

## LET THERE BE LIGHT

THE POLONSKY ACADEMY - VAN LEER JERUSALEM INSTITUTE

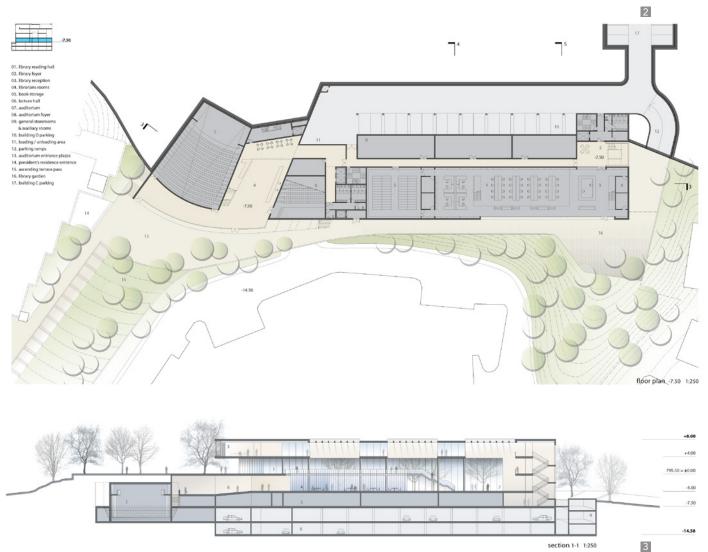




An Academy dedicated to learning and research could not but celebrate light in all its grandeur as it does at the Van Leer Jerusalem Institute's new building designed by Architects Bracha and Michael Chyutin

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PHOTOS: Aviad Bar Ness | DRAWINGS & GRAPHICS: Chyutin Architects



The stark white interior of the longish entrance lobby, at once, commands you to the academic atmosphere of the newly designed Polonsky Academy building of the Van Leer Jerusalem Institute, Israel. An informal seating area for scholars dotted by a few red easy chairs, presents a breathtaking view of the green landscape facing the north façade, while rooms of scholars are lined to the south. In the centre is a well of light, transparent to the floors, above and below.

A serene academic complex, now tucked in a lush green landscape, the 28 dunam

(28,000 sq. m) plot in Talbieh, Jerusalem, was once barren desert, belonging to the Greek Orthodox Church. In 1939, the then British Mandate Government purchased the land for £1 million to build a Government house on the site. Today, the Van Leer Institute, which houses the Israel Academy of Sciences and Humanities, founded by Dutch Jewish Philanthropists, Bernard and Polly Van Leer, in the 1950s, finds itself conveniently placed between the President's Residence and the Jerusalem Theatre.

The buildings in this academic complex

- 1. Built 40 years apart, the old and new buildings in the campus have a common language
- **2–3.** Plan and sectional view of the Academy







are modest and easily merge into the landscape, hardly making them visible to a passer-by. The element of surprise that the architects Shmuel Pevsner and David Reznik desired in the old buildings of the Van Leer are seen emulated by architects Bracha and Michael Chyutin in the new building. The buildings in the complex reveal their form in steps and provide the user with a gradual experience of the spaces within. Although work on the new building began in 2008, more than 40 years after the original campus building, there is an unbroken dialogue of horizontal lines that connects the two visually.

A striking feature of this north-south oriented building is the absence of windows on the south façade, populated with three open-to-sky courtyards interspersed between scholar rooms. The façade is punctured as a 'mashrabiya' with specially developed prefabricated concrete units faced with stone, a pattern on the south façade, inspired from the recessed stone work of architecture in Hebron. Windows in the scholars' rooms face these courtyards. Incidentally, the south façade is the only side from where one can see all the four levels of the building, a strategy the architects ingeniously used to visually dwarf the building in order to balance it with its historic counterpart.

Quite in contrast, the north façade is almost totally glazed from floor to ceiling. Facing the pine-studded landscape garden, originally designed by Yahlom-Zur Landscape Architects, every space in the north is adorned with the brilliance of diffused light that along with the serene landscape presents a pastoral palate. A shaded Rotunda in the landscape has a statue of Albert Einstein, seated in the center – no doubt a favorite spot for young scholars, who spend nearly five years dedicated to research in this Academy.

The projected upper floor on the North façade, which is completely glazed, is protected by vertical fins made of hollow steel, covered with recycled veneer.



These vertical shades help reduce the horizontality of the north façade, and the reflection of the rectangular old building block on the lower reflective glass aptly defines the harmony between the two.

But nowhere is the play of light most pronounced than in the seminar hall on the lowest floor of the new building. The recessed stone pattern used on the courtyard facades on the upper floors continue here, but with dramatic effect. The small deep recessed slits bring in ample light but not much heat, while the deep round skylights provide almost uniform light throughout the seminar hall, without affecting the audio-visual display area.





- 4. Scholar's rooms
- **5.** The glazed north facade is well shaded
- **6.** South facade with dead wall and mashrabiya pattern
- **7.** Courtyards on the south with Mashrabiya features in recessed stone
- **8.** Rotunda in the central garden with Sir Albert Einstein
- 9. Library at two levels

## HIGHLIGHTS

- 1. A striking feature of this north-south facing building is the absence of windows on the south façade, populated with three open-to-sky courtyards, interspersed between scholar rooms. The façade is punctured as a 'mashrabiya' with specially developed prefabricated concrete units faced with stone, a pattern inspired from the recessed stonework of architecture in Hebron.
- 2. The buildings in the complex reveal their form in steps and provide the user with a gradual experience of the spaces within. There is an unbroken dialogue of horizontal lines that visually connect the old and new building, built 40 years apart.
- 3. On asking what tools of simulation she used to achieve such suave levels of lighting within the building, Bracha Chyutin answered, "No simulation, only my imagination!" which is where architecture begins.
- 4. The academic building cools itself from a buried water pipe geothermal system that cost a whooping NIS 1.4 million (US\$ 374,000), but is expected to be repaid in 5 years considering the cooling load that it takes care of, without conventional fossil energy. The building is designed to generate more energy in the future than it consumes.
- 10. Lower entrance foyer
- **11.** The white lobby facing the greens and the central light well that greet the visitor
- **12.** The central well of light







The library, distributed over two levels, opens on to a garden, and can be accessed by a separate entrance, thanks to the site slope that has been creatively used by the architect. Made largely in wood, it provides the ideal setting for introspection.

One of the conditions of the donor of the Polonsky Academy, Dr. Leonard Polonsky and his wife, Dr. George Bennett, was to make a 'green building'. The academic building cools itself from a buried water pipe geothermal system that cost a whooping NIS 1.4 million (US\$ 374,000), but is expected to be repaid in 5 years, considering the cooling load that it takes care of without conventional fossil energy. The building is designed to generate more energy in the future than it consumes.

On enquiring about what tools of simulation were used to achieve such suave levels of lighting within the building, Bracha Chyutin answered, "No simulation, only my imagination!" – which is where architecture begins. The Polonsky Academy building is a celebration of space. The ability to move in and out of built and un-built opento-sky green spaces in the building is as remarkable as the use of the mashrabiyas and the central light well to infuse natural light throughout the building.

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