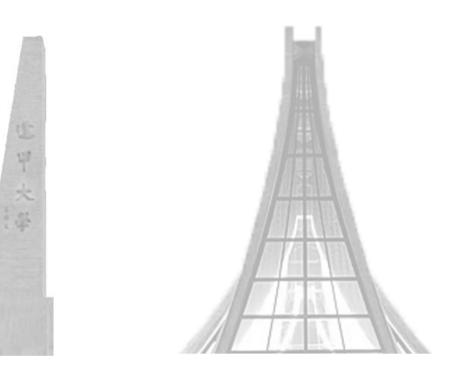
羽毛的木屋 [CURVED] FEATHER WOOD HUT

From Primitive to Parametric Hut Adviser : Chiu Hao-Hsiu,Shu Chih-Feng Student : Liang Jing-Li THU-Department of Architecture July,2015

私立東海大學建築系碩士班 建築碩士學位論文 從原始構造到參數設計 -羽毛的木屋 研究生:梁景俐 經審查及口試合格特此證明 論文考試委員會 勤報輪 候剧美 部的 指導教授:蘇智鋒 系 主 任:邱浩修 中華民國 104 年 06 月



Acknowledgement

When I studied bachelor's degree in Feng Chia University , teacher taught me how to help people and consociate.Now ,I came into this family Tunghai University for studying master drgree, it enhanced my attitude and passion on design, make me energetic to face kinds of problems. First of all , thanks to Professor Simoin Shu, for taking us to Ilan to visit Huang Shemg-yuan' s projects. And arrange the workshop in Belgium let me enjoy the great progect in Europe. Also thanks to Professor Hao-Hsiu Chiu , teacher always can find the potemtial of different students and lead us with patience and right direction .Teacher always encourage we grow by ourself and lead us to work out independent project. Not only a good teacher, but also a friend. When we are upset, teacher will encourage us, when we are tired , will join us. Under the guidance of teacher we learnd a lot . Dear Peter Chang , thank you accomany me for so this years on my architecture way, keeping encourage me .What I have now is because you.

Dear all , after we walked around the world and solved kinds of problems, and then , finally we can graduated together !! The most important things is no matter how's the real life in the future, don't forget the brief what we have when we are students.

Content

Main Design Project

From Primitive to Parametric Hut 01 [CURVED] WOOD FEATHER HUT

Supplementary Design Project

Eatscape shared kitchen	13
Re-Searching Workshop	25
Simultaneous modernities THROUGH THE LENS	37
Rethinking The Future	41

From Primitive to Parametric Hut

From Primitive to Parametric Hut-New Vernacularism with Digital Materiality and Tectonics

Digital methodology has been dramatically changing how architects think and make buildings over the last two decades. The emerging technology of both parametric modeling and fabrication tools enables a paradigm shift of architecture by exploring a more adaptive and expressive forms and spaces. However, the pervasive adoption of this global free form-finding process in architecture ends up irrelevant to local culture and economics. One may find it difficult to differentiate a complicated, curvilinear geometry from another as they share similar design concepts and formal approaches with the same digital tools. We have to admit, at a certain level, architecture needs to share universal qualities such as Vitruvius's "firmitas (solid), utilitas useful), venustas(beautiful). Laugier's "Primitive Hut" may best demonstrate such fundamentals how architecture originates from nature and speaks for itself.

Even so, new technology (e.g. concrete) gives totally diverse representations in different environmental o social contexts.

_[CURVED] Wood Feather Hut

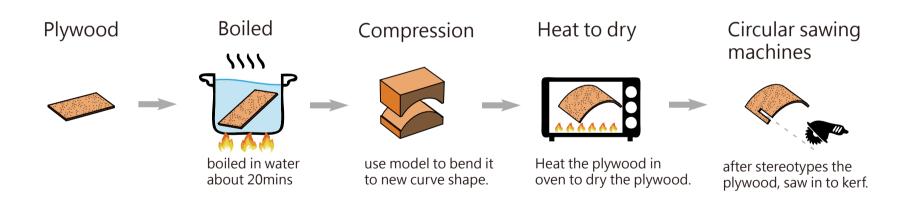
Trying to take the texture from the animal-like teather of bird as a unit. Take the unit into copy and become a surface ro protecture the people inside. So I using the the change of the water vapor to male curved wood, and slit the plywood and inlay to form a surface. Under the change of the curvature, how the plywood can inlay is different, so the restriction is different. After this research, apply on the Rhino and grasshopper to calcuate and build out the whole wood huts.

Process of production:

changing materials, and composition

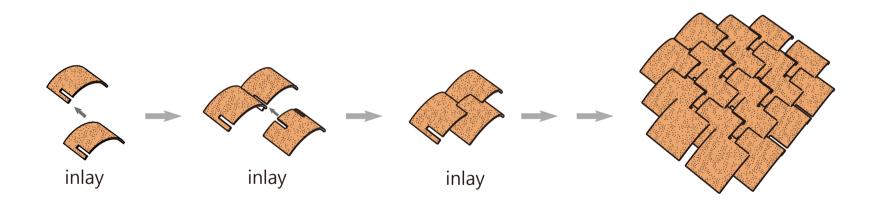
Materials Processing

In the beginning of the first ,study the characteristics of the material . In order to soften the wood, because of the curvature of the wood be influenced by the changes of water vapor . So put the wood into the water to heated to soften the wood. And then, bent the softened wood into a module variant, and heating to shaping.



Units Composition

After heating stereotypes, began to assemble it . By circular saw cut a slit on each piece. Inlay each other to form a complete face .



the concept of composition

trying to use the texture from nature animal . The feather from the bird with each one is a unit and copy it. With the curve wood to inlay each other become a layer of facade. And trying to using the feather to compose become a nest to protect people inside.

