

Maan Library

ARCH 346 Competition Elective

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03/12/2014

“The works of the past always influence us, whether or not we care to admit it, or to structure an understanding of how that influence occurs. The past is not just that which we know, it is that which we use, in a variety of ways, in the making of new work.... The typology argument today asserts that despite the diversity of our culture there are still roots of this kind which allow us to speak of the idea of a library, a museum, a city hall or a house. The continuity of these ideas of type, such as they are, and the esteemed examples which have established their identity and assured their continued cultural resonance, constitute an established line of inquiry in which new work may be effectively grounded.”

The Harvard Architectural Review. Volume 5. Precedent and Invention. Between History and Tradition: Notes Toward a Theory of Precedent. John E. Hancock.

In the making of new work, Maan Library, I took inspiration from several projects that serve as a foundation for the new work. The most basic “idea” of a library is storage and organization of books, comfortable place to sit and to be around other people. People have the choice to work at home, but they choose to be in a library, immersed in the academic environment. The pressure of working in a setting promotes the habit of work and study. Even in the technological world where information is easily accessible through the internet, the physical tangibility of books still possess a desired quality.

The Maan Library is located between the Helsinki Culinary School and the Aalto University School of Business. The library stands out with its curved walls, its frontal free-form released from the conventional box-type. Because of its boldly-shaped exterior, its surroundings become “something the building [acts] upon”¹, While its expression derives from the building’s setting, “its context is what gives a building its meaning.”²

¹ Denise Scott Brown, “Context and Complexity,” in *Complexity: Design Strategy and World View*, ed. Andrea Gleiniger and Georg Vrachliotis (Basel, Switzerland: Birkhauser Verlag AG, 2008), 25.

² Robert Venturi, “Context and Complexity,” in *Complexity: Design Strategy and World View*, ed. Andrea Gleiniger and Georg Vrachliotis (Basel, Switzerland: Birkhauser Verlag AG, 2008), 15.



Zoning site plan. The context of the library is admist a network of public academic buildings.



Site section. The convex glass façade of the library lends itself to reflect and magnify its surrounding, particularly the sky.

For this competition four projects were researched: Delft TU Library in the Netherlands, Kamppi Chapel in Finland, British Museum in the United Kingdom and Fisht Stadium in Russia. Several key characteristics were noticed in each study.

Delft TU Library brought about a unique programmatic organization of a bookshelf wall. The Kamppi Chapel of Silence was built with curved, womb-like walls to create an inwardly-focused space. A point of silent reflection. The British Museum was an excellent example of the potential of steel and glass-walled construction with its detail and intricacy. The Fisht Stadium is versatile: an open-air stadium built for the Olympic and Paralympic Games with its steel structure and ethylene tetrafluoroethylene panels. These examples each have a unique “cultural resonance,” and serve as icons for their explorations of programmatic organizations, daylight quality and structural systems.

The “roots” of a library is the storage and organization of vast amounts of books. In strict definition, a library is just a space that “contains collections of books, periodicals and sometimes films and recorded music for use or borrowing by the public or members of the institution.”³

Delft TU Library merges the idea of storage and architecture. The library was designed by Mecanoo and completed in 1997. It is located east of the Conference Centre on campus, just south of Christiaan Huygensweg. The Delft TU Library stacks the bookshelves on top of each other to literally build a wall of books with a feature staircases cutting across. This modern take on the old bookshops with the moveable ladder connecting the shelves and its result is freer space on the ground level for seating.



Fig. 1 A personal library with moveable ladder.

³ “library.” Oxford dictionaries, accessed March 14, 2014, <http://www.oxforddictionaries.com/definition/english/library?q=library>

The continuity of books draws back to the idea of the library as just a storage centre for books. Delft TU Library draws on the identity of collections of books and the simplified spatial organization that Dutch architecture is known for.



In borrowing this spatial organization for Maan Library, books in the main building are positioned in a linear wall. The books in the smaller building are arranged into a curved bookshelf wall that echoes the exterior wall. The flattened northern side of the Library continues the linear language set by the two schools, while maintain the boundary of the courtyard. The curvilinear forms of the southern side expands the public realm and invites the visitors to linger in front of the Library. The main building is “pushed in” near the main entrance, allowing the patio to extend the café area into the exterior. This organization clears the floor space for flexible seating in the main building allowing a variety of activities that could take place. The idea of a wall of books draws to the essence of book storage and emphasis on books by displaying the books in a uniformed fashion.



Fig 2. TU Delft Library book wall.



Maan Library book wall.

The Kamppi Chapel by K2S Architects Ltd. was completed in 2012. It is located in one of the busiest areas in Finland in the Narinkka Square in Helsinki. The chapel was built as a point of silent reflection amidst in the metropolitan area. It is a simple iconic representation of the Finnish use of northern light and wood. The distinctive curves of the thick wall are carefully choreographed to draw the visitor to the altar. The visitor can feel the sensuous curves of the wall and the warmth of the material. The gentle illumination by the northern lights upon the wooden walls, encloses the visitors in the warmth of the wood.



Fig 3. Kamppi Chapel interior.

In the Maan Library, the curves of the bookshelf wall unit follow that of the exterior glass wall. The natural warmth of the maple wall units invites the visitors to slow down, look for the books and guide the visitor around the sinuous path. Standing on the outside of the bookshelf wall there is a distinctive contrast in the temperature of the two curved walls, the coolness of glass and the warmth of the wooden bookshelf and books. Standing on the inside of the book wall, there is a safe cocoon like enclosure.



Maan Library small building interior walkway.

The British Museum renovation covering the The Queen Elizabeth II Great Court was design by Foster and Partners. The British Museum was established in 1753, first opened to public in 1959 in Bloomsbury and is growing to be one of the largest museums in the world. The courtyard contains a pillowy glass roof, constructed by an Austrian steelwork company during the recent renovation with, 1656 panes of uniquely shaped glass.⁴ The courtroom contains a pillowy glass roof. The crystal blanket encapsulate the artifacts of the Museum. This roof is created using a lattice structural system. Depending on the time of the day, the roof structure creates various shadow patterns on the floor and walls of the museum. The white walls and white floors of Museum create a blank backdrop for the intricacies of the roof system. Amidst the cityscape of London, the fabric of the roof is drastically contrasted by that of the city.

The Maan Library has an extended structural system which creates a free form membrane that allows light penetration. The floors and walls are white to set the stage for the shadow play of the exterior structure. The structural flexibility of the lattice system easily allows for the transition of the building from the rectilinear north wall to the free organic curves of the southern wall.



Fig 4. The Queen Elizabeth II Great Court in the British Museum



Fig 5. Areal view of the British Museum.

⁴ Foster and Partners. "Great Court at the British Museum." Accessed March 13, 2014. <http://www.fosterandpartners.com/projects/great-court-at-the-british-museum/>

The Fisht Stadium is designed by Populous and British consultancy Buro Happold and built in 2013 for the Sochi Olympics. To the north of the bowl is the Krasnaya Polyana Mountains and to the south is the Black Sea. The upper portions of the stadium is made of ethylene tetrafluoroethylene panels to give the appearance of snowy peaks, as well the panels light up at nighttime. Due to the large curves of the stadium the lattice structure is composed of large rectangular pieces, which is easier to assemble than the triangular structures. The Lattice structural system in the lower portion of the stadium hugs the large curves. The relatively modular rectangular glass panels allow for easy panel installation, and the thin spans allow ample light to filter in.

The Maan Library uses the same structural lattice system. The flexibility within this structural system allows translucent glass to be placed where there are floors and clear glass everywhere else on the membrane. The structural spacing is 1Metre on centre, the same dimension as the exterior doors making the modular manufacturing process easier. The operable pivoting windows allow for cross ventilation on the ground level. It pulls in the cool air from the outside.

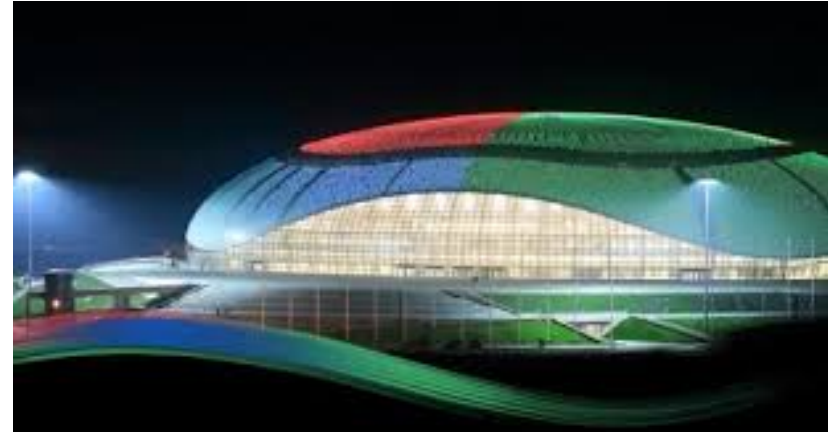
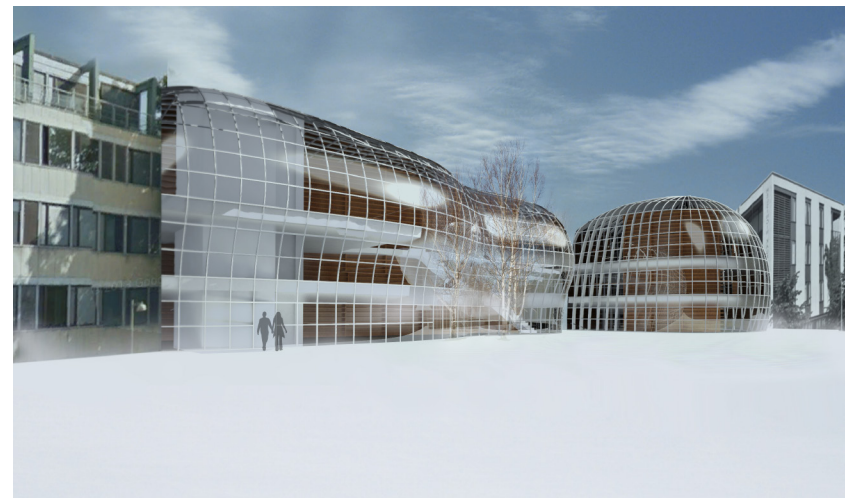
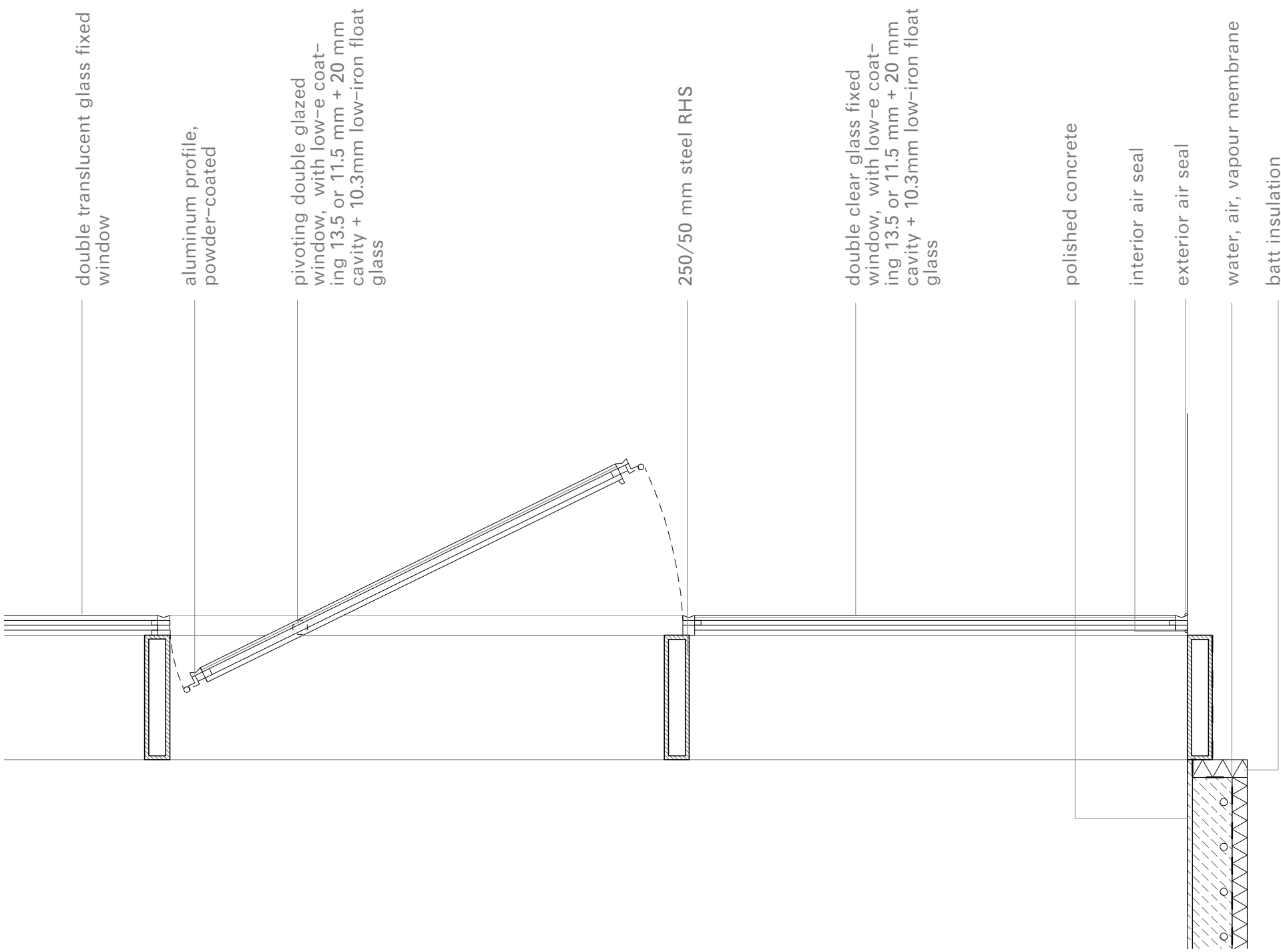


Fig 6. Fisht Stadium areal view.



Maan Library streetview.



1:10 WINDOW DETAIL

The Maan Library takes inspiration from Delft TU Library Book stacks, the curvature of the Chapel of Silence, the structural clarity of The British Museum and the Fisht Stadium, and these examples of the organizational, formal and structural expression resonate most strongly in its fundamental design.

Images :

- Fig 1. Tired Mirrors. "20100601." Accessed March 14, 2014.
http://tiredmirrors.blogspot.ca/2010_06_01_archive.html
- Fig 2. mecanoo architecten. "library delft university of technology." Accessed March 14, 2014.
<http://www.mecanoo.nl/Default.aspx?tabid=116&DetailId=821&pcode=A126>
- Fig 3. CollabCubed. "Kamppi Chapel: K2S Architects." Accessed March 13, 2014,
<http://collabcubed.com/2012/07/06/kamppi-chapel-k2s-architects/>
- Fig 4. and Fig 5. Foster and Partners. "Great Court at the British Museum." Accessed March 13, 2014.
<http://www.fosterandpartners.com/projects/great-court-at-the-british-museum/>
- Fig 6. Oriental Review. "Sochi Bringing Olympic Spirit Back to the Games." Accessed March 13, 2014.
<http://orientalreview.org/2014/02/01/sochi-bringing-olympic-spirit-back-to-the-games/>

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