INTRODUCTION

At the northern foot of Mountain Hui sites the first support building project in China. Completed in 1985, it covers a gross area of 12,100 m² with the building area of 8,500 m² and is composed of eleven clusters with 217 households. Thirty years passed after realization, this project is still widely discussed while its current situation is unknown. That is why this study is conceived.
GENERAL IMPRESSION

ITEMS

Public Space
The public space between buildings is left for the users' future activity.

Shared Courtyard
Shared courtyard is designed in each building.

Private Gardens
Private gardens are designed in the entrance or terrace.
THE USE OF OPEN SPACE

Open space between buildings is not well used. Trees are seldom pruned, the grass is quite overgrown, and public facilities are disorderly arranged. Some people dry clothes or park the car there, but they would not stay longer.
THE USE OF OPEN SPACE

It is observed that the space along river is in a better condition. It is now the most pleasant place for chatting. While several suites facing the community road are used as shop or workplace, which have a positive on the open space along road.

**Picture for Open Space 1**
Wooden benches are provided by the municipal department. People may have a rest here, but seldom stay for a long time.

**Picture for Open Space 2**
The workplace has a positive influence on the open space along the street.

**Picture for Open Space 3**
People living in the northern part like to dry clothes in the grassy field which is with wonderful sunshine.

**Picture for Open Space 4**
People like to stand and chat by the river. Some of them even do their handwashing there.

**Picture for Open Space 5**
Some trees are planted by residents, and a set of stone table and stool is provided by a family in the ground floor.
SHARED COURTYARD

Shared courtyard is designed for every building in order to provide the opportunity for neighborhood communication. It should be admitted that this special building form has a negative impact on the natural lighting condition of suites in the northern part. And it attributes to users' wide complaints of this community.

However, it is observed that only very few people would stay at the courtyard although various accesses are design by the architect. In the group discussion, 10 participants attributes the disadvantage to the visual noise especially to the 'sensitive rooms' (for example, bedroom). While 6 of them mentioned the influence of 'negative rooms', for example bathroom and kitchen.
ENTRANCE GARDEN
Private gardens in the ground floor are used in three ways. Among all the 37 entrance gardens, 7 of them are completely abandoned. 23 are rebuilt as additional rooms, while the great majority of which is storage rooms. The rest maintains the original function.

- 23 (62%) As additional room
- 7 (19%) Renew as a garden
- 7 (19%) Abandoned

TERRACE
It is observed that spacious terraces that are design as private garden are now with two forms. Some maintain the original design, while the rest is shut off by users. The unorganized renovation of terrace has a negative influence on the appearance of the building.

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BALCONY
Sealing balcony is very popular. While only a few balcony are left open.

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### LIVING STORIES
The renovation experience of sixteen families is recorded.

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The diagram on the right visually represents the renovation locations and changes for each family.
Introduction:

In 1985, a couple moved into this apartment with their youngest son (24 years old). After the son’s marriage, the old dining room came to be too crowded to bear. As a result, the wall between kitchen and dining room was removed in 1990. In the next year, the third generation was born and the living area was obviously insufficient. Instead of making a renovation, the grandchild was sent to her (maternal) grandparent’s home at the age of nine until the old couples moved out in 2004.
Introduction

The household is a couple about 75 years old. In 1985, they moved here as relocated household. In the past 30 years, their renovation could be concluded as three aspects - the 'infill' partition was renewed; the entrance garden was rebuilt to a storage room; the balcony was shut off.

Fig. Picture of the additional room
Introduction
The current user is a 27-year-old journalist. In 1985, his father bought this suite and presented it to the son in 2005. The renovation was under the direct control of the father. With great interest in ancient building, he tried to renew the suite to a traditional Chinese building. And the son also participated in the work.
FAMILY A4

Introduction
The current householder is a new couple (27 years old) who bought this suite in 2004 for the wonderful location of the community. Being unsatisfied with the area of kitchen and living room, the reorganization of internal space was organized shortly after they bought the suite.

Fig. Location in the community
Fig. Location in the building
Fig. Picture of the entrance

The old wall was moved for a bigger bathroom.

The kitchen was removed to an open one.

The window for storage room was opened by the user.

The partition was moved so that the living room was extended while the area of secondary bedroom was reduced.

The old window on the wall was filled. The whole wall was painted white and used as the background wall of garden that was redesigned by the householder.

Support: Facade elements, windows, doors, enclosure wall of kitchen and bathroom.

Stage 1 (by architect)

Stage 2 (by user)

Fig. Current Layout

Init: A partition

Result: An apartment with two bedrooms, a kitchen, a bathroom and a living room.

Remove: Sola walls, the old 'infill' partition, two windows.

Add: New partition, a wall for bathroom, a window for storage room, a pathway in the garden.

Result: Internal space was reorganized, and the garden was redesigned.
FAMILY

Introduction

The householder is a couple about 55 years old. They live in this community since 1985, and this is the couple's second suite that is bought in 2001. As an antique collector, the husband uses this suite as his home and his own exhibition hall. All the furniture is antique. The renovation is driven by this factor as well.

Fig. Picture of the internal space
**FAMILY C1**

**Introduction**

The current users are a couple about 35 years old and a 9-year-old daughter. In 2004, the couple bought this suite. Being unsatisfied with the narrow kitchen, they reorganized the space of kitchen and bathroom before they moved in.

Fig. Picture of the internal space

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The living room is used as the daughter’s bedroom in the mean time. The window is always covered with curtain in the daytime.

The entrance garden was closed. And a new bathroom was built in the original entrance garden.

**Current Layout**

The space for bathroom was occupied by the new kitchen. While the old kitchen was remodeled to a dining room.

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Support:
Facade elements, windows, doors, enclosure wall of kitchen and bathroom.

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**Stage 1**
[by architect]

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**Stage 2**
(by users)

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**Result:**
- A partition
- An apartment with a bedroom, a living room, a kitchen, a bathroom, and a garden.
- The wall separating the bathroom from the kitchen; the footstep in entrance garden.

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**Add:**
- Additional room in the old entrance garden.

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**Result:**
The kitchen was moved; a dining room was added; the bathroom was relocated in the garden.
FAMILY C2

Introduction

The suite is used as a workplace from the very beginning and the household is a 54-year-old tailor. There were two main renovations in this suite in the past thirty years. One was conducted in 1986, shortly after moving in. The user added a partition to divide the suite into a living part and a small tailor shop. The other was conceived since 2001, in which the whole suite was changed to a dry-cleaning shop.

Fig. Picture of the internal space

Fig. Location in the community

Fig. Location in the building

Fig. Picture of the internal space
Introduction

This is a rented suite that is used as a storage house for fruits. The householder is living in Shanghai with his wife and son, and this apartment is rented to the fruit seller since 2009. The renovation is conducted by the renter. After that, two storage rooms are separated; the entrance garden is changed to an office, and the bathroom and kitchen are left empty.

1. Office
2. Storage room
3. Storage room
4. Abandoned kitchen
5. Abandoned bathroom

The flush toilet was blocked, and it was out of service.

Refrigerators for perishable fruits.

A partition was added to divide the spacious room into two.

With an air-conditioner, the temperature of this room could be reduced.

Three wood beams were placed to support the roof.

The old entrance was closed by temporary material. And it was used as the renter’s office.

Original:
Apartment with a spacious room, a kitchen, a bathroom and an entrance garden.

Remove:
A window of the adjacent suite, the entrance of the garden.

Stage 1 (by-users)

Current Layout

Add:
A partition, the enclosure wall of the garden.

Result:
The big room was divided into two; the garden was enclosed to an office.
FAMILY C4

Introduction

This is an apartment for a family of three - the couple are bank clerks of about 55 years old and their son is a 24 year-old doctor. In thirty years’ living, their renovation focuses on area extension. The couple’s bedroom was extended, while the duplex floor was built to provide an independent room for the son.

Fig. Picture of the internal space
The current householder is a couple about 75 years old. In 1985, the man’s single mother moved into the suite without making any renovation. After the mother’s passing away in 2000, the couple moved here for its wonderful natural lighting. For enjoying the sunshine, they made the first renovation in 2013 - a sunshine room was built outside their house.
FAMILY B1

This is a suite for a family of three—parents and their seven-year-old daughter. In 2003, the couple bought the apartment for their marriage. Just before moving in, they changed all the windows and doors, and laid the floor. Besides, the balcony was shut off to get a larger living room. The shelf in the hall was customised in 2009.

Stage 1 (by users)

1. Daughter’s bedroom
2. Entrance
3. Dining room
4. Living room
5. Corridor
6. Kitchen
7. Bathroom
8. Parent’s bedroom

A shelf was customised to separate the hall from the corridor.
The old balcony was never used as part of the living room.
The balcony was shut off.

Result: Apartment with two bedrooms, a kitchen, a bathroom, a hall and a balcony.

Remove: A window, an enclosure wall

Add: A large window for balcony.

Stage 2 (by users)

Result: The hall was extended.

FAMILY D1

This is a suite for a family of three—a couple about thirty years old and their two-year-old son. In 2010, the couple bought this apartment, and the renovation was conducted before they moved in.

Stage 1 (by architect)

1. Kitchen
2. Bathroom
3. Bedroom
4. Living room

Stage 2 (by users)

The old partition was removed so that the old bedroom was changed to a living room.
The balcony was closed, and a set of closet was customised.
The young son shares the same bedroom with his parents.

Remove: Old partitions; the wall separating balcony from bedroom.

Add: An enclosure wall and a window for the balcony.

Result: A bedroom was changed to living room, the balcony was combined with bedroom.
FAMILY A2

In 1985, the household moved to this suite with his wife. They did not make a massive renovation until 2005 when their only son left Wu to Shanghai. In the mean time, the apartment with large living room became increasingly popular. As a result, they changed the north-facing bedroom to a living room. And the terrace was enclosed in the same year.

1. Kitchen
2. Bathroom
3. Parent’s bedroom
4. Sunshine room
5. Living room
6. Dining room
7. Son’s bedroom

Support:
Facade elements, windows, doors, enclosure wall of kitchen and bathroom.

Stage 1 (by architect)
Infill:
Three partitions

Stage 2 (by users)

Result:
- A partition; three windows
- Roof and enclosure units in balcony
- The terrace was shut off; a room was changed to a hall.

The old partition was removed, and the old bedroom was changed to a living room.

FAMILY A3

This is a suite for an old couple of about 70 years old. In the past thirty years, they only made some slight renovations, for example laying the floor and closing the balcony.

1. Main bedroom
2. Kitchen
3. Bathroom
4. Secondary bedroom
5. Dining room

Support:
Facade elements, windows, doors, enclosure wall of kitchen and bathroom.

Stage 1 (by architect)
Infill:
A partition

Stage 2 (by users)

Result:
- Apartment with three bedrooms, a kitchen, a bathroom, a hall and a terrace.
- The old window was blocked with brick.
- It is room for the householder’s only son. Although the son has moved out in 2007, the room is reserved.
- The balcony was shut off.
- A window.

Fig. The location in community
Fig. The location in building

Fig. The location in community
Fig. The location in building
FAMILY C5
This is a suite for a DINK family. The renovation was conducted in 2000 under the control of the householder who was about 48 years old. He removed their study room and changed it to a living room.

1. Bathroom
2. Kitchen
3. Living room
4. Bedroom
5. Closed balcony

Support: Facade elements, windows, doors, enclosure wall of kitchen and bathroom.

Stage 1
(by architect)

Infill: Three partitions

The door of the bathroom was moved.
The old partition was removed and the original secondary bedroom was changed to a living room.
The balcony was shut off.

Stage 2
(by users)

Result: Apartment with two bedrooms, a kitchen, a bathroom and a balcony.

Remove: Door of kitchen and bathroom; 'infill' partitions

Add: Doors for kitchen and bathroom; enclosure walls for balcony.

Result: Doors of kitchen and bathrooms were moved; internal space was realigned; the balcony was closed.

Fig. Location in Community
Fig. Location in Building

FAMILY C6
This is a suite for a family of three. They did not make obvious renovation in the past 30 years except enclosed the balcony. However, they plan to remove the secondary bedroom and change it to a living room as soon as the 13-year-old daughter gets married.

1. Bathroom
2. Kitchen
3. Daughter's room
4. Parent's room
5. Closed balcony

Support: Facade elements, windows, doors, enclosure wall of kitchen and bathroom.

Stage 1
(by architect)

Infill: Three partitions

The door of the bathroom was moved away from kitchen.
The 'infill' partition was never moved in the past 30 years.
The balcony was changed to a storage room.

Remove: The door of bathroom.

Stage 2
(by users)

Add: A rear door for bathroom; enclosure wall for balcony.

Result: The door of the kitchen was moved; the balcony was closed.

Fig. Location in Community
Fig. Location in Building