAGMATISM : ADDRESSING COMPLEXITY**

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### **ABSTRACT**

Beyond the playfulness of absolute freedom, and beyond the headache of impossible meaning, proximity, diversity and density inherent to the condition of layered contexts are fundamental tools for a sustainable future.

AgwA architecture office was co-founded in 2003 in Brussels by the author. During the last 10 years, it has been confronted to a wide range of projects of different natures in various contexts. This paper will explore these projects through the lens of abstraction (radicalism of the formal simplicity) and of pragmatism (evidence of the functionality and of the constraints).

*Keywords: built forms, architecture practice, complexity*

### **1. layered complexity as context**

In Belgium, the urban expansion and the suburban sprawl in the last century has led to a very layered urban fabric in the cities and a fragmented landscape in its outskirts. Different scales, typologies and historical backgrounds cohabit in landscapes of juxtaposition, superimposition and heterogeneity that have become the playground –or the Tartarus?- of architects and urban planners.

Beyond the playfulness of absolute freedom, and beyond the headache of impossible meaning, it is undisputable that proximity, diversity and density, inherent to the condition of layered contexts, are fundamental dimensions of a sustainable future.

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Figure1. "Touring Lanaken", collage in Brussels, AgwA, 2007

Consequently, it is of utmost importance for architects and urban planners to go beyond the "problem solving" and subjectively artistic approaches of the XXth century, and find ways to change cohesion for coherence through local actions that provide a sense of collectivity and evidence in complex sites. Reducing these local actions to radical simplicity : they become abstract markers of stability in a world of permanent transformation. Reducing them to mere pragmatism, to their inner practical sense : they become monuments of utility.



Figure2. Valens Aqueduct, Istanbul, Turkey

In other countries in which galloping urbanization is ongoing, this precedent is fundamental. In Shenzhen, huge parts of the generic city are about 35 years old. In Brazil, informal urbanization is becoming a permanent situation. In Lagos, Africa's metropolis is starting to regenerate itself from the interior. In Los Angeles, endless sprawl needs diversification. On the contrary, Hong Kong is an endless tridimensional maze. In Europe, cities need to reinvent themselves in times of economic contraction. Time for transformation, adaptation and ways to sustain complexification in order to answer these inextricable issues?



Figure3. Piazza Anfiteatro, Lucca, Italy

## 2. complexifying simplicity

Introducing simplicity in complex contexts sounds like evidence. Most architecture tends to differentiate itself from the context, in order to exist as a landmark or at least to be recognizable. The other way round, there may be ways to reinforce complexity in order to create a sense of fuzziness, of absorption of the new in the pre-existing. Adding, superimposing, extending, cutting, pasting, juxtaposing, colliding, interpenetrating, combining, exploding. Manipulating reality. In a way, we are faced with the urgency of creating sense out of a chaotic reality. One way of acting may be a refusal to play the game of complexity, an attempt to “solve” complexity. An other way is its contrary : engaging with reality, diving into complexity, to take part in the creation of a fuzzy background that could become the new condition of the emergence of order. It is the fuscum subnicrum depicted by Leibniz in the 17<sup>th</sup> century, the dark background containing all the possibilities and all the qualities that emerge in the occurrences of reality. It may be the fuzzy background of television static noise. It may be to superposed pictures of Idris Kahn.



Figure4. The Houses of Parliament, London, Idris Kahn, 2012

The work of Idris Kahn can be seen as a metaphorical expression of this idea. Landscapes are physically layered in the image, adding almost infinite complexity, which in the end creates a new perception, giving birth to new regularities and merging into a soft, peaceful mist. More practically, this approach is illustrated by the work of the photographers Dionisio Gonzales and Filip Dujardin.



Figure5. Dionisio Gonzalez, Heliopolis IV, 2006

They augment reality in the way that it becomes difficult to define the exact borderline between reality and invention, between the existing and the designed, between the background and the object. Dionisio Gonzalez creates a favela-looking background in which gems of contemporariness are inserted. Unexpected and unadapted yet coherent and sensible. Filip Dujardin creates hybrid architectures made of fragments of banality, which are recomposed in seemingly impossible ways. Contradicting and conflicting, yet recognizable and ordinary. They offer ways of contributing to the background, in a somehow modest but energizing way.

The project Metal in Brussels by AgwA proposes a similar layeredness. The former tyre workshop is to be found in a street typical from the XIXth century, but presents a modernist



structure, clearly contrasting with the context. The project is about the refurbishment of the building in a sports hall and evening school, to which appartements are added. Already, a layered program.

The existing structures are maintained and modified, and a volume is added on the street side. The new volume recreates the coherence of the volumes with the neighbours, but adds a conflicting layer to the composition. The minimal architecture of the sixites combined with a two levels concrete beam cladded with polycarbonate respond to the XIXth century houses of the streets. However, the simple principle of stacking levels ensures coherence of the whole, and even can be related to the stylistic work on the ancient façades, in which the lower levels are coarse and refining gradually with the height.



Figure6. Metal, AgwA, 2009

Inside the building, the work on the structure is similar. The simple typology of structural beams spanning the entire space from neighbour to neighbour is never contradicted, ensuring coherence. But the materiality, the detailing and the sizes are allowed to vary freeing according to necessity. As a result, space is modified and the old and the new merge into a new reality, serving as background for local interventions.

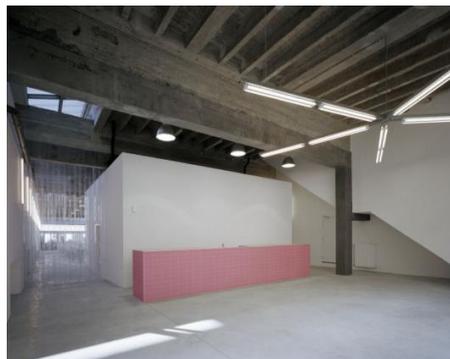


Figure7. Metal, AgwA, 2009



This approach offers the benefit of pragmatic evidence : it plays freely with the existing, feeds from local interventions, allows contradictory styles to coexist, does not necessarily search for articulations. Though it may result in quite surrealistic and poetic results, the work is down-to earth and hands-on. Specifically in Belgium, where the landscape is almost entirely built, there is no real space for new developments in untouched sites. Economic contraction and ecological consciousness may also add to a sense of necessity for these pragmatic approaches of complexity, allowing to absorb contingencies instead of looking for abstract pureness, most of all when addressing relatively modest projects which form the every bread of architecture. In a way, there is a coherence between the approach and the object. Merging architecture into a new background as an approach precisely adapted for these architectures that form the background.



Figure9. Berckbeekschouw, De Vylder Vink Tailieu

Another example of this approach is the carré des Arts in Mons, Belgium. AgwA and Ney & Partners engineers were commissioned the development of a retractile membrane roof for the exceptional heritage military building known as the Carré des Arts. In the framework of Mons 2015 European Capital of Culture, the courtyard houses the "Festival au Carré" and other events run by the arts school Arts<sup>2</sup>, the city and the regional cultural leader Le Manège in Mons (be) and Maubeuge (fr). The space can host up to 1200 persons. The courtyard, the largest open air courtyard in the city center, is now covered by five large membrane vaults responding the archs and rythm of the building. The membranes can be completely removed, leaving the heritage building intact. The special structure was designed in order to allow a very easy and fast handling from the ground and to integrate all structural reinforcements in the thickness of the existing concrete structure. The belgian artist Jean-Luc Moerman painted an immense network of curves on the asphalt of the courtyard.



Figure10. Carré des Arts, AgwA & Ney, 2014

The new membranes are in phase with the building : the form of the vaults is entirely defined by the anchorage points below the roof and in the ground, that respond the rhythm of the existing structure. However, materiality and space are completely changed by the coexistence of the two structures. The painting on the floor adds a layer in signification, and provoke the merging of the structure, the building and the painting into one new identity, which does not deforce the identity of each element apart.



Figure11. Carré des Arts, AgwA & Ney, 2014

The covering of the abbey ruins at Bad Hersfeld by Otto Frei is similar in purpose and technique : a mobile roof membrane linked with a heritage building. The focus is probably more on the mobility of the structure, and in consequence, on the technical aspect of the project. In the project of the carré des arts, this technicality is disappearing in the background because the “structure” is reduced to anchorage points in the existing and reinforced structure, which is invisible. The membranes are part of the Carré des Arts, they could impossibly be transplanted to another place, as the supporting structure is the Carré des Arts itself. In this case, the layeredness and the principle of addition are also present in the physical interaction between the elements of the whole.



Figure12. bad Hersfeld, Otto Frei, 1968

### 3. simplifying complexity

Next to complexifying simplicity in order to merge architectures into a new reality, it is also possible to propose local actions resolving complex situations. Resolving is perhaps not so good a word : transform or revealing may be more appropriate. Placing simple objects in complex contexts may work in a liberating way. This way of working has been present throughout centuries, though it was not with the ambition of changing the perception of space proposing new uses of space. In the introduction, we mention roman aqueducts. These are “utilitarian monuments” according to poet Francis Ponge, but do not serve any spatial purpose. On the other end, simple shapes like the Piazza Anfiteatro in Lucca appear because they were built upon other structures, like a Palace, an amphitheatre or other buildings. The shape is there “because it is there”, not with a specific agenda. From mere utility to mere coincidence, there is a field of possibilities, which does not procede from a designer’s consciousness of the power of a simple shape in space.

Artistic minimalists may have contributed to fundamentally shift this consciousness. Avoiding any references to style, scale, perhaps even matter and constructions, their works are primarily the appearance of a shape, or of a phenomenon, in space, engaging in a relationship with their audience. It may be necessary to distinguish architectural minimalism, which is rather regarded as translation of minimal shapes into architecture, more than the architectural equivalent of minimal approaches. Minimalist works are what they appear, there is no distinction between an underlying message, the construction, the space in which they may appear, the technique, the colors and materiality.



Figure13. Black Square, Ad Reinhardt, 1963

They do not refer to something they are not. This radical honesty, in a way, is comparable to the radical simplicity of the acceptance of reality and locality in the former chapter. The radical honesty of Ad Reinhardt proposing a black square in order not to propose anything else, in order to avoid the influence of any contingency, and in order not to be something else than it essentially is, is perhaps the equivalent of the photographs of Idriss Kahn combining all the possible views from the top of the Empire State Building in New York. The simultaneous acceptance of all possibilities corresponds to the absolute negation of any specificity. If the question of Ad Reinhardt is about what a painting is, if it is only to be a painting, then the hole in the sea by Flanagan is also nothing more than a hole in the sea.



Figure14. Hole in the sea, Barry Flanagan, 1969

This approach of changing reality by placing an intervention in space without altering or articulating the context is particularly powerful in architecture. Not referring to anything, but defining a strong identity, avoiding movement, articulation, dependence between object and context, but providing utility, dialogue and mutual force, allows to address ever-changing landscapes. There is a reversal between object and context : the object becomes the context's context. Where the borderline was becoming fuzzy in terms of space in the former chapter, it is



here a fuzziness of time : has the context grown around the object or was the object placed in space?



Figure15. Ringroad houston, Bas Princen, 2005

The Peronnes sailing school by AgwA, along a vacant industrial waterway, reorganizes a polyvalent site around a central pedestrian pier. The layeredness of the site, determined by the strong presence of the water, the alluvial landscape of the Scheld, the fluvial infrastructure of the Nimy-Blaton waterway and a new series of buildings for the sport activities and accommodations.

A long pier is introduced, floating over this characteristic alluvial landscape and ecosystem. The pier is reminiscent of the linear human inscription in the landscape, and distribute all functions in a flexible way. Complementary elements like outdoor sport fields and the sailing school are disposed in a looser way in the alluvial lanscape. The simple linearity of the pier introduces a formal identity that allows the site to evolve around it. Anchors the pre-existing infrastructure and the new facilities in the context.

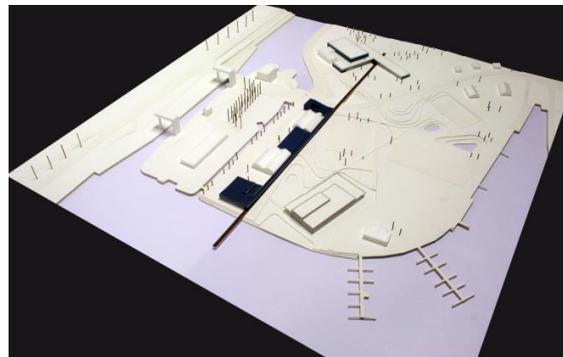


Figure16. Péronnes sailing center, AgwA, 2010



The swimming pools at Bellinzona by Aurelio Galfetti (1967-1970) develop in a similar way. However, in Bellinzona, the “pier” is layered and made functional too, containing supporting infrastructure for the pools. It becomes a layered reality in itself, being more than the simple organizing principle of the site. In Péronnes, the pier is nothing more than a pier. It means that the project can stick to a very simple constructive reality, a simple shape, a simple organizing item. Yet, it is a fundamental tool in the organization of the site, providing the link between the various buildings and infrastructures.



Figure17. Bellinzona public pools, Aurelio Galfetti, 1967-1970

The construction of a small building for the ferryman in Nieuwpoort on the North Sea, next to the harbour entrance, is given the shape of a small tower, containing an office, a rest space and storage room for the ferryman helping people walking along the shore to cross the waterway. The small tower is a humble landmark anchoring the ferry along the beach promenade. It also offers different views according to the viewpoint, thanks to a slight deformation of the shape. It is positioned in a very precise way in the context, articulating the crossing of two pedestrian paths and a small public equipment.



Figure18. Nieuwpoort ferryman house, AgwA, 2012