January 1999
建築
建築雜誌第022號
1999年1月發行
每月一刊
行政院新聞局
登記證局版台誌字第736號

Dialogue

Architecture + Design + Culture

1998 Winner of the prestigeous Golden Tripod Award from (ROC-GIO) for Magazine Quality & Graphic Design

本刊榮獲1998年度行政院新聞局雜誌推薦金鼎獎暨雜誌美術設計金鼎獎

Special Features on Rafael Viñoly

Rafael Viñoly 特別報導

Campus Architecture 校園建築

4 712622 000028

NT$ 200

022

Monthly review from

Interbreeding Space Architecture 佾所建築事務

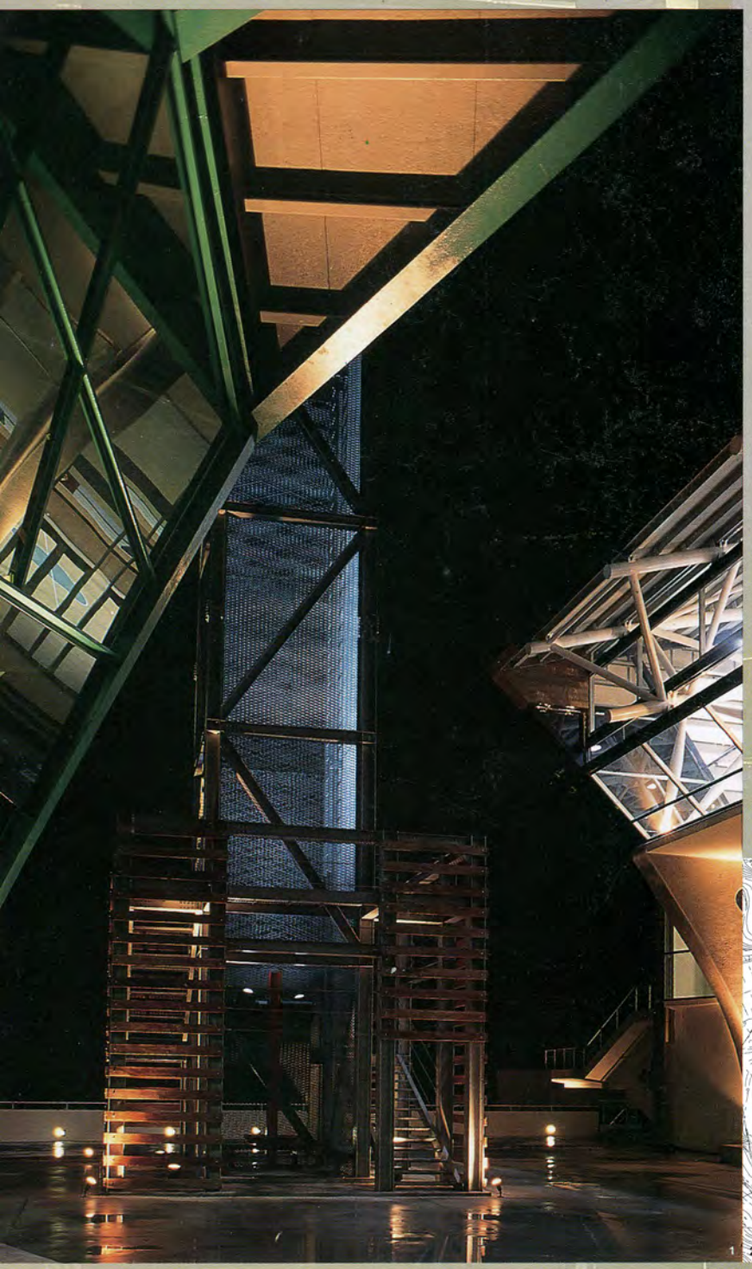
Camera Eye & Interbred Hand — Three Projects of Shih Chien University, Kaohsiung Campus

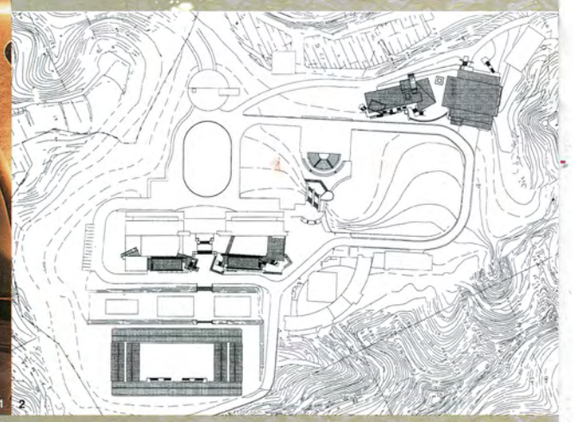
Kaohsiung, Taiwan 1996-1998

補影的眼．混殖的手
實踐大學高雄校區群體建築—台灣 高雄 1996-1998

案名：實踐大學高雄校區群體建築
建築師：佾所建築事務(ISA)呂理煌
設計群：陳仕偉、林欣蕙、邱彥霖、鍾裕華、黎冠驛、
周忠邦、蘇亦奇、蔡淑玲、呂龍梅、顏暐英、陳冠華、黃俊傑
林朝成、郭國相、十方聯合建築師事務所、
林柏旭建築師事務所、胡炯輝建築師、黃演宏、孫兆信
顧問：結構—胡浴暉結構工程技師事務所
機電—正典電機技師事務所、巨匠電機技師事務所
空調—元圻工程顧問
營造廠：章宜營造工程股份有限公司
業主：實踐大學
校地面積：130,625m²
主要建材：屋架—H型鋼骨、圓鋼管、銅板
外牆—斬石子、噴雨漆、鍍鋅壓花鋁
地坪—GRANDWOOD 水泥整體粉光
攝影：呂小凡
美術編輯：蔡淑玲

PROJECT NAME: Three Projects of Shih Chien University, Kaohsiung Campus
CLIENT: Shih Chien Kaohsiung Campus
ARCHITECT: Interbreeding Space Architcture(ISA)
PROJECT ARCHITECT: Li H. Lu
PROJECT TEAM: S.W.Chen, S.I.Lin, Y.L.Chu, Y.H.Jong, K.Y. Li, J.B.Jou, Y.C.Su, S.L.Tsai, H.M.Lu,TAO Architects & Planners, Jone-Hui Hu Architect, Y.H. Hwang, Z.S.Suen, S.I.Yan, K.H.Chan, J.J.Hwang, J.C.Lin, K.K.Guo
CONTRACTOR: Jang-yi Construction Inc.
SITE AREA: 130,625m²
STRUCTURE & MATERIAL: I-beam, steel pipe, copper plate, grandwood,
PHOTOGRAPHER: Li H.Lu
GRAPHIC DESIGNER: S. L. Tsai


1


2

National Tainan Institute of the Arts professor Li-huang Lu and partners at ISA Architects recently completed three projects at the Kaohsiung campus of Shih Chien University: the expansion of the existing foundation building (completed in 1996), and construction of the new Student Activity/Sports Center and Education Building (both to be completed this year).

All three projects followed an "installation art" model and use glass, copper, and other metals as the principal surface materials.

目前任教於國立台南藝術學院的呂理煌，於近來結合了佾所建築事務的工作夥伴，完成了三件作品，都是在實踐大學高雄校區之內，第一件於八十五年完成的基金會，是一個既有建築物整建的工程，第二件及第三件都是在今年完工，分別是學生活動中心暨體育館，以及教學大樓。

這三件個案都是採用了＂裝置藝術＂式的造型，材料方面則用了銅料、玻璃，金屬面材，比之於台灣數十年來的校園建築，可以說是異軍突起，十分的引人注目。

1 Student Center of Shih Chien University, Kaohsiung Campus./ 實踐大學高雄校區學生活動中心群體建築

2 Site plan of Shih Chien University, Kaohsiung Campus./ 實踐大學高雄校區活動中心群體建築，新建教學大樓配置關係圖

3 The Shih Chien Home Economics Education & Culture Foundation Hall./ 實踐教育文化基金會館

4 The Gym of Student Center of Shih Chien University, Kaohsiung Campus building./ 實踐大學高雄校區學生動中心群體建築的體育館

5 The Activity Hall of Shih Chien University, Kaohsiung Campus Student Center building./ 實踐大學高雄校區學生動中心群體建築的交誼廳

6 The Educational building of Shih Chien University, Kaohsiung Campus./實踐大學高雄校區教學大樓

3

4

5

6

This is a striking departure from other campus architecture in Taiwan, which has long tended to be conservative, static, and square, with a preference for concrete and tile. The client made a bold move in accepting the avant-garde, experimental, and irregular design vocabulary that Lu presented. The new buildings mirror the marked differences between the founding principles and unconventional educational philosophy of the school and other universities.

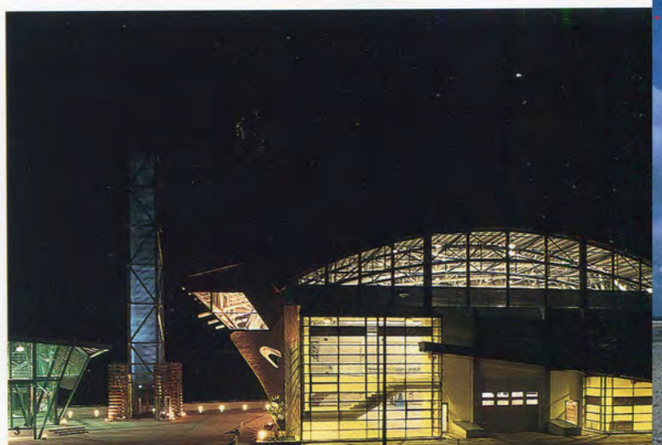
All three projects share similar traits and themes, namely controlled depth of field, relation between objects, object "embedding," and modular manipulation.

Depth of Field As a college student, Lu was an avid photographer whose works were characterized by their spatial scope and unusual depth (see diagram). This experience has given him a strong interest in expressing depth of field within a framed context, as reflected in the steel framework of the foundation building, and the controlled mass in the Student Activity/Sports Center (see diagram).

台灣校園建築長久以來規劃理念與建築設計多趨於保守、靜態、方正，材料也多屬混凝土貼面磚，但是實踐高雄校區都採取了完全不同的走向，接受了呂先生提出的前衛、實驗、不規則的語言，可以說是一項大膽的嘗試，或許也可以看出，實踐大學的建校與經營理念與傳統大學有了明顯的區分，在傳統的教學之外，這些建築物似乎也傳遞了額外的訊息，年輕學生的跳動，追求新鮮，非正式的生活性學習，也是學校的主要功能之一。

這三件作品都具有類似的特色與主題，包括景深的控制，物體之間的關係，物體之間的＂植入＂，以及運用模型的操作，爲設計的主要媒介。

景深 呂理煌先生在大學期間醉心於攝影，也曾想投入攝影工作，他的作品往往表現出空間的廣度，以及非常的深度，（見圖） 這使他對於以框景表現景深，產生了濃厚的興趣，這在基金會的鋼架，以及活動中心的量體控制上（見圖），都明顯的反映出來。

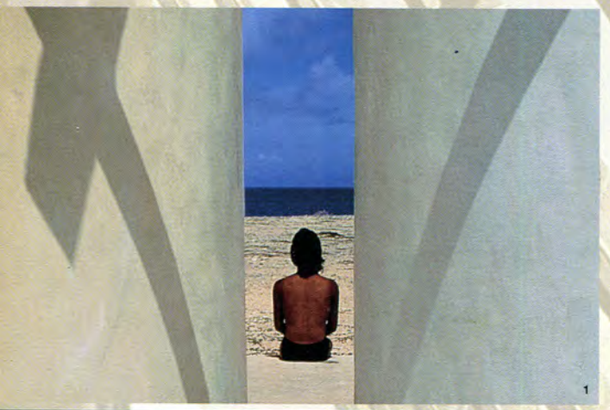


1. 2 Lu's photographic project./ 呂理煌之攝影作品
3 Lu's architectural project./ 呂理煌之建築作品

1 The I-beam structure exposed to the Educational Building./ 鋼骨結構外露之教學大樓

2 The Activity Hall composed of a multiform I-beam structure & glass./ 形式多變化的鋼骨構造及強化玻璃組合的交誼廳

3 The Activity Plaza surrounded by the Gym & Tower./ 體育館、燈塔及交誼廳共同包披形成學生活動廣場

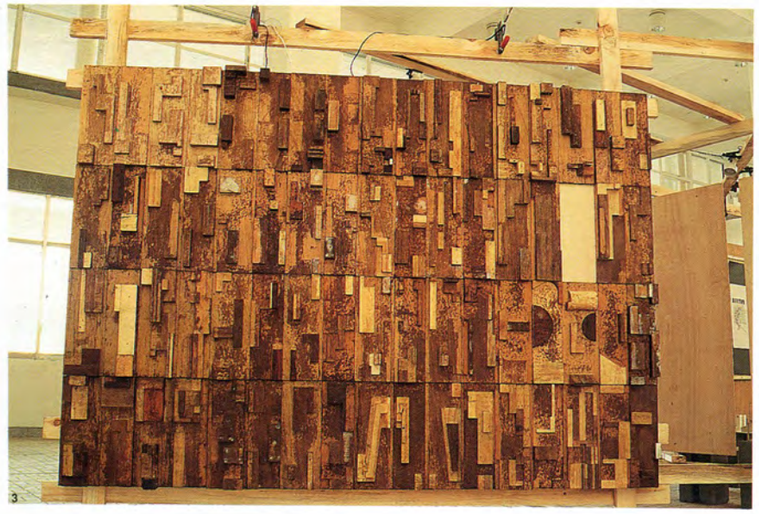


1. 2 Lu's photographic project./ 呂理煌之攝影作品

The Importance of Hands-on Learning At his family's insistence, Lu chose architecture as his profession, but he already knew the direction he would follow within this field. He decided to apply at Cranbrook, Pratt, SCI-Arc and other small design schools. He finally decided on SCI-Arc, and as soon as he arrived at the school, he knew that he had made the right choice. The school's emphasis on workshop methods matched his inherent love for hands-on learning, and after "playing around for three years in the workshop", he had become well-versed in the media of plywood carving and cast aluminum. (see diagram)

After returning to Taiwan in 1992, Lu made this "workshop" teaching method an integral part of his classes at Shih Chien and Ming Chuan University, and currently at the Tainan National College of the Arts as well. The benefits to students are apparent in the considerable skill displayed in their works (see diagram), and it has invigorated design education in Taiwan overall, providing an entirely different kind of stimulation, expanding the media of traditional diagrams and models, and adding a new dimension to design and expressive methods.

Relation Between Objects At SCI-Arc, Lu became practiced in the expression of "objects". As a result of this influence, he places great importance on "objectivity" beside planar functions and spatial considerations.

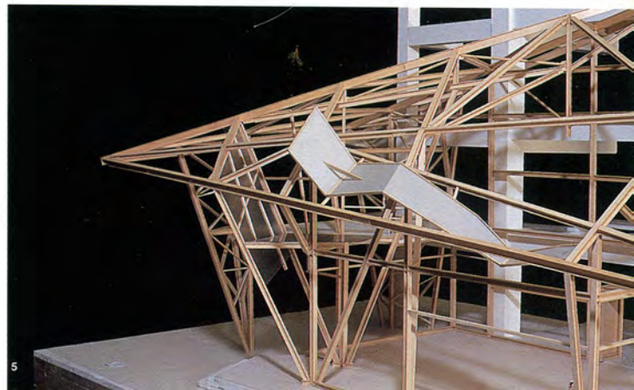


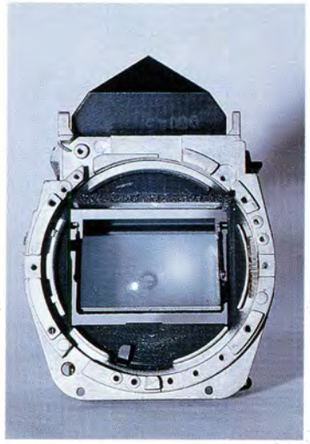
操作的重要 出於家庭的堅持，呂理煌仍舊選擇了建築爲深造的專業，但是他已經知道希望走的方向，因此選擇了Cranbrook、Pratt、SCI-Arc等以設計工作室（studio）爲重的小型學校爲申請對象，當他到SCI-Arc時，覺得自己沒有走錯了路，因爲他天生就喜好實作，該校極爲著重工廠workshop的方向令他覺得水乳交融，"玩了三年工廠"，以合板作木雕、鑄鋁，成爲他十分熟練的媒介。（見圖）

他在92年回國之後，也就把"工廠操作"的教學方法帶了回來，在實踐、銘傳的空間設計系，淡江建築系以及目前任教的台南藝術學院，他都貢獻了他的知識技能，令工廠實作成爲重要的教學內容之一，學生的作品（見圖）以可以看到相當程度的熟練，這對台灣的設計教育，可以說是一個相當不同的刺激，把傳統的圖面及模型媒介拓寬，在設計與表現方式，增加了層次。

物體（Object）間的關係 呂理煌在SCI-Arc的時期，正是設計界對"物體Object"的表現最著重的時期，他也深受其影響，在固有的平面機能，空間的考慮之外，更著重了"物體性"的考慮。

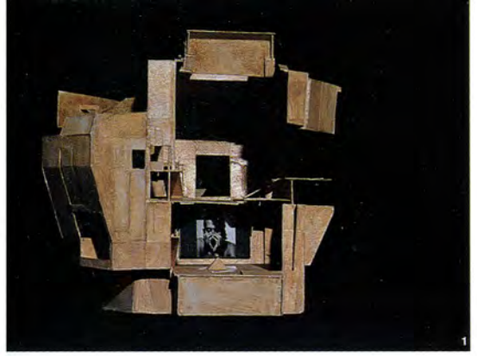
1 Furniture design, composed of plywood & aluminum./ 家具設計、合板原木與鑄鋁的構成
2 Project by Lu's student (concrete)./ 呂理煌學生的作品
3 Project by Lu's student (Template wall)./ 呂理煌學生的作品
4 Project by Lu's student (Material composition)./ 呂理煌學生的作品
5 1:20 structural model of Activity Hall./ 交誼廳1：20結構模型





Lu's emphasis on expression of objects is also a product of his workshop experience. Often when he confronts a design difficulty, he will cut open his working model and from the section attempt to find a solution. This method also reflects the Museum of Images design, which began by cutting an old camera in half (see diagram). From the principle of the camera he then designed the interior mechanisms of the museum (see diagram): The vanishing point and depth of field seen in diagram 1, also exhibits the influence photography has on Lu's work.

工廠實作又增加了他在這方面的運用，他在設計呈困窘時，往往將模型硬切開，由模型的剖面來尋找操作的可能性，這個方法更反應他當時"影像館"的設計，他在設計之初就把一個舊相機切成對半（見圖），由照相機的原理，來設計影像館的內部機制，（見圖）而圖一中的消點景深，則又顯示出攝影對他的影響。

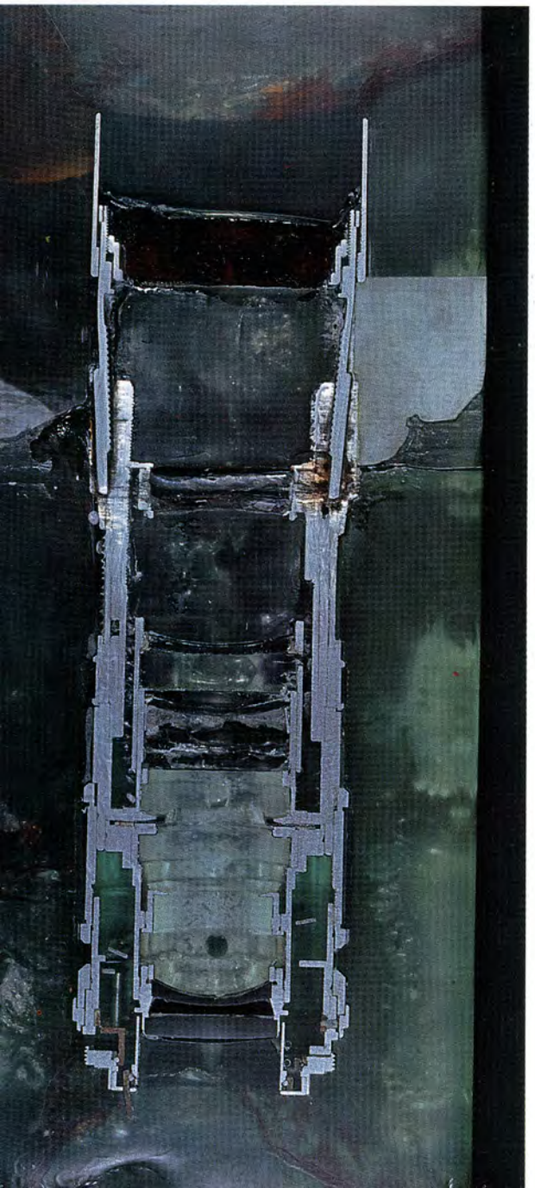


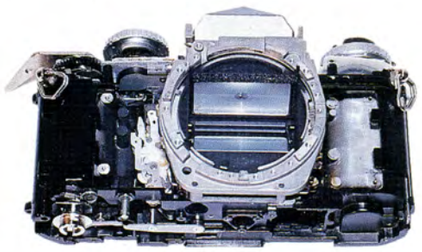
1 The vanishing point and the depth of field are created in this model./ 模型中所表現的消點景深

2 Image Center model./ 影像館模型
3 Interbreeding./ 殖入
4 Image Center model./ 影像館作品模型

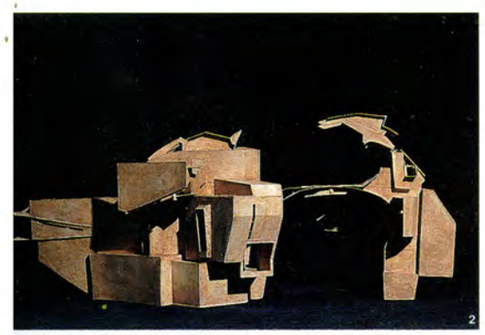
5 Interspace between expansible grid & classroom./ 教學大樓的擴張網與教室之間的中介空間

6 This picture taken by Lu in Southern California, shows a visual space by superimposition. The space relationship could compare with the picture above./ 呂理煌於南加州所拍攝，以重複曝光手法所表現的空間場景，此空間關係可與上圖相呼應





Concept development of one of the projects during Lu's student period./ 呂理煌求學時代作品的設計發展操作過程



Inter-breeding During his workshop years, Lu lost his index finger in a machinery accident. The severed finger was surgically restored and took six months to fully recover. This experience gave Lu a strong interest in the transplanting of foreign objects into existing systems, (which he calls inter-breeding) and this theme became one of his major design elements. It can also be seen in the arrangement of objects in the foundation building and Student Activity/Sports Center, and in the "metal frame" and concrete structure of the Education Building.

All three of these projects can be considered "alternative" in Taiwan's architecture world. They are also the unique products of Lu's aptitude and training. When the contractor for the foundation building jumped ship, Lu and his partners pitched in to finish the project, personally helping out with the assembly of the steel structure and even with the plastering, sanding, and painting. It took two months of relentless work, but when the project was completed Lu had taken his "hands-on" skill to new extremes. In many of Lu's works, this record of operation is apparent, to the extent even that they appear still in the process of operation.

[Text by Editorial Staff/ Translated by Kristian Kildall]

植入 在工廠實作中，呂理煌曾被機器切到左手食指，把筋切斷了兩條，因而在動手術後綁著套子復健了半年，這個"切身"的感受，令對外物植入一個既有體系，有了深入的體會，從此異質系統間的植入，也成了他的設計主題之一，這在基金會的增建案，活動中心的量體安排，以及教學大樓的＂金屬網＂和混凝土結構的結合上，都在在表現出來。

實踐高雄校區的三件作品，在台灣的建築中可以算是"另類"可說是由呂理煌的性向與訓練所造成的，其中基金會在施工到一半時廠商逃跑，呂理煌和工作夥伴們自己投入，親手將鋼構組裝修整、補土、打磨、上漆，不眠不休的做了兩個月的工人，才將這項工程完成，把他的"操作"本領引用到了極致，而他的作品中，也時時流露著＂操作＂的記錄，甚至顯得還在操作之中。

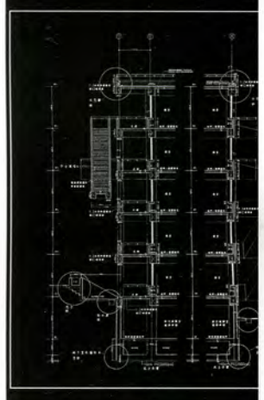
[採訪整理 編輯部]

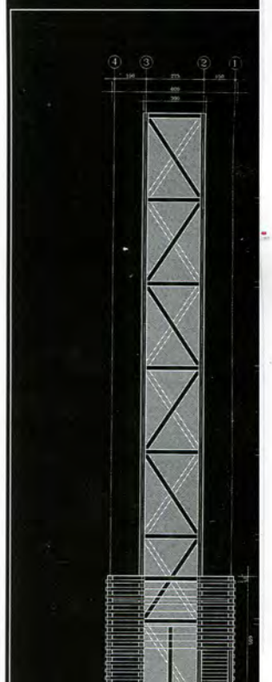
1 Tension between wounded hand & heteroessential system./ 受傷的手與異質系統植入後所產生的人爲張力

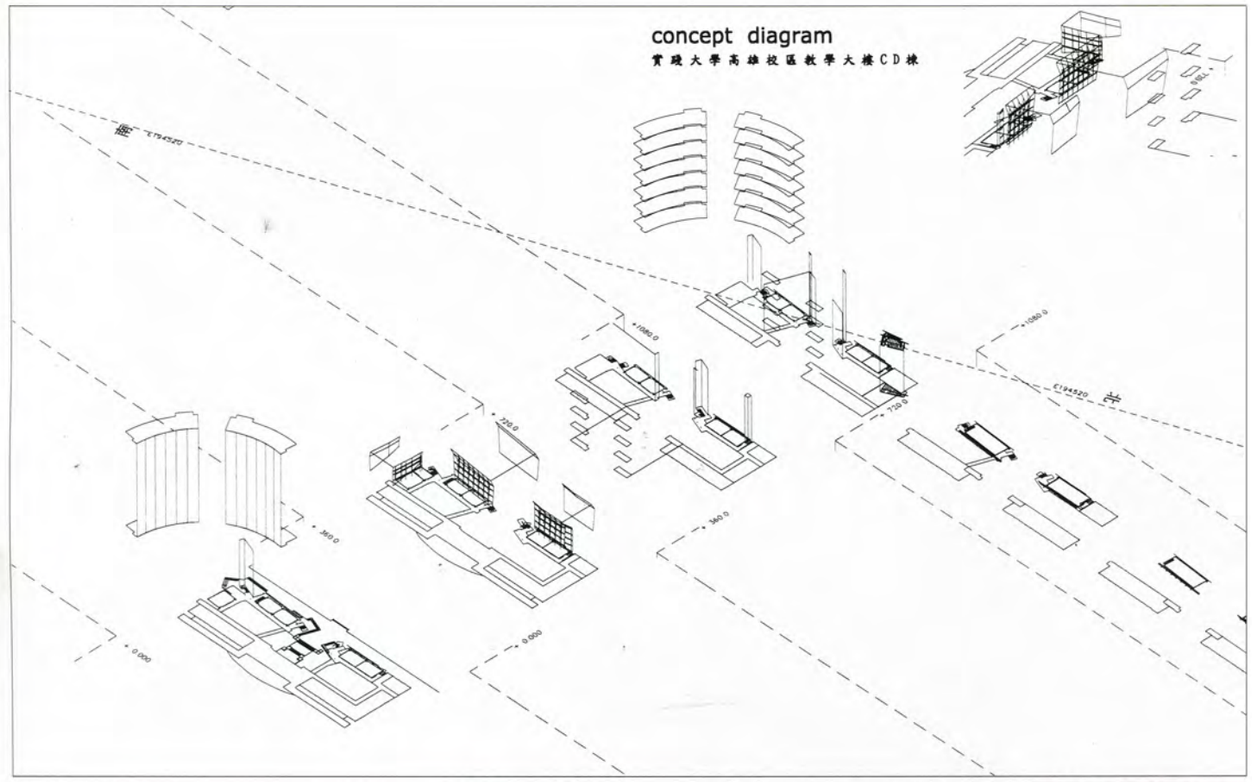
2 Interbreeding the hetero-structural object to the original building, Shih Chien University, Kaohsiung Campus./ 異質體植入既有系統上，實踐大學高雄校區基金會

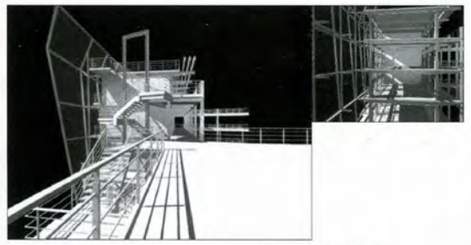
3 Hetero-sturctural clutch at RC structural building, Shih Chien University, Kaohsiung Campus./ 異質結構體趴在 RC 結構物上，實踐大學高雄校區交誼廳

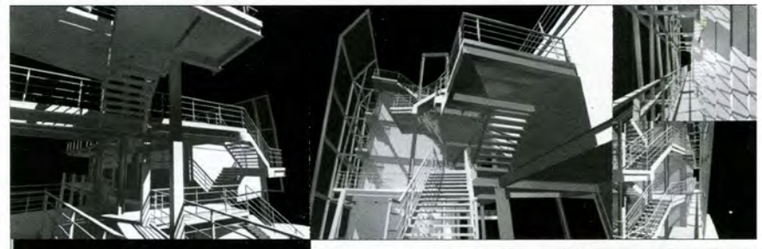
4 Compare the new Educational Building with the original one./ 新建教室與原有教室間的對比

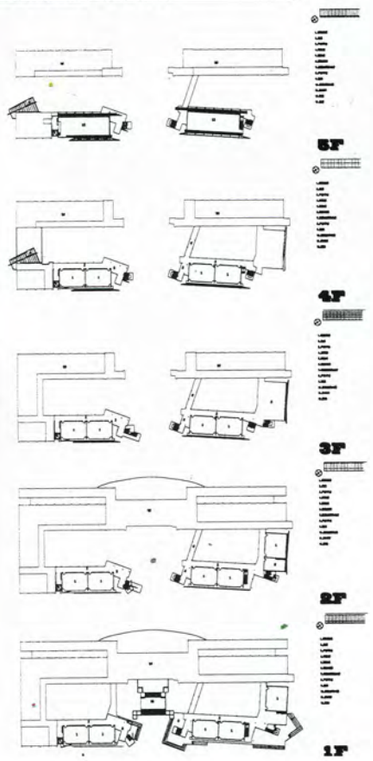


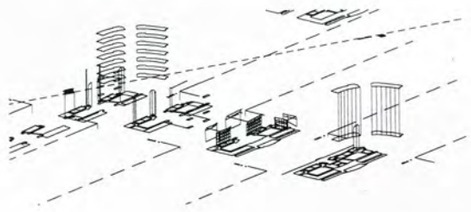


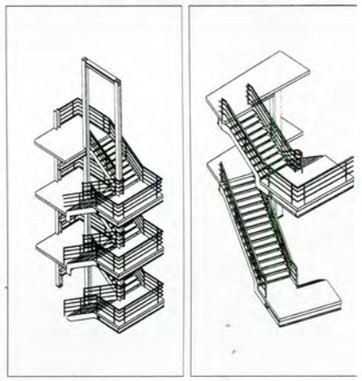


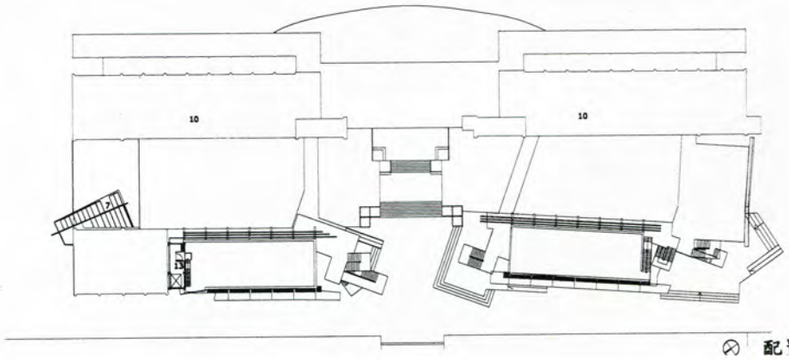






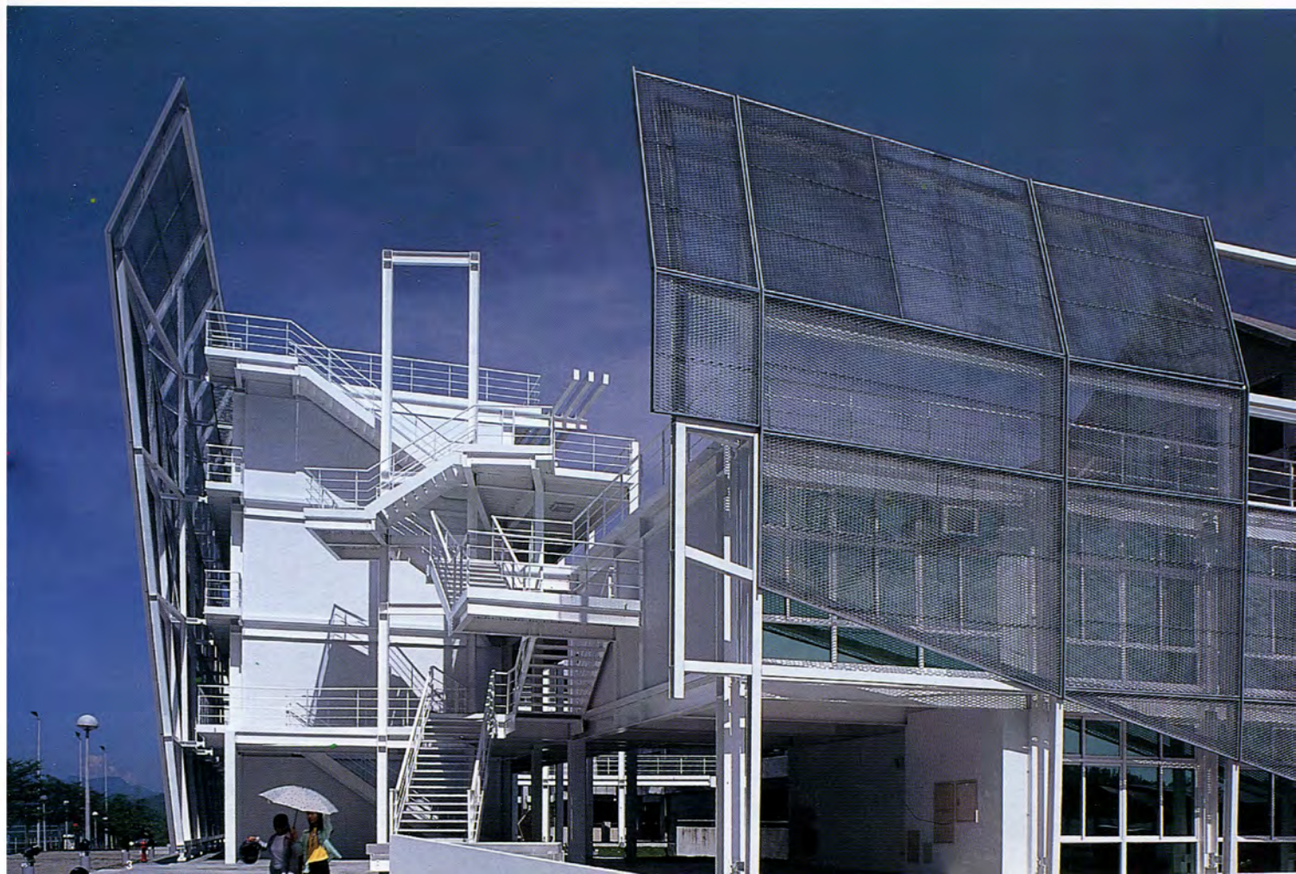


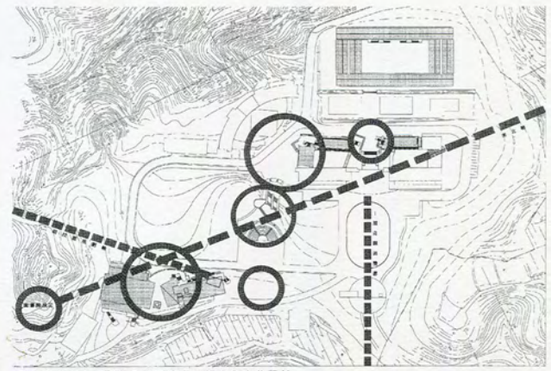


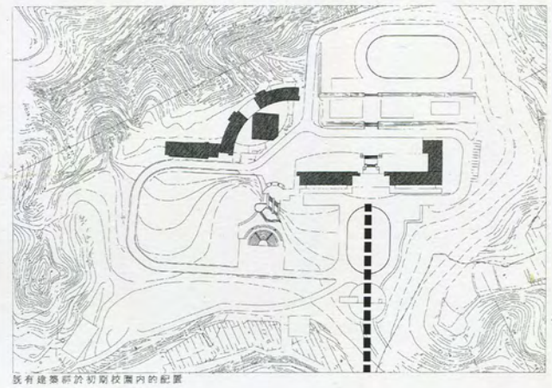


配置平面

1 Surrounding volumes creates "Genius Locus"./ 由量體所圍塑出的 " 場所精神 "
2 Educational building, Shih Chien University Kaohsiung campus./ 實踐大學高雄校區教學大樓
3 The expansible grid effected of penetrating & shading./ 教學大樓的擴張網所具有的穿透性有遮陽的效果







引入後空間與視覺聯軸及場所空間的垂直對應關係

既有建築群於初期校園內的配置