

Squaring the Circle

Building a Tower the Tirana Way

In 2004, we won an international competition to build a multi-purpose high-rise tower in Tirana, the capital of Albania. If all goes well, the tower will be completed in 2011, seven years later. That it took so long to realize this project has to do with many factors, most importantly, however, with the brutally idiosyncratic reality of Tirana which does not compare to any other urban condition we had worked in before. It was a challenge to which we came fully unprepared.

Tirana is a very upfront capital without subtlety or escape, and so are its people. Tirana's history is diverse, it has suffered a number of unresolved wars, riots, dictatorships, and pyramid economics. The country is based on the *Kanun*, a set of traditional Albanian social laws often related to blood revenge. Although Albanians know that the 21st century has arrived, they don't really deal with it. Daily life radiates an almost insulting roughness, which, after a while, becomes endearing and truly sincere. All logic that we had up until established had to be abandoned. Tirana weighs on your (West European) stamina.

If you want to develop a high-rise project in Tirana, you have to forget any preconceived ideas about how to approach this task elsewhere and embrace the place wholeheartedly, internalizing its logic before you even begin to think how you can contribute to, or transform, this reality. Tirana offered us the opportunity to conceive and build in an environment that is not found elsewhere in Europe today: West Europe learning from Tirana, rather than the other way round, was our mission.

The first thing that struck us was the quality of the light, which is absolutely superb and slightly surreal. The climate is Mediterranean. The presence of the dramatic Dajiti Mountains, a mountain range surrounding the entire city center, became the main backdrop.

In 2003, the city of Tirana, headed by its larger-than-life mayor Edi Rama, had commissioned a masterplan for the redevelopment of the city center. The laureate architects of the French Architecture Studio proposed a Hausmanian doctrine that would uneasily rewrite the heart of Tirana into a car-free zone bordered by ten towers. Since 2003, different parts of the masterplan have been offered as individual competitions, hardly any succeeded to go beyond the proverbial drawing table. Today, the city cannot confirm that either the towers, or the city center development will be completed, because of Tirana's intricate real estate situation, a leftover from Communist times. Due to its client, the Tirana International Development Company, the TID project, however, turned out to be one of the few exceptions. TID managed to acquire over 70 small lots, some not bigger than 2 m². The competition could start.

After two months of concentrated work in our Brussels office, we went back to Tirana, ready to present our proposal. The jury was composed of unrivaled international architects (Elia Zenghelis, Josep Luis Mateo, and Valerio Olgiati, to name just a few). Representatives of the public were carefully chosen, ranging from Miss Albania to West European deputies. The entire event was broadcast live on national television. Architectural CNN... The future of Tirana was now! Whether you believed it or not!

Our competition proposal revolved around the question: "How can we catch Tirana's light in a tower?" The solution was a super-ellipse, a volume starting from an ellipse and ending in a rectangle. The subtle transition between the two basic shapes created a tower, which captured the light fully and changed the profile when viewed diagonally. From the top corners the façade sloped 6 m inwards, forming a gentle cantilever. Viewed from the Kavajes Boulevard, the

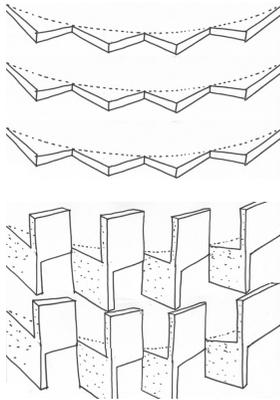
main axis leading from the airport into the city, the tower's silhouette gracefully but strongly complements the historical line-up of the Skanderbeg Square, the Mosque, and the Clock Tower. Because of potentially seismic action, we were convinced that a diagonally interwoven net of columns would be the most effective solution. It would also emphasize the rather smooth three-dimensional development of the skin with which we tried to capture the light. The specific central location of the tower called for a façade that would work on both an urban and a private scale and would comprise of various elements that would correspond to the Mediterranean conditions, both on interior and exterior: loggia / shaded loggia / shaded window / textured surface with view through / textured surface clad with light. We decided to enter the competition on the basis of a terracotta *Moucharabieh* principle, made out of small and basic components following a geometric yet flexible pattern that connected to the tower's structural column net. The *Moucharabieh* was to provide maximum sun protection, which is mandatory in Tirana, where temperatures can rise up to 40 °C. Moreover, unlike a glass façade the *Moucharabieh* could deal in a more graceful way with Tirana's high air pollution which is resulting from a number of still unpaved streets and the utilization of old leaded gasoline by virtually every car. Tirana requires strong lungs.

Programmatically, the tower was conceived in a way that can be re-programmed in a rather flexible manner, even during construction. It comprises of two basic parts: the fixed program and the flexible program. The fixed parts are ground floor shopping and a rooftop restaurant. The main body of the tower consists of an office and housing program, depending on the market. But it was actually one small detail that awarded us the competition. On the site, next to the street, we found a rather dilapidated structure, a seemingly lost item, engulfed by the unstructured daily Tirana frenzy. Little did we know that this monument, a tomb, had been dedicated to Suleman Pasha, a general in the Ottoman Empire, who had founded Tirana in 1614. Apparently, the French masterplanners had not been fully aware of or had simply overlooked this historical relic. However, here it was on our competition site, and a tower, a true monument, was to be built right next to it. We decided to design the base in a way that it would cantilever over the Suleman Pasha Tomb, restoring its true scale and grandeur. The quarter dome that resulted from this intent created an instantly ethereal aura for the city's founder and proved to provide a pretty good urban hangout as well. The day after the competition, the newspapers were wild about this revolutionary idea, hardly

mentioning the tower. Suleman Pasha's dignity was restored! So was Tirana's founding history—perhaps their only certainty.

On the day of the newspapers' laudation, the client, who had been part of the jury, congratulated us wholeheartedly, however, stating in the same sentence that they really disliked the project. Especially the façade, which in their eyes was too Muslim, too closed, too cheap! Our allusion to the Islamic past had not been fully unintentional, considering that up to 70 percent of the inhabitants are in fact Muslims. During the rule of dictator Enver Hoxha, religious practice and symbolism had been suppressed as a principle, depriving Tiranians of any kind of overtly cultural markers until to day. The client's final argument was that the tower's façade did not sufficiently reflect the future image of Tirana. We decided to call an immediate stop, a reflection period for all team members, allowing everyone time to critically re-evaluate the program. After a couple of weeks the client was very surprised when he understood that we were even more critical about our initial project than he was. We believed in the light, we believed in the powerful directness of the super-ellipse, the historical line-up, the way it constructed public space, and last but not least, the redemption of Suleman Pasha. But the budget, which had been communicated to us only after the competition, seemed entirely insufficient. It was clear to us that the original *Moucharabieh* façade principle had to be dispensed with, because it was impossible to work with standardized elements. The diagonal structure had to be rethought. Each column needed different angles and even required different lengths so that all columns would have been unique. This design was out of the question in face of the budget and under the local building technology. The client gladly accepted our suggestion to rethink the façade, which he had judged being too Communist anyway. But the alteration of the diagonal structure, which they considered the true exponent of Western flair and technology, took a piece of work to convince them differently. Not only did he refuse to change the structural concept, he even surprised us with the promise to have a 1:1 concrete mock-up of the diagonal structure finished by the time we came back to Tirana. We congratulated him and withdrew into silence for a couple of months. Eventually he came up with an argument why it's better not to go on with the diagonal structure, actually repeating the same reasons we had brought up before. We could finally focus on the actual goal of our project: How to capture Tirana's light.

We found a simple but effective solution in using standardized façade elements to cover the 3D volume. Albania is a country without a tradition of pre-cast



technology, but Albanians are magicians of cast-on-site concrete. You can ask for whatever you want, they deliver it. Trying to cash in on this wonderful—and in Western countries rather forgotten—craftsmanship, we developed a design concept for the façade whereby the shifting circumference of the envelope would be complemented by constantly changing triangular protrusions. The triangles at the base are the most angular, softly opening up towards the top floor. Like teeth of a saw they gradually dissolve into a straight line. The circumferences of all floors are equal in length, making it possible to conceive a single panel dimension to complete the entire façade. The panels have a height of roughly half a floor and are connected to the floors, not to each other, creating standing and hanging ‘balconies.’ When seen from inside one can perceive the disconnecting panels creating an artificial horizon, the thinnest panoramic cutout conceivable. The gap between panels offers sufficient building tolerance, yet smoothly unifies the reading of the façade, and most of all provides a surface onto which the Tirana light can project itself in abundance. To be affirmative about these assumptions we proposed to have a 1:1 mock-up built. This mini-construction site taught us to decipher the Albanian way of working, but even more strikingly, the Albanian way of thinking. Everything is theoretically possible, but you need to explain it in a way that they can really understand the final intention. Although the contractor could read our drawings, he could not extrapolate from them, which often resulted in wrongly executed construction parts that subsequently had to be taken down. It made us realize that execution drawings had little meaning in this context, other than preparing legal documents for the sake of the local municipal authorities. On the other hand, the contractors had an unseen 1:1 relationship with the actual building material, which opened up new possibilities. After a year of struggling with inadequate communication we managed to establish a specific way of working which could be described as ‘collaborative drawing.’ Since not everything could be tested with to scale or full size models, we decided to bring a video projector into the design meetings. The plans were projected on a whiteboard, so that all team members could freely sketch on the plans, over and over again. This extremely physical way of adapting plans became the true motor of the process, bypassing the failures of verbal communication. We are using it now all the time.

The first test panels were mounted on the mock-up; plasterboard dummies enabled us to check whether the open-closed ratio made sense. A couple of weeks later, the first concrete panels arrived, fully polished concrete slabs consisting of



local black granite set in white cement with white silicon quartz. The latter radiates a transparent quality when viewed from close by, the former offers a beautiful deep glow. Seen from afar, the panels become an abstract sky-colored cladding from which the constituting parts are rendered non-decipherable—an urban garment whose concept of the triangular protrusions fools the (lazy) eye into thinking that it is a continuous field. Conjointly, the concept of the triangles allows for a low-tech construction method that fits Tirana's building culture which is accustomed to erecting projects at 300 EUR/m². To evaluate the feasibility of our new façade proposal the client ordered a 1:1 mock-up with plasterboard panels hung from a concrete structure to be built. He came with a team of more than ten people, all in suits and sunglasses, accompanied by wives, friends and friends' friends. Seeing the construction principle in a nutshell in real dimensions allowed them to imagine that the tower could be built this way.

Once the design was approved the search for a manufacturer could start. We went to Italy, Belgium, and Turkey. In the end, the client settled for an Albanian solution, setting up a local production plant, providing a long-term investment in Albania's manufacturing sector and enabling us to be directly involved in the fabrication process. Each panel is made by hand, resulting in a crafty 12-cm-thick plate, which is then polished to expose the aggregate. The finished panel is 10 cm thick. The final decision for an Albanian production facility was triggered by the need to establish a low-cost production environment. In Albania each panel costs about 500 EUR, in Belgium it would cost 1,500 EUR.

But the construction detailing was not the ultimate bridge to be taken. We had to adjust to working without clear standards and building norms, which in the end resulted in a field rife with possibilities. We felt that things could be shaped, regulations could be written, standards be defined, tests be made. It was truly exhilarating to operate as a free agent within a vacuum of regulations. The TID tower is actually the country's very first project that complies with legal fire regulations and it is the first project for which construction site meetings were held. In Albania, an architect normally stops working when he hands in the building permit. There is no such thing as site supervision, nor is there any form of liability. So parallel to the development of truly contextual building details and ditto methods, we equally had to venture into negotiations guaranteeing professional rights that we—as West European architects—had taken for granted. In the end, the contractor took a fond liking to the construction site meetings, as did the client. It became their weekly moment! In turn, we decided to set up a local office,

headed by a German ex-pat architect who leads a group of local draftsmen/architects, who were desperately needed to strategically avoid the 'lost in translation' effect. From our Tirana office, located on the top floor of a nearby building, we could see that our initial gut feeling to rethink both the structure and the façade was the right decision. We avoided West European import and created something new: not local, not foreign, but something new, yet to be appropriated.

Three years after winning the TID competition we applied for the Skanderbeg Competition, a major competition aiming at redeveloping Tirana's main central square, a pantheon of Albania's history, which is located just off the TID Tower construction site. Competing with offices like Daniel Libeskind and MVRDV, we banked on our Tirana gut feeling experience. We proposed a straightforward non-romanticized ambitious project and got the commission. All of a sudden the Tower regained its square, it's last missing link to perform on the Tirana stage.

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