2006.09-2008.06
Re-order Reconstruction of deductive organization
Re_Modulor Re_combine stacks Re_Grille
9547501 Liu-Yin Lin
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9547501 林柳吟 Liu-Yin Lin
was born in Miaoli, Taiwan. Master of Architecture, NCTU and Bachelor of Arch., NTUST. Entry awards of international competitions, TOP 30, 2006 FEIDAD. take part in "NEXTGEN 20" project design team in AleppoZone. Discover that architecture is not merely purified connection between form and space but thinking transition deriving from life and logics. Superficial physics influence my awareness of aesthetics and relatively change my narration of all kinds of "condition".
Re-order_reconstruction of deductive organization

Abstract

Re-order_reconstruction of deductive organization

"再秩序"_再構築組織，是尋求籌有或已經實驗過的理論具形式的規則裡。「再」整理出另一
種詮釋方法，加上變形與組織，賦予新的面貌在新與舊之間衍生出新的用法，演繹的過程中分為三
個領域。「Re_Modular, Re_combine stacks, Re_Grille」。在「Re_Modular」，是尋求數位
形體裡是否有新的規律隱藏存在，試圖從早期柯比蓋的自由形體“羅香”裡分析出規律與規的
可能，再以演化應用於新的自由形體裡；「Re_combine stacks」是探討下世代圖書館知識的
需求與搜尋方式已經被網路的搜尋引擎以個人的需求與關鍵字所取代，未來也會隨著人類的需
求重新整合組合，把建立過往的秩序，因爲隨的改變。「再」變化與組合；「Re_Grille」是藉由
觀察都市的都市物件，菜市場頂樓，將所巔密的頂樓標中抽象成另一個圖像，經由圖像演繹，
形成空間與實在的案例，發展出空間的另一種無關方法，這三種的空間實驗方法，都是循著秩序
的線索在重新整理出一套實驗性的方法，運用新的邏輯推理，再「秩序」。

論文最後加入“編織參數曲面”“的學習成果，發現複雜的自由形體可以簡化為簡單的數學公式以
代數代表出不同的形體，以及學員參與了Jaakko Workshop。對於荷蘭的水岸城市有新的觀察與
扮演不同角色接入河岸，尋找新的水岸的解決辦法，最後再“修習完”Digital library project後在
圖書館舉辦了“nextgen”的展覽，回應進入web2.0時代指名知識資訊是反應個人需求與使用搜尋
知識的個人化，個體性的呈現我們需求的學習心得。

"Re-order"reconstruction of deductive organization is to observe old or
experimented theory and rules. "Re" concludes the other way to interpretation and
when we change its shape and reorganize, give the new appearance that extends the
new way between new and old. The process of deduction is divided into three programs
including Re_Modular Re_combine stacks and Re_Grille. Fist one, Re_modular is to find a
new Modular if it exists or hides in the digital freeform, "Re_combine stacks" is to research
the next generation needs in the library, the way is to find a book and knowledge in the
library instead of internet search engine entering the keywords according to your
personal need. When you enter the keywords, the active shelves will reorganize in
accordance with people’s needs. The active shelves will be reorganized and changed by
changing behaviour."Re Grille" is to observe the “the ceiling of the food market” in the
city and design. Through the deduction of picture, it places this idea into the real
case and develops the others spaces. These three experiments on spaces are the way to
reorganize and find a new logic following a new idea and rules. On the new logic our
research deduce that the concept is "Re"-rules.

In my research, I added learning results about “Weaving Parametric Surfaces”.
It is to simplify a complex free form to math formula instead of different forms. I also
joined the Jaakko Workshop program to observe water city and try to find a new way to
solve problems in Netherslands. Finally, when we finished the “Digital library project”,
we held and exhibition called Nextgen in the library. The purpose is to catch information
knowledge to replay the personal needs in web 2.0, that’s all we learn in this semester.
Digital Modualization
Corbusier published the concept of the modular during 1945 to 1955. He used the concept of the mathematic ratio and the massilia a lot in his own design case. No matter his dimension or the ratio of the space, it stands on the modular.

On the other hand, we cannot find the modular in the La Chapelle de Ronchar that he designed FROM 1950 to 1955. It is one of the special creations, which is different from others. Because of this, the later generations try to analyze some relationship of its ratio.

Now, in our dissuasion, we try to find and experiment on this kind of situation. We try to see if it exits some kinds of the mathematic ratio or not, and then display the concept of themathematic modular further. In the future, the digital architecture can be made and produced enormously but it still can keep its personal characteristic.
Project overview
The concept of Digital Modualization
The module
The La Chapelle de Ronchamp

Find the model of module
Test 1
Test 2
Conclusion

Design
Site
Analyze
3d perspective
Physics model

Corbusier published the concept of the modulor during 1945 to 1955. He used the concept of the mathematic ratio and the massilia a lot in his own design case. No matter his dimension OR the ratio of the space, it stands on the modulor.

On the other hand, we cannot find the modulor in the La Chapelle de Ronchamp that he designed FROM 1950 to 1955. It is one of the special creations, which is different from others. Because of this, the later generations try to analyze some relationship of its ratio.

Now, in our dissuasion, we try to find and experiment on this kind of situation. We try to see if it exits some kinds of the mathematic ratio or not, and then display the concept of themathematic modulor further. In the future, the digital architecture can be made and produced enormously but it still can keep its personal characteristic.
The concept of Digital Modulation

La Chapelle de Ronchamp
Le Corbusier
- 1945-1955 Modular
- 1945 - Marseille
- 1950-1955 La Chapelle de Ronchamp
Project overview

The concept of Digital Modulation

The module

The La Chapelle de Ronchamp

Le Corbusier

the Modulor of Digital

- The digital architecture is without module.
- Does it exist the relationship of module on the free form of La Chapelle de Ronchamp.
- If it can conclude some relationship of the ratio, does the digital architecture have the ratio in mathematics or not?
- Substantially, it is economic and tangible.

Le Corbusier MODULOR.

a : b = a : a+b
b : a = 1.618
The La Chapelle de Ronchamp

(01-05-01) modular division of floor
(01-05-02) the axis of site
Descendants also try to analyze the relationship of the mathematical ratio on the La chapelle de Ronchamp.
(01-05-03) Axis
(01-05-04) the relationship of the mathematic ratio
back to the future: digital thinking learning from history
Digital Modualization

(01-07-01) unit composition
(01-07-02) Division
(01-07-03) Install unit
(01-05-04) Install unit modulization of three-dimensional axises
(01-07-05) Mosaic

It's one of the ways to display the architecture. Maybe it can show the digital architecture completely.
Re-order reconstruction of deductive organization

Re_Modulor

Surface and circumference

Find the model of module

Test 1

Test 2

Conclusion

[1] back to mention surface and circumference

[01-08-02] _exist some proportionable relationship on surface, organization and its circumference

[01-08-03] _a regular pentagon of dodecahedron and a regular hexagon of twenty sides get thirty-two sides

[01-08-04] 1.first, use three assembly forms and let it conform the modular

[01-08-05] 2. then use the relationship of mosaic to combine together

[01-08-06] when the angle is changeable, it can change much more different forms.
it can compose of the different kinds of forms by the same length of side.
Re-order reconstruction of deductive organization
Re_Modulo

223
Project overview
The concept of Digital M
The module
The digital process

183
Find the model of module
Test 1
Test 2
Conclusion

Limitation ..... the observation of microcosmic and macrocosm in the microcosmic, if the length of side varies too much, it will become too small acute angle.

113
Design
Site
Analysis
3D perspective

1. Control its angle and avoid it to become a acute angle.
2. Be careful not to be close to the mosaic
3. After controlling and becoming a surface, use the second-layer control vertex to fix

(01-10-02)
- Try to make the slope not to change but still can have an inclination.
- Let the square measure and the length of side have the relationship of ratio and modulator.
Re-order reconstruction of deductive organization

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Project overview
The module

183
Find the model of module
Test 1
Test 2
Conclusion

113
Design
Site
Analyze
3D perspective
Physical model

Find the model of module
[01-12-01] [01-12-01] [01-12-01]

Relationship of ratio
[01-12-01]

{01-12-01} 1. surface could be liberated, but angle could not be fixed
{01-12-02} 2. only becomes a volume
{01-12-03} 3. only become volumes in some peculiar angles
{01-12-04} 4. only become volumes in some peculiar angles

01-12
林雅羚 Liu-Yin Lin
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Main unit utilize the length, width and height of the proportion and make it have the modular, so you can conclude three basic units and then use them furthermore.

(01-12-02) Analyze unit every unit combines together. It will become another kind of unit and these combination is a kind of digital code.
Re-order reconstruction of deductive organization
Re_Modulor

Find the model of module
Test 1
Test 2
Conclusion

Design process
The same length can rotate and make up.
Site

(01-15.01) a convent
Try to rebuild a wall in pre-existing building to retrieve the La Chapelle de Ronchamp image

(01-15.02) Try to rebuild a wall in pre-existing building to retrieve the La Chapelle de Ronchamp image
Site with La Chapelle de Ronchamp liberated from the module of Le Corbusier’s ...
Digital Modualization
Re-order reconstruction of deductive organization
Re_Modulor

Design
Site
Analyze
3d perspective
Physics model
Re-order reconstruction of deductive organization
Re_Modulor

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Project overview

The module

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Find the model of module

Test 1
Test 2
Conclusion

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Design
Site
Analyze
3d perspective
Physics model

01-20
Liu Yin Lin
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back to the future: digital thinking learning from history
Digital Modualization
Re-order reconstruction of deductive organization
Re_Modular
We will hunt for knowledge through Internet instead of going to physical library since we enter the time of Web 2.0. The activity of infilling keywords in the blank of Google reveals that, Internet platform give us a virtual key to unfold the extended coverage of online knowledge bank. Consequently, library 2.0 represents redefinition and recombination of knowledge which is due to human activities in cities.
Re-order reconstruction of deductive organization
Re-combine stacks

URBAN LIBRARY

City is composed of many different divisions which define how we consider the urban features. And these divisions will vary directly corresponding to consumption and requirement of city residents.

Library would become one part of living essences and would also stimulate the morphing progress of city when consumption awareness is prompted by living formation.

(02-02-1)Change

Ascending increase of reading rate on Web illustrates the adjustment of reading habits would not be tied down to a lack of reading time.

(02-02-2)Search Engine

There exists a huge difference between traditional and contemporary categorization of knowledge since digital age has arrived for decades. Internet search engine would precipitate the efficiency of how we grab and gain our desirable knowledge. And classification of library resource would be changed by the oncoming era of Web 2.0.
REQUIREMENTS

We will hunt for knowledge through Internet instead of going to physical library since we enter the time of Web 2.0.

The activity of infilling keywords in the blank of Google reveals that, Internet platform give us a virtual key to unfold the extended coverage of online knowledge bank.

URBAN PLANNING

The classification of needs is showed on the portal site like library. It is a main search engine in accordance with action and their knowledge.

Recombine the requirements

- Life in city reacts on the needs of human. For example, knowledge will be regrouped to follow the action happened and it will be efficient to follow the needs of human.
- Urban zone = needs zone = knowledge needs to be divided but just like traditional classification.
- Consumption behavior in the urban arises from the zone. Human consumption demand arises from the urban.
- How to consumer in my library is that when consumption knowledge becomes the human demand, I arrive my purpose people consuming in my library.
Re-order reconstruction of deductive organization
Re_combine stacks

RECOMBINE THE REQUIREMENTS

(02.04-1) Traditional knowledge classification

(02.04-2) In accordance with needs, we will regroup the needs and become virtual internet into hyposalization like spectrogram which can’t be divided very clearly.

(02.04-3) In accordance with classification of living needs, they will be subdivided into more details and parts.

(02.04-4) We key in the activities and induce the consumption management. The concept of the Activities is like a search engine. The more accurate words we key in, the more possible opportunity consumption management will be regrouped.
URBAN LIFE

For example, we bring the Green trails' concept into it and make the city life become a part of the knowledge in the library. When the knowledge in the library is regrouped with changes of the activities, it means people need more knowledge and consume the knowledge further.

EXPLOSION

Life in city reacts on the needs of human. For example, knowledge will be regrouped to follow the action happened and it will be efficient to follow the needs of human.
Re-order reconstruction of deductive organization
Re-combine stacks
REQUIREMENT STACK

(02.07-2) Only when activities happen, bookracks would move and give up some spaces for activity requirement, and even mutate with different types of knowledge necessity.

(02.07-3) Bookracks would be hung homogeneously in the library when no activities.

Requirement stack

- Book transportation
- Bicycle parking
Re-order reconstruction of deductive organization
Re_combine stacks

IF FOOR PLAN

(02.08-1) The gentle slope in the library links first floor and second floor.
(02.08-2) Activities in the library extend to green trails which becomes a part of the library.
REQUIREMENT STACK

(02.09-1) If there is no activities happened, movable shelves are hung in the library equally.
(02.09-2) When some activities happened, movable shelves will move and vacate the sphere of activities that people needs. On the other hand, shelves will follow the knowledge needs and vacate enough spaces.
Re-order reconstruction of deductive organization
Re-combine stacks
BOOK TRACT

(02.11-2) The movable shelves will move to the right places. The path of the movable shelves arise a loop to link all of the floors. Because of the movable shelves, knowledge will be regrouped with needs.

(02.11-2) The continuous slop will link with special stacks and will bring more knowledge exchange to satisfy more needs.
Riding a bike is a part of the city life. You can ride a bike into the library without limitation.
Re-order reconstruction of deductive organization
Re-combine stacks