

historical environment instantly. Although, it is a restrain standard from the top to the bottom, but it still remain the flexibility of the adjusted norm mechanism. It is to improve the consciousness of cultural environment preservation and to seek for a better preservation. There is also operation of dynamic preservation in it.

4.2 The control of “minimal preservation space” means “limited preservation”; it is partly preservation and partly reconstruction.

The reconstruction of historical buildings is part of “re-use” preservation, in order to control the efficiency of reconstruction from destroying the historical fact, it needs to preserve part of the building and controls the reconstruction work from destroying the historical environment. In other hand consideration to satisfied the residents by the usage of the rate of capacity. Therefore, the used of “minimal preservation space” as the bottom line of reconstruction work and it is also the balancing tools for both preservation and development to perform any possibility for reconstruction proposal.

4.3 The tools of the preservation is “volume control” and “historical landscape preservation line”

(i) “Building restriction” is the area that defines after zoning under the permitted building capacity to the operation of quantitative renewal. Using this to preserve the part which needs to preserve and also part which needs to add up.

(ii) “Historical landscape preservation line” Intended to grasp the human view at the both side of the historical street to get the height of the view and set up the control line. The method is to let a person stand at the opposite of the street, at the eye level of 150 cm looks opposite of the street to the highest point of façade of the building. Use this extension line as reference. For building which is exceeding the restriction line has to move back. This is to ensure the viewing quality of the historical cultural attraction.

4.4 The diagram of operational model for “current-preservation”.

This article adopts “partly preservation, partly reconstruction” as the renewed way for these traditional dwellings. We simulate the shape of building by “volume control”, and further used “the restrictive line of historical landscape preservation” to control the height of the reconstructed space. Originally, “volume control” is the main technique for urban design. Now, we use this technique to discuss the common problem of historical area which are “preserved” and “reconstructed”. The “volume control” method also helps us to discuss the capacity which the building is able to be reconstructed. Hope that this discussion can create a dual win mechanism for both preservation and development.

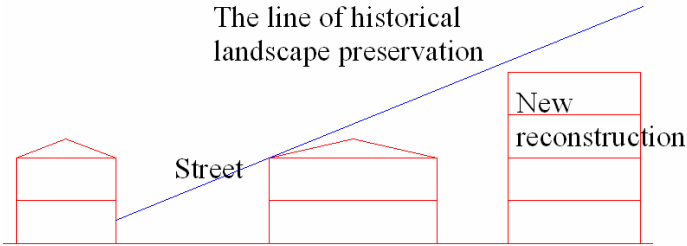


Figure 7 : The diagram of “volume control” for renewal

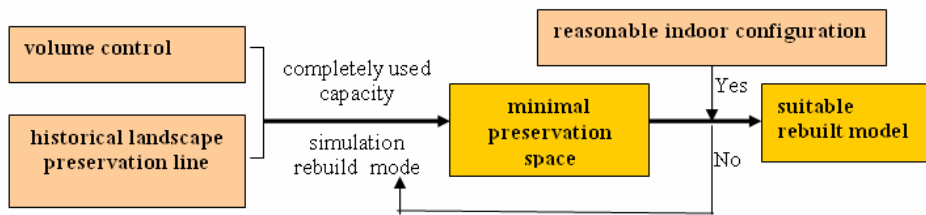


Figure 8 : The diagram of operational model for current-preservation

5. THE MEANING OF “VOLUME CONTROL” METHOD

We set up a current-preservation for Taiwan's dwelling's preservation. Firstly, it is must to respond to the demands of reconstruction by the owner. Means that during the preservation work, to meet the satisfaction the improvement of the quality of the life and efficiently used of the building capacity must be fulfill. We should be able to agglomerate consensus to execute the preservation work in the shortest time. This research addresses a method that residents can renew their buildings under the building act, and to use the end of the building capacity for their renewed work. Therefore, this paper performs the strategic of “current-preservation” to achieve people’s hope and uses the tool of “volume control” to achieve cultural preservation. This mechanism is under the conditions of “the restrictive line of historical landscape preservation” and “reasonable indoor configuration” that can preserve the cultural landscape of historical environment and improve the living quality instantly. Although, this way is a top-down mechanism, but it still remains the flexibility for the preserved range. It will be expected for a better preservation by strengthening the preserved consciousness of the residents. For this reason, it is a dynamic preservation.

5.1 The method of simulation operation for current-preservation of building reconstruction

(i) To define hierarchy of the building preservation restriction

There are six levels of building preservation restriction from the street space to the end of house.

1. Building façade and street space, 2. Extend until the space of the first hall, 3. Extend again until the first atrium, 4. Then extend again until the second hall, 5. Continue to extend until second atrium, 6. Then extend again until the third hall.

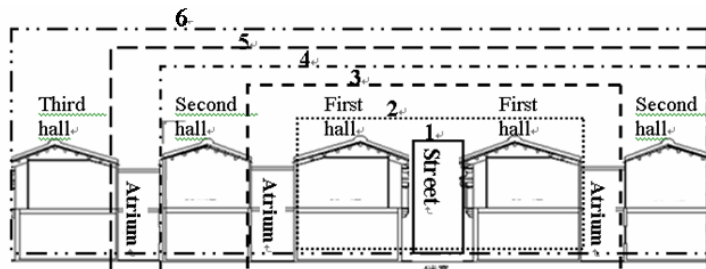


Figure 9: The diagram of six levels of building preservation

(ii) This diagram is used to explain the simulation of building restriction methods. “Minimum preservation space” is used as premise for building reconstruction. Then “the restrictive line of historical landscape

preservation” is used to control the height of the renewal. The minimum preservation of the space must enough become a single housing unit and face the Sheen-None street.

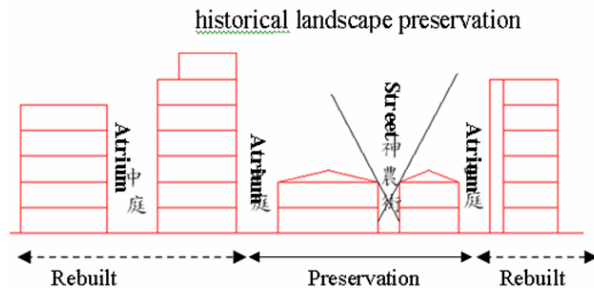


Figure 10: The minimal range of preservation for substances spaces

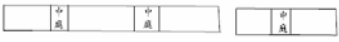
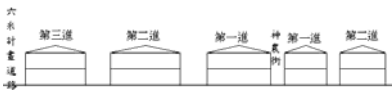

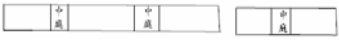
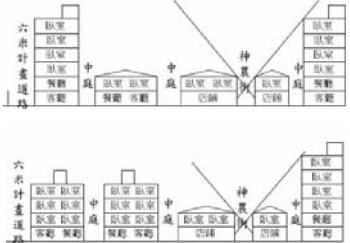
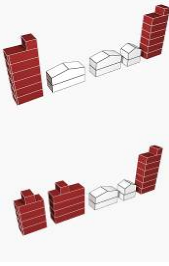

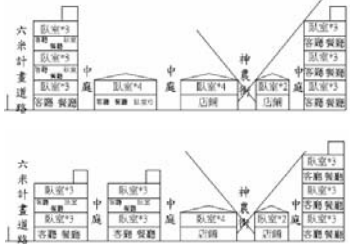
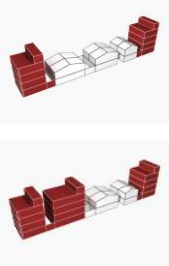
6. THE RESULT OF THE RENEWED SIMULATION STUDY

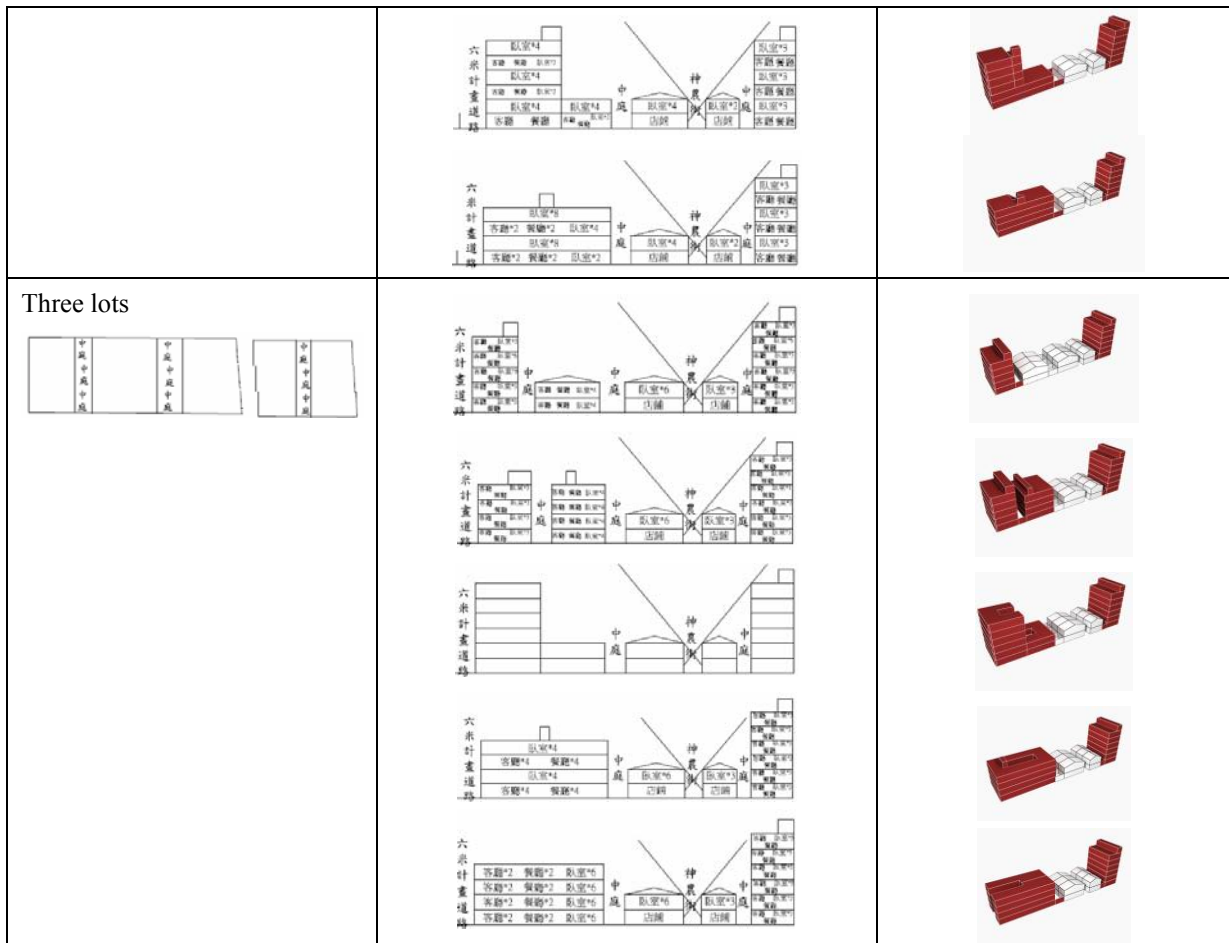
6.1 The result of the renewed simulation study

The renewed simulation study operated with one lot, two lots amalgamation and three lots amalgamation etc. The four lots amalgamation composed of one lot adding three lots or two lots adding two lots. The main consideration is to restrict on the renewed size. We find this method can work out the feasible ways as many as 10 kinds for owner discussing to make one choice.

- (i) The northern shop-house of the Sheen-None Street has 9 schemes for renewal. Its preservation of the space is the first hall and atrium or two halls and one atrium.
- (ii) The southern shop-house of the Sheen-None Street only has 1 scheme for renewal. Its preservation of the space is the first hall and atrium. The simulation study described the following table.

Table 2 : The schemes of the renewal

Lots amalgamation	Section for renewal	The 3D simulation
<p>One lot</p> 		
		
<p>Two lots</p> 		



6.2 The preservation range of the shop-house

- (i) The minimal preservation of the space is faced the traditional street, the first hall and atrium of the shop-house at North-South area. See the figure 11.
- (ii) The maximum preservation of the space is faced the old street, the first hall, the second hall and the second atrium of the shop-house at the north house. See the figure 12.

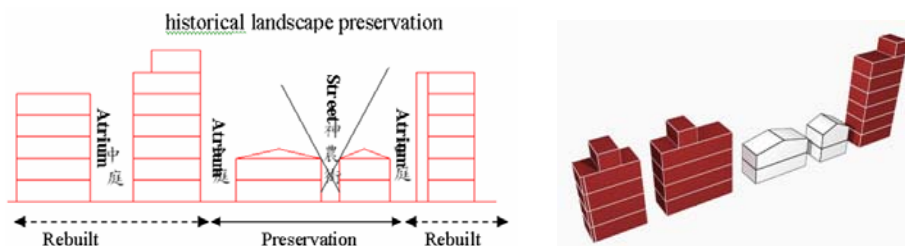


Figure 11: The minimal range of preservation for substances spaces

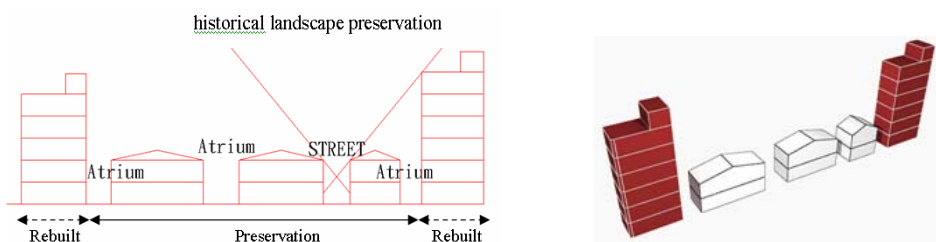


Figure 12: The maximal range of preservation for substances spaces

7. DISSCUSSION

7.1 The strategic of “current-preservation” is a measure for historical property rescued.

Previously, experience gain during the execution of historical area preservation. Preservation and development are always the main problem during selection. This may cause acute destroy on cultural property and confront against the preservation consciousness. The long term set of regulation will cause the cultural property to be disappearing slowly. Therefore, when direct against private historical buildings. A completed and flexible thinking about cultural, social and economic have to be proposed for preservation work. Even though “current-preservation” has value to the owner of the historical building, it is also the positive approach to rescue the historical building immediately.

7.2 The renewed simulation model of “volume control” can appraise the preservation and rebirth of historical environment effectively.

The method of “volume control” used the idea of “partly preservation, partly reconstruction”. The execution of “preservation” and “development” is for dual directional expedition research. It can collectively preserve the cultural spaces in those historical sites and respond to the residents on their rights of using the building volume. It can find out the potential and limitation of the building for reconstruction and to find out the minimum preservation space. This will help on estimation of the space reuse and the impact toward the value of the historical environment.

7.3 “The minimal preservation space” will help government to think about the appropriate of the restriction limit for the preserved private building.

Through the probe of the value of historical environment and complete used of the capacity after the reconstruction simulation. Further estimate of “minimal preservation space”, the proposed of this point is to measure the preservation of the small area with huge historical value, and also probe about the limit of intervene of government into private building. At the same time, to care about the current needs of the living.

7.4 The variety proposals of the renewed simulation model will be chose a scheme by people’s mutual discussion of selection, and it will help to start the preservation conscious of the residents.

The drawing of “the renewed simulation model” compares to writing, it easily offer the residents to discuss. The variety proposals of the renewed simulation model will be chose a scheme by people’s mutual discussion of selection. And it will help to start the preservation conscious of the residents. The Process has the chance for becoming local renewed agreement for the cultural environmental preservation work.

8. CONCLUSIONS

The main purpose in the process of this study is to raise the issues involving the Implementation Rules for the Cultural Heritage Preservation Law which has not been implemented in some of the historical sites. To renew

those historic buildings basing the “Quantitative Renewal” model, it could speed up the assessment of the need to renew those historic buildings, and the changes and impacts to preserve those cultural spaces. Also based on the “Lowest Limit of Space Preservation” design, it brings a step further to raise an issue for consideration viz. the need to set a lowest limit guideline to preserve cultural spaces when renewed. Only then, the spaces of those historical sites can only be “concurrently” and suitably preserved. Other than the “win-win” model based on collective response to the people on the development rights of those building volume coupled with the suitable care of those historical sites and the preservation of those cultural spaces, this model will enlighten the people to understand better the benefits for possible coexistence between “Preservation” and “Development”. This will resolve in time to prevent at the brink of collapse in those cultural spaces and historical sites. At the same time, this will also allow longer time for the local folks to discuss the matters and reach better and common understanding for the need of the preservation works. There will be hope then to gradually expand and deepen the cultural preservation works on those historical buildings. There will also be opportunity to materialize the execution of the overall city preservation and renewal. The main characteristics of executing this “General Theory and an Operational Model with the Settlement Preservation in Taiwan's Historical Urban Area” are “real-time, zoning, simplicity, fundamental, multi-layer, variety, mobility and continuity” which are current preservation trend.

Finally, the background of this “General Theory and an Operational Model” study is to raise up the issues for discussion on the governmental departments, their attitude of preservation toward the private rights of those historic buildings. This includes execution of limited preservation works; respect of current living cultural value being continuously evolved and developed; and holding softer attitude to deal with the rightful owners. These implications hopefully provide sufficient help for further thought while executing works on preservation planning to those historical living environments.

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