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Architect & Engineer

THE FIRE STATION CHARLEROI

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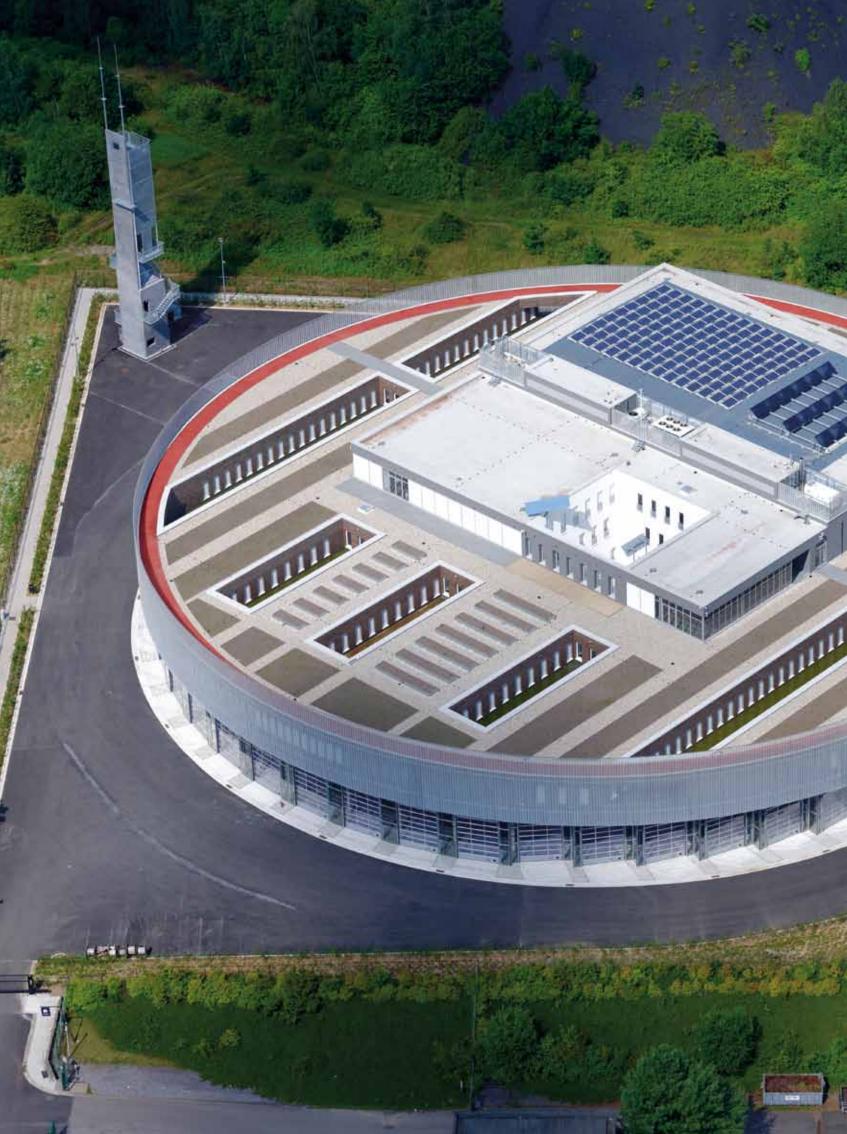














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INTRODUCTION

Brussels, Chaussée de Waterloo, 1537. 1st April 2016, 8:55.

Ghislain André is there.

First you hear his voice, quickly exchanging a few words with the secretary and greeting an employer on his way through the lobby. Then he appears, spritely, straight-backed, suit, white shirt, bow tie.

He carefully takes off his jacket, lights his pipe and starts speaking.

"My awareness of sustainable development dates back to 1971-72, when I was studying at the MIT (Massachusetts Institute of Technology). Required to choose an optional course, I came up with a course given by Jay Wright Forrester, the pioneer of the theory of system dynamics Jay Wright... System Dynamics... Urban Dynamics... His questioning of the Club of Rome, of which he is a founding member, with regard to global balances ... World Dynamics! This book looks at the modelling of complex interactions in the fields of economics, demographics and the environment. Remember, we were in the early 1970's.

Yes, that was when I gained my awareness for sustainable development and my systemic approach to the world."

He pours us a coffee.

"Here, we're a true community of colleagues ... great colleagues. A team working together in a permanent spirit of trust. There's just one key, one telephone number and one e-mail address. Each one of us is responsible for the well-being of the whole set-up, whether it's cleaning up one's desk at lunch or tidying up at the end of the day. A united team, with shared trust.

All of my customers are extraordinary, but since the 2008 crisis I'm finding I have to take part in lots of competitions, as the normal market has collapsed. We're seeing a change in paradigm.

But I'm also continuing with my research. I blame myself for my lack of imagination. I force myself to invent errors. Designing something forces me to start researching. This in turn fuels what I am doing, even though it can sometimes be a bit disturbing: indicators of volumes, the vertical city, white solar panels, the use of glass in a vacuum, perforated steel sheets in combination with a PTFE film I'm a great believer in the virtues of theory.

From whom do I draw my inspiration? Dom Hans van der Laan (Le Nombre plastique, L'Espace architectonique) and Christopher Alexander (A pattern language) ... "

He shows us his 1.35 metre-wide picture inspired by Hans van der Laan

He starts speaking faster, his ideas come tumbling out.

He speaks about the recently won competition for the Province of Namur's House of Culture, an extension of Victor Bourgeois' original building.

"The revelation ... the revelation, that's what's important! The traces left by previous architects are there, but not everything has yet been revealed. We want to reveal the whole form. My proposal for the "bow cylinder" reveals the work of Victor Bourgeois while at the same time linking up to it. I was utterly convinced that we needed something to achieve an overall harmony that wasn't that easy!"



The winning draft submitted by Philippe Samyn and Partners for the Province of Namur's Maison de la Culture. (Ref. 01 | 628)
The number in brackets refers to the corresponding file on the www.samynandpartners.com website.

He gets excited.

"Down with perfection! The Galva flowers on perforated steel sheets have a taste of the Mysteries of Jade.

I also hate featureless architecture. These sleights of hand, this rush for appearance rather than real life Nothing but whims of fashion. The shading is important, it gives a building character, while at the same time fulfilling a technical need for protection: a doorstep, a sill, an overhanging roof to protect the walls and reflection is also important."

He turns to the window.

"But we've got to be fair. I made a mistake here. The window openings are too high. The fascination of a proportion! But the maximum size for any sash is 2 m², though things are obviously different for fixed panels!"

On the other side of the opened window, the fountain in the middle of the old farm's patio starts up. Its music has a soothing effect on our conversation.

"Strict adherence to details, precision, ethics! Those are the rules of our still 'liberal' profession! But unfortunately things are changing. In these times of globalisation, maybe architects will end up being nothing more than salesmen. No more of that "Monsieur l'architecte" you used to hear back in the 1950's."

He puffs at his pipe.

He talks of the undertaking given by young engineers belonging to Canada's Corporation of the Seven Wardens, where the 'Ritual of the Calling of an Engineer' was created by Rudyard Kipling in 1925 in Montreal. They give the following pledge – a true ethical commitment vis-à-vis the world! – in the ritual Iron Ring ceremony admitting them to the Corporation:

"I, ______, in the presence of these my betters and my equals in my calling, bind myself upon my honour and cold iron, that, to the best of my knowledge and power, I will not henceforward suffer or pass, or be privy to the passing of, bad workmanship or faulty material in aught that concerns my works before mankind as an engineer, or in my dealings with my own soul before my Maker."

He gets up and pours us yet another coffee.

"Obligations. As a child, you can; as an adult, you must ... you owe it to yourself! Once you know things, you have to do things. But I experimented a lot, constantly looking for new things, questioning everything.

Coherency through incoherency. There's nothing more paralysing than forced coherency right from the start.

I consequently dread those smug engineers, those "Iying" engineers who're so certain that everything they do is right, who think themselves above all criticism because nobody else understands what they're on about."

He answers his telephone.

"Beauty! Beauty? My heart is more in search of poetry than beauty! All of those dualities: poetry and beauty; tenderness and strength; hesitation and power; ephemeral and long-lasting ... Beauty should not be complicated, should not be expensive; Poetry should not be expensive, but it's more complicated!"

He gets up and goes over to one of his colleagues to discuss a problem for a few minutes.

He comes back.

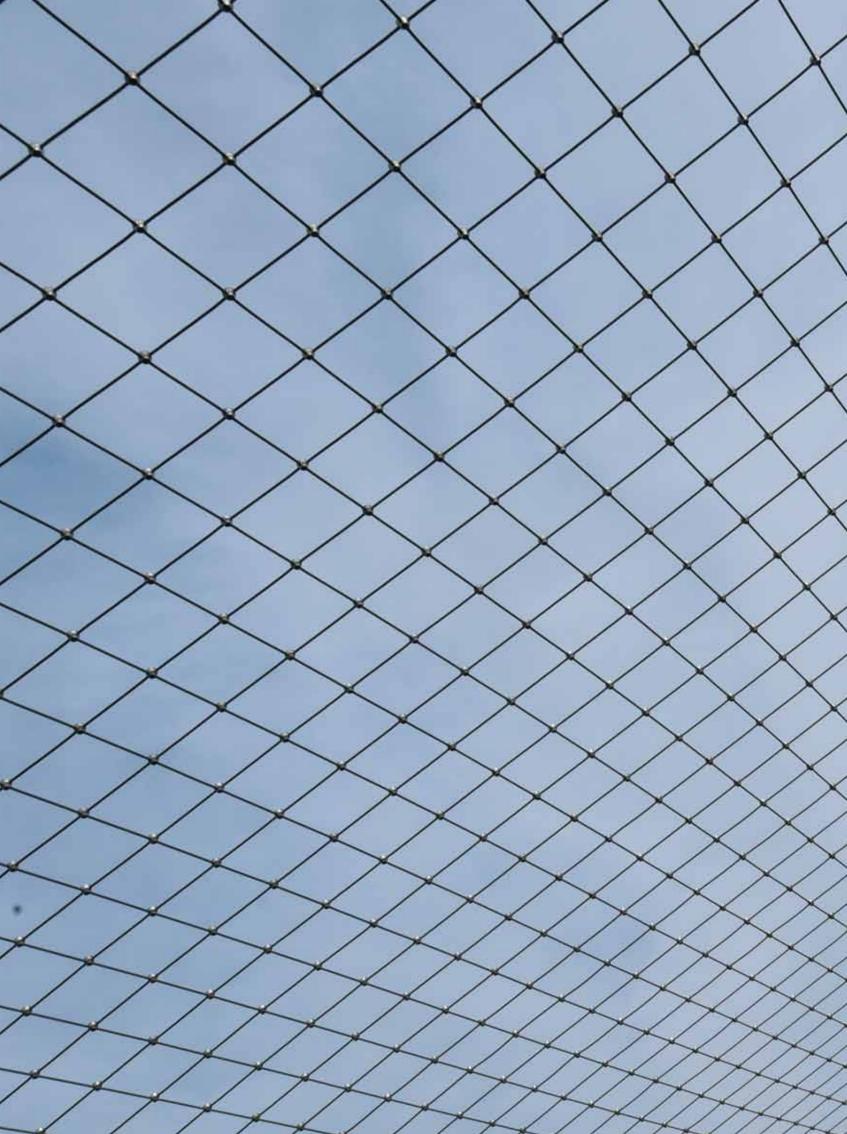
"The Charleroi fire station, that's our last project without Revit. Revit (published by Autodesk) is a CAO software package for building information modelling (BIM). It a very versatile software targeting BTP professionals (architects, engineers, technical staff and developers).

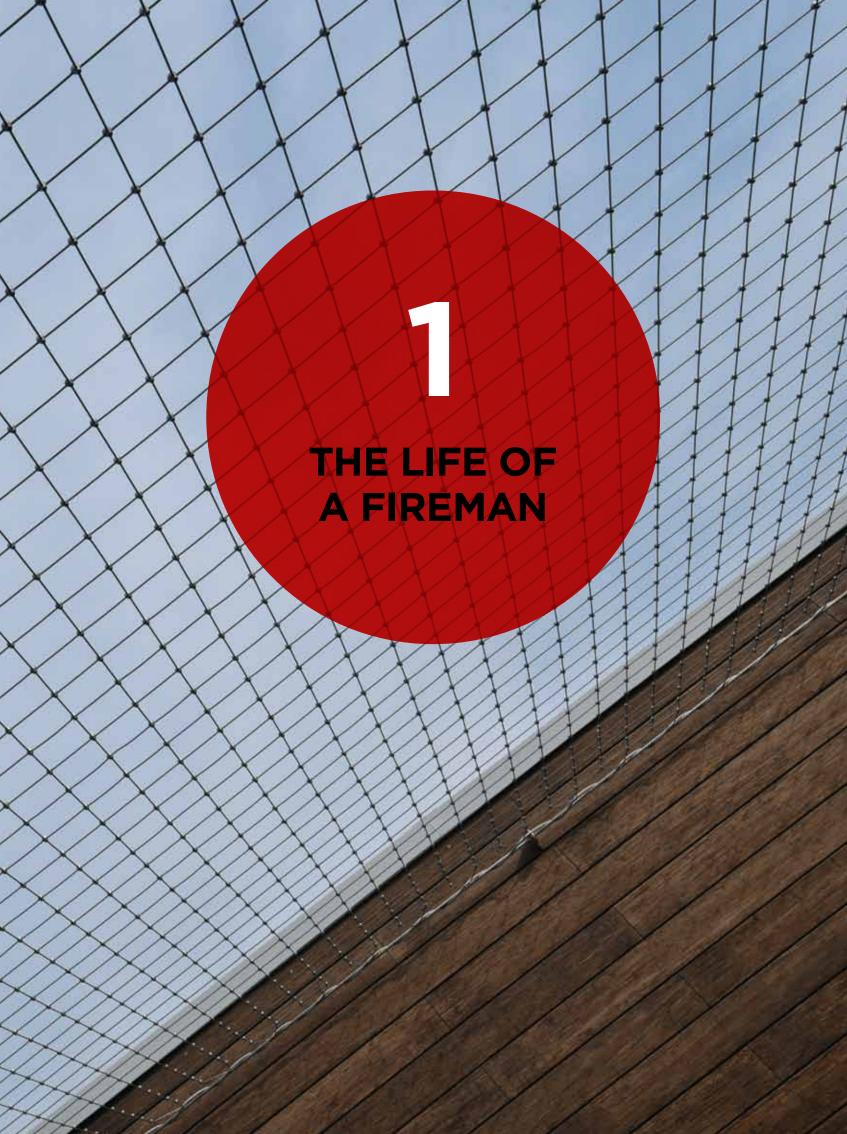
Charleroi fire station involves an awful lot of intense collaboration. 63 blueprints, 208 detailed drawings, more than 1700 emails – and the work's still not finished. 2 years spent on the design, working closely with S.M.Thomas & Piron Bâtiment - CIT Blaton and their subcontractors. And that's why you need to keep to a strict methodology, allowing you to keep track of everything (documents, technical drawings, etc.)."

Charleroi fire station, such a great investment in human resources."

He gets up and says 'good-bye, drop by some other Friday!'









SOMETHING MANY CHILDREN WANT TO BECOME WHEN THEY GROW UP

A CHILD'S DREAM COMETRUE

"I was born in 1940, at the beginning of the Second World War. My family was quite poor." I was told this by François Hallet (name changed), while his charming wife served me a slice of the delicious redcurrant tart she had made specially for my visit, and the smell of hot coffee rose from my cup.

That was around the time the Charleroi fire brigade was re-established. Housed in Charleroi city hall, it consisted of some fifteen firemen, helped out by the mobile Civil Defence unit which had previously been in charge of fire-fighting in Charleroi.

At that time, the only vehicles they had were one small lorry and two fire engines with room at the back for the firemen, sitting on benches exposed to the elements. The fire engines had:

- no on-board pump (the trucks still towed a standalone pump)
- no ladder (there was a 14-metre wooden ladder which had to be towed by a vehicle. It was only used when specifically requested and was manually operated by means of a crank. It was sometimes supplemented by a ladder with hooks on the end, the use of which can only be described as acrobatic),
- no water tank (water was accessed by hoses, sometimes covering quite a distance. In the best case, water would come from a fire hydrant, but sometimes it might even come from a stream, a rainwater cistern or a manure tank),
- no high- or medium-pressure hose reels.

The fire hoses still had no tap and information had to be passed to the person in charge of the pump to open or close the valve, a method which obviously caused extra damage.

E: "I only went to primary school. At the age of fourteen, my father sent me to work as a typesetter in a Charleroi printing shop. Then came military service, where I did duty in the Green Berets as a paratrooper. After that, I had no intention of going back to typesetting. That wasn't what I wanted at all. I needed something a lot more physical. I applied to the police and the fire brigade. I could have gone to either, but I chose the fire brigade, something I'd dreamt of as a child!"

On joining the Charleroi Fire Brigade in 1961 at the age of twentyone, there was still a small Civil Defence unit there, made up of a dozen men.

François entered the fire service together with five of his class-mates, receiving no. 45 as his ID number, the last of his year. He was thus the forty-fifth professional to become a member of the Charleroi Fire Brigade, eight of whom were already no longer in the service (two had died, four had taken retirement and two had been relieved of their duties).

These thirty-seven professionals (officers, sergeants, corporals, drivers and firefighters) were able to provide firefighting services to an area roughly equivalent to what it is now with just seven vehicles (three pumps, one 32-metre ladder, a rescue vehicle, one small lorry and a command vehicle), thanks to the support of the "policiers-pompiers", policemen-cum-firemen permanently assigned to the fire station.

E: "I signed on out of a passion for the work, without any knowledge of the number of hours involved or the wages. At that time, I was still living with my parents. As was customary in those days, I had to hand over my full wages to my father in order not to be dependent on him. On receiving my first wages, I realised just how little I was getting – about one third less than in the private sector. You know, they often 'taxed' us for spending the whole day playing cards! That's why our wages were so low! Though it was wrong, we didn't quit! My father advised me to quit, but I preferred to carry on, while working as a typesetter on my days off, i.e. every other day. That meant I was quite comfortably off."

There were no intercoms in those days. Life in the fire station was punctuated by a bell sending out signals like Morse code. It reverberated in all rooms and was activated from the storage room by the operator:

- uninterrupted ringing for an emergency response,
- · · three short rings for a chimney fire,
- one short ring followed by a long ring for the roll call.



