

“Sculpt the Light ”Architectural Exhibition

Presented by “The Prototype”, Henry Leung & Ryan Leung



The "Sculpt the Light "architectural exhibition at JCCAC has been very successful and finally come to the end on 7th April. The spatial installation, “light sculptor” was certainly an inspiration to many visitors. If you weren’t there to catch the action or just want to relive those unforgettable moments, we’ve got you covered with the extracted content and photographs:

Exhibition Content

We often find the most impressive light scenes existing at the corners of the city, it happens like an accident, can we recapture the beauty of this lighting quality that so it becomes part of an architectural design?

Our general understanding of “Architecture” always refers to the matter of function and measurable dimension, on the other hand we neglect the atmospheric and spatial condition generated from the building. Light, for example, it plays an essential role that affects the space under various manipulate of lighting quality. For instance, we feel uncomfortable when we can’t escape from the vigorous sunlight; we feel relaxed under the tree with diffused light and shadow; we feel insecure in a dark and narrow alley and etc... In a sense, light is such as an invisible element that dramatically transforms the spatial quality.



The ever-changing behavior from sunlight, it generates various shadow patterns in relation to building orientation. In other words, it creates an unbreakable "triangular relationship" between light, time, and building. If the structure plays the part of "sculpturing tool", light would be an invisible "material". For our art work, the geometry design has been captured from the route of the sun, it generates various lighting effects during the day. In addition, we applied the translucent canvas as the membrane component in order to enhance the gradient and layering effect. Additional flood lights have been set up in the structure, so the shadow pattern will take place on the canvas during the evening time. As each set of canvas is formed by four different angles, its elastic property generates the double curvilinear surface. As a result, the pattern of canvas formed a relative effect in two directions, visitors can review different spatial experience with one side "closed" while the other side "opened", it just works similar to a three-dimensional louver creating unique shadowing effect.

We choose the type of lightweight Structure because it enables to re-capture the spiral-shaped tunnel at the same time allowing the light comes through. Firstly we separated the entire structure into thirteen ribs, each rib is connected with six metal rods. The rib itself is formed by three square-like aluminum frame work rotated with specific angle, therefore the structure has been reinforced with the diagonal braced joints. Furthermore, each rib has minimum of three points to connect, so it should not cause a critical problem if there is any loosen bolt. Since the art piece is made with lightweight structure, it takes advantages for both assembling and transportation from place to place.



This is our first architectural exhibition using "light" as the main topic, apart from the design of light sculptor, we also consider the venue that provides natural sunlight in order to trigger the lighting effect. In order to express our concept, we believe any computer graphic will never be able to match the real effect generated from natural sunlight. Therefore, we decide to present the idea with 1: 1 prototype which allows visitors to "catch" the ever-changing shadow pattern during the day.

About "The Prototype"

When everyone concerns about the efficiency in our city, we lose the spirit from living environment unwittingly. It leads to the fact that the aesthetic value has been taken away from architectural design. Architecture is not a "container" for living, but it is a way to express and educate for better life style. Nevertheless we still believe art is a key to revive the spirit of life and architecture. Good architecture should not be a luxury limited to few peoples, instead we want to promote and create a better living environment to the public.

We often find numerous good designs only remain at concept stage, mostly it will end up by losing the initial concept due to the resistance from practical part of design process. In this case, our team "Prototype" tries to break the traditional working method, alternatively we often represent the idea through experiment of real scale prototype that performs a direct spatial experience. It will be a very challenging task however we believe this is the most precise way to proof the concept in reality.

「Sculpt the Light / 光影之間」建築設計展覽

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位於賽馬會創意藝術中心名為「Sculpt the Light / 光影之間」建築設計展覽已經在四月七日完滿結束。標誌著以實體空間裝置出來的效果比預期更加成功，令每一位來到訪過的參觀者對這作品留下深刻印象。以下是我們收錄的展覽圖片與內容供大家欣賞：

展覽內容

很多時在城市的角落，偶然會發現令人難忘的光影情景，這剎那間的情景就像意外般發生。大家可有想過去捕捉這光影情景，將這效果揉合在我們生活的建築設計上？

人們普遍對建築的看法都只是着重表面或 Measurable(量度得到)的功能效果，而往往忽略了建築物所營造出來的氣氛與空間感。以光為例，不同素質的光能夠營造出不同的氣氛：例如我們在無法躲避的日光下而感到畏縮；在樹蔭底下那柔和的光會令人感到輕鬆；在陰暗的後巷會令人感到害怕等等。光，這個觸摸不到的元素，就這樣戲劇性地影響整個空間變化。

日光永遠是處於不停變化的狀態，基於不同時間相對建築物座向，而產生不同的光影效果。因此，光、時間和建築物就產生不能分割的「三角關係」；如果建築結構比喻為雕刻「工具」，光就是透明的雕素「材料」。在我們的設計作品上，那結構形態是為捕捉太陽運行的路線而設計，在不同時間裡刻劃出不同的光影效果。此外，在結構架上掛上半透明的帆布，加強光影層次和漸變效果。而我們在展品內裝上太陽燈，在晚上那光影部份便會集中在結構的帆布上。由於每一組帆布都是以四點不同角度編排而成，物料的彈力會形成雙曲面的立體效果。就這樣兩個方向的帆布排列出現了相對效果，參觀者在一邊方向會發現「密封」而另一邊會發現「疏通」的效果，這就仿如立體的 Louver(百葉窗)而帶出更獨特的光影變化。



在結構上我們選擇了以 **Lightweight Structure**(輕型結構) ，以做到像螺旋形般而可以透光的隧道形態。首先將整個結構分成十三組像肋骨般的構件，並在每組構件之間以六枝金屬杆連接。每一組構件獨立上由三組正方形鋁製骨架以特定角度組合而成，令結構能達到對角支撐效果。再加上每一枝骨架最少以三點來連接，假若有螺絲鬆脫也不會構成很大問題。最後由於整個設計是輕型結構的關係，在裝嵌與運輸方面也有很大幫助。

今次是 **The Prototype** 首次以「光」為主題的建築設計展覽，除了在創作上的研究與考慮，在場地選擇方面也需要找到有日照的地方來實現展覽品。在表達設計方面，無論用任何電腦構圖技術也無法媲美真實日光演繹出來的效果，因此團隊堅決以一比一實體裝置來表達這個概念，好讓參觀者以不同時間在展品上觀賞到不同的光影效果。



關於「The Prototype」

在這個講求效率的年代，悠久以來所建立的美學早已與建築設計分離，城市裡的生活環境變得枯燥乏味。建築並非只是生活的容器，而是幫助我們去尋找有價值的生活態度。就因為這樣我們相信只有藝術才是生活與建築之間的一條橋樑。美好的建築設計不應是少數人的奢侈品，而我們作為設計師應該將這個意念普及化。

很多時好的創作只能停留在構思階段，在設計的執行過程上受到很大阻力而放棄原先概念。為了打破傳統的設計方法我們嘗試以「Prototype / 設計雛型」為基礎，對「概念」與「實際」之間進行求證，並以最真實的方法表達這個空間體驗。