

A Research on Sexual Difference in the Resident Space

A RESEARCH ON SEXUAL DIFFERENCE IN THE RESIDENT SPACE

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Abstract: Being the existence of human' life and activities; Space has been in close relationship between the gender and the society classes based on it. After the thoughts of feminism being introduced to the research on urban space in 1970s for the first time, gender difference in space environment is widely focused on and the research extends to the field of architecture. The establishment of "the Lab on the sexuality and space" indicates that there is more focus on the subject. The present study is insufficient for an objective and systematic study about the gender difference and living space in special environment. Having "Wuhan Baubuting Block" and some ancient settlements in the southeast in Hubei as a case study, having carrying on the preceding literature research, exploring the theory behind the data, analyzing the transformation trend, in the perspective of humanism I suggest that eliminating the sexual difference in the living space is a way to improve the space arrangements.

Key words: the sexual difference, the habitation, the space environment, humanism

Résumé: Being the existence of human' life and activities; Space has been in close relationship between the gender and the society classes based on it. After the thoughts of feminism being introduced to the research on urban space in 1970s for the first time, gender difference in space environment is widely focused on and the research extends to the field of architecture. The establishment of "the Lab on the sexuality and space" indicates that there is more focus on the subject. The present study is insufficient for an objective and systematic study about the gender difference and living space in special environment. Having "Wuhan Baubuting Block" and some ancient settlements in the southeast in Hubei as a case study, having carrying on the preceding literature research, exploring the theory behind the data, analyzing the transformation trend, in the perspective of humanism I suggest that eliminating the sexual difference in the living space is a way to improve the space arrangements.

Mots-Clés: the sexual difference, the habitation, the space environment, humanism

1. AN INTRODUCTION

The difference between sexes exists in human's intelligence, physical strength and space cognition. The emphasis has widely been on the gender in urban space and in the architecture field. "The sexual differences" exist not only simply in physiology but also in society. The habitation is a solid and complex system with the ages and genders' discrepancy, which embodies itself in the interaction among the culture, the architectural and the environment.

The book *The Environment and Psychology* suggests that there are sexual differences in the requirements of space, but the book only elaborated the human psychological characteristic and the human sense, but not explored further into the correlation between different sexual demands and behavior. The

significance of space gets rebirth because of the study on the sexual behavior discrepancy of the living space. In my opinion, abating the lasting separate of soul and body causing by the same environment space designing, we can achieve the objective of humanism.⁴

Since "The Lab on sexes and space" established in 1995, all kinds of movements, such as the discussion about the women's safe in public space, the women's participation in the small community, the movement relating to the equal quantity of public lavatory, the heterosexual comrade's space and the experimentative movement "the heterosexual lodge in the college",

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make contribution to the study on increasing the sexual space in society. In the mainland China the fender and space have been rarely studied except that Wang Hongwei studied the “sexuality and space”. And he illuminated the relation between the gender and the space when he only treats space as the way of human surviving and activities. We studied the relationship between the sexual difference and living space, the interaction of psychological modes and behavior modes with the help of research strategies including field survey, questionnaire and analysis of the data.

2. A SURVEY AND ANALYZE ON THE RELATIONSHIP BETWEEN THE SEXES AND SPACE

2.1 The sex difference on the space

The research has been carried out in Baibuting Block in Whuan which includes Anjuyuan, Wenxinyuan, Baiheyuan, the zoology belt, the culture corridor and the entertainment space.

2.1.1 The traffic environment

The survey findings about the safety of the pavement,

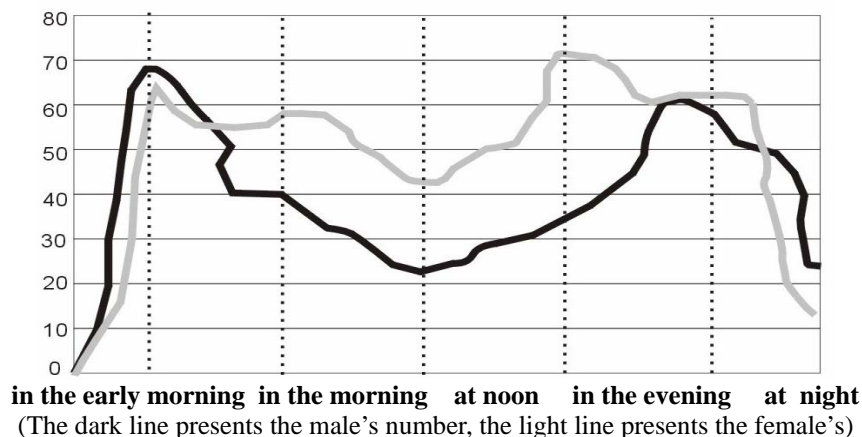
the driveway, the elevator and stairs, the underground garage show that females requirement of safety is higher than males. The women feel dangerous about the sideway parking, driving among the walking people which are caused by the expensiveness of underground garage in the block. So the female demands more space for the driving way, underground garage and the elevators.

2.1.2 The Activity Area

The result of the research about the public square, the gymnastics area, the running way and the closed space in the forest indicates that females especially the aged ones prefer group activity in general while the male prefer lonely. And it's mostly the women who stay in the children's playing ground. The people that are active in the vehemence sporting area, such as basketball or football field, are mostly male.

Counting the number of male and female who are present in different time, such as in the morning, at noon, in the evening, at night or in deep night, most of the people in the block are present in the early morning or in the evening, least at noon, the less males do exercises at noon. At the same time, the population of female who do exercises in the evening decreases more rapidly than that of male. (Such as Graph 1)

Graph 1:



2.1.3 The Sight Spots

We have taken the data of the different groups of people that are present in the sight spots including four different locations: secret, half-secret, half-open, open space. Most of the people in the secret part are lovers, more aged people and children in the open space, and more women are present in the children's playing ground because the children are mostly taken care by the aged women.

2.1.4 The Adjunctive Establishment

According to the inquiry about the use of furniture and other establishments, the male focuses more on the orientation of seats while the female cares more about the number and comfort and they ask nothing especially about the direction board and newspaper hall. As to the lights, the female are particularly concerned about the atmosphere the lights will bring about. (Such as in Graph 2)

Graph 2:

	The seats	The indicating boards	The newspaper hall	The dustbin	The nameplate	The lights
The male	Orientation	Strikingly	Number	Number	Strikingly	The effect
The female	Comfort Clean Number	No feeling	No feeling	Number Beauty	Strikingly Beauty Interesting	Color (warm) Atmosphere

According to the research about the locations, number, area and light condition of the sanitation in the block, it shows that the male care more about the number, area, the sanitation condition and the location, the female care more about the safety and light condition of the sanitation.

establishments which include the inquiry about the material, the function and the culture of the little sculptures show that the male care more about the function such as orientation function while the female care more about the figure and its meaning, such as the beauty, kindness and truth the sculptures imply.

The results of the research about the ornamental



Picture 1



Picture 2



Picture 3

According to the inquiry about the green belts' practical and ornamental function, the male usually find them useful to orientation while the female are concerned about their shadowing function. Analyzing the favor about the figure and color of the plant, the

male focus on the combination of plant' function and its figure such as rugged, highness and plain while the female are more concerned about the diversity of color, the arrangements and the safety of the plants. (Such as in Picture 4, 5 and 6)



Picture 4



Picture 5



Picture 6

Analysis: According to preceding literature research and the inquiry to inhabitant, it's believed that both the male and female spend most of their leisure time in the public locations in the community where they can intercourse freely. Whereas the sexual difference in the space still exists in the means of the activity. The male tend to intercourse in the early morning and in the evening and they like to stay together in the public leisure location or in the sight spots while the females often assemble in the square, courtyard, building on the

stilts and in the children's playground. The sexual difference also exists in the requirements in the establishment in the block when the male care more about the function while the female care more about the ornamental function. Whereas both the male and the female have the same requirement in the residential space that include safety, comfort half-open space for intercourse among the neighborhood.

2.2 The sex difference on the choosing of the residential environment

2.2.1 The Sex’s Different Request for Space Environment

According to interviews around Baiheyuan, Wenxinyuan and Anjuyuan in Baibuting area, the result of questionnaire shows that adult female attend to live in the old habitation, such as in Picture 7, 8 and 9, the middle aged and old aged house wives especially like the outer space in the older community where it’s more

lively, more spacious, and with denser population. The adjunctive establishments in the new block are better, but because the expensive of the maintenance, the children would rather play in the street of the alleyway instead of playing in the pleasure ground where the establishments are only on show. It’s hard to take care of the children playing in the alleyway and it’s not convenient to intercourse among the watchers, such as in Graph 3. On the other hand, the male care more about the traffic convenience and enough parking spots and they have requests for the parlor to meeting friends and public house, such as in Graph 4.



Picture 7



Picture 8



Picture 9

The safety	The stairs, the dead corner outside, the traffic satiety
The environment	More request for green belts, big arbors (without pollen)
The shopping market	Convenience and the diversity of goods
The traffic	The combination of safety and convenience
The education	Mainly about the children’s education
The administration	Pay more attention about the safety of water, electric and others
The intercourse	More large public location, easy to intercourse

Graph 3 (The female’s requests for the new building block from the questionnaire)

The traffic	The request for convenience is very high
The public location	The young ask more basketball, the older more goal kick fields
The environment	More request for the sight-seeing style
The space location	More request for the public house, banks and chambers
The additional establishment	Number of the dustbins and the striking of nameplates

Graph 4 (the male’s request for the new building block from the questionnaire)

2.2.2 The relation between ages and the different requests for space

Studying four groups of people including young women, middle-aged and old-aged women, young men, middle-aged and old-aged men, the young women adults care more about the secret of environment, the green belts, the exercise and leisure location while the middle and old-aged women care more about the safety, the area of the exercise field, the shopping location. The young man adults care more about the traffic establishments and exercise location while the middle and old-aged men care more about the scope of public location for intercourse and the exercise location for leisure time.

Analysis: According to the interview research around the adult inhabitants of different ages and genders in the new building community, the results indicate that the sexual difference on the choosing of space location can find its origin in Chinese traditional ideas such as “the man work outside, the women inside”. The male care more about the chamber, the public house and the establishments in it while the female care more about the shopping markets, the schools and the administration. The adult women usually ask for outside activity space in the new building’s environment while the male request more for the traffic, public location and activity space.

2.3 The sexual difference in traditional country village

Comparing with the modern society, the southeast area in Hubei has been closed and independent to the outside world holding the traditional life style and idea that dominates the peasants' daily life and mind. In the influence of the traditional hierarchical system and idea, the sexual difference, which embody in the inequality between the husbands and wives and in the imparity between the male and female, exists in the communion subject, the intercourse location and the intercommunion style.

I will study the sexual difference on the space location to research the sexual difference in the country taking the traditional village as a case in the next part of the essay.

2.3.1 The location research

According to the characteristic of traditional life, there

are three kinds of intercourse locations: the compulsory activity, the spontaneous activity and the general social activity in which the sexual characteristic are obvious.

The first kind of intercourse space: the compulsory activity location

The necessary activity in the countryside includes the work such as the labor for bread, shopping and housework and etc. Under the control of the traditional ideas such as cultural idea, customs and so on, what activity to take depends on the gender difference. The research results show that in the south-east area in Hubei the women usually do the housework such as washing clothes in the river, get ready for the cooking and some light farm work, and they take care of the older and the children in the same time. The adult male mainly goes to work in the town and do the farm works in the village. (Citing the picture 10, 11 and 12 taken by Mr. He Ming)



Picture 10



Picture 11

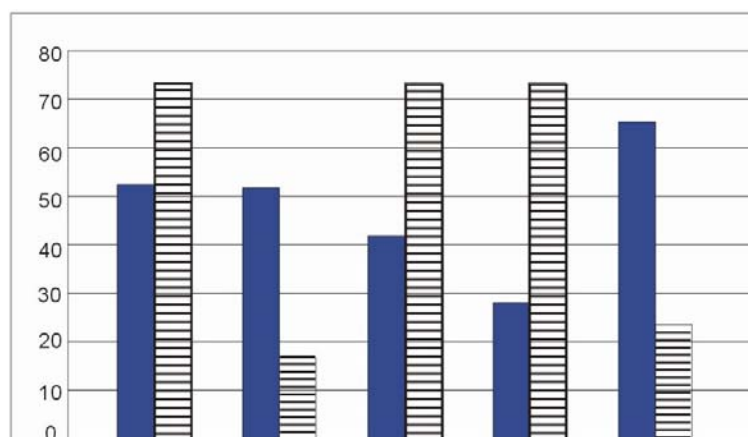


Picture 12

The second kinds of activity space: the spontaneous location

In the traditional village, the spontaneous activity in which the people tend to take part in their leisure time usually take place in the outside location, and some locations that have become popular in the history have

different characteristic, including sexual discrepancy. The observation and research finding shows that there are some locations with more intercommunion such as the street, the field before the house, the little shops or small groggery, beside the brook and the corridor with folk-custom. (Such as in Graph 5).



The street the shops near the brook before the house the corridor

Graph 5

(The dark pillar presents the number of male and the light pillar presents that of female)

The male in the village usually assemble near the shops or the corridors while the female stay before their houses or at the door. The aims of the man to assemble are mainly to enjoy the cool and chat while the women who have lots of housework to do have to stay before

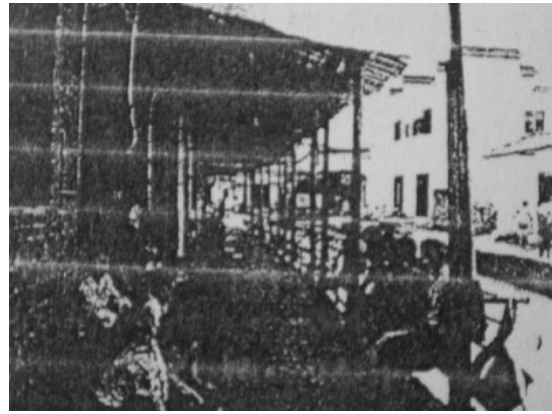
their houses to drop around and to take their children at the same time. There is usually a traditional symbol location around an old tree in the entrance of the village where the men and women can both be seen. (Citing the Picture 18, 19 and 20 taken by Mr. He Ming)



Picture 18



Picture 19



Picture 20

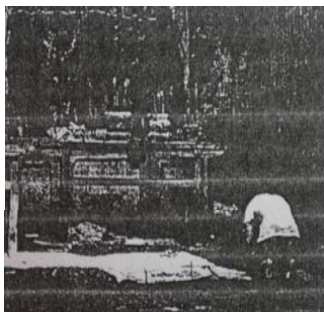
The third kind of activity space: the society activity space

The society activities happen and develop because of people's participation. To the people living in the traditional village whose society activity space depends on the others' providing locations and certain conditions, such as the ancestral temples, the markets, the empty ground before the ancestral temple, the temples and etc. In terms of the locations' content, there are activities

such as the sacrifice, going to the market, holydays, the meeting in the village and pilgrimage and etc. It's found that the male play the main role in the ancestral temple and other important public buildings. The man takes charge of the festivals in the village, the ceremony of weddings and birthdays and etc. The women are mainly seen in the market, temple or the pilgrimage. (Citing the Picture 21, 22 and 23 taken by Mr. He Ming)



Picture 21



Picture 22



Picture 23

2.3.2 The idea research

In the traditional village, the daily life consists of daily productive activity, daily intercourse and daily idea activity. The daily idea activity is the base of the other two activities. The corresponding activities are the ones in relation with politics, economics, culture and others. These factors have an influence to the living space states in the traditional villages which include the influence from the nature environment, the influence from the technique, the influence from the society groups and cultural ideas. The gender and daily idea discrepancy we are discussing belong to the influence of culture.

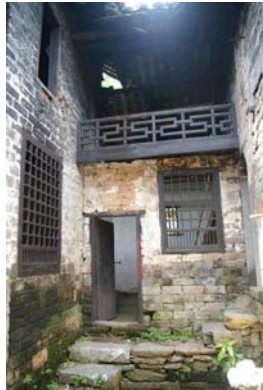
In the traditional village, the cultural ideas include the system idea and custom idea, which are very important

in the southeast area in Hubei. The region is based on blood relation which demands the respect to the ancestors, attaching importance to family, clear social class, the sequence of inheritance and the different rights and compulsory of the clan members in various social class. The role in the life ties the man (or the woman) to the certain location he (or she) can join. For example, there are four parts in order, which are respectively for the servants, the lord, the woman and the last parts are the ancestral temple. The arrangement of the space, which indicates "more population, more rich", is formed in the influence of culture. The typical "embroidery story" in the area is built to constraint the women who are thought not to go out of the house. It is the embodiment of the idea "Honor the man, humble the

women". (Such as in Picture 24, 25 and 26)



Picture 24



Picture 25



Picture 26

The pictures above show us the daily life in traditional patio, the traditional embroider story in the residential house and the space arrangements of the residential house.

Analysis: according to the research about the traditional village in the country in the southeast in Hubei, the residential space arrangements are mainly decided by the sexual difference both in the communion space and in the traditional hierarchical ideas such as the idea of "Honor the man, humble the woman" which is embodied in the intercourse locations where the male are the main role of various intercourse activities such as daily meetings, labor, traditional religion fete. On the other hand, the female live in another inner space busying with the activities such as housework, farm works, taking care of the older and the children and etc which are far more single than the man's colorful lives and both of them constructed the closed lives of traditional China.

3. SOME SUGGESTIONS TO THE NEW BUILDING COMMUNITY IN THE CITY AND THE TRADITIONAL VILLAGE IN THE COUNTRY

The findings of the research and observation shows that most of the female prefer capacious space when they are asked whether they require capacious space, but if it's not at hand the activities can be spread into disperse sight spots which can lead to the decrease of the sensitivity of space and space requirements deviating from the actuality. Besides, the standardization production in the design of the modern inhabitation ignores the slight diversity in the individual. We have some suggestions for the new inhabitation in the city and the traditional village in the country.

3.1 The space environment in the new building inhabitation

3.1.1 The traffic environment

The safety of the traffic environment are concerned mainly by the female, as shown in the research, who expressed worries about the phenomenon that the motor drives in the pavement at night, so we suggest that some attentions should paid to the separation of the driveway and pavement in the programming. Bright street lights and striking indicating boards should be set in case. Because of the traditional idea such as "the man work outside, the woman stay inside", most the people earn for the bread are adult men who like driving a short cut on their way home on workdays, so they require the convenience of the roads which demands the stylist look into the road programming carefully.

3.1.2 The activity area

The adult female who need enough location for exercises and intercourse prefer more to square area which demands the stylist to be concerned about the area of the square in the inhabitation. On the other hand, the adult male prefer to stay alone, which was found in the research. For example, there are some of them fishing at the lake, watching the water, smoking in the boundary of the square, reading the newspaper and etc, so the closed location should be taken into consideration by the stylist.

3.1.3 The sight spots

The female who are seldom present in the dead corner in the sight spots and the dense forests are wild about stay in their own courtyard where they can intercourse with the neighbors while taking care of the children at the same time. So it's very important to arrange the courtyard. On the other hand, the adult man, especially the aged man, require more of the corridor or the summerhouse. It's observed that the aged man like playing chess and the standers-by are in an endless

stream. The man who presents himself in the forest is mostly strolling with his bird.

3.1.4 The accessory establishments

To the accessory establishments the adult man require more to the effect of the lights which is closely linked with their driving at night. And they care more to the numbers of the dustbins and demand more for the function of the furniture while the female care more to the figure and color. So it demands the stylist design the accessory establishments satisfying both of the male and female. As to the constructing of the green belt as a accessory arrangement, as it is shown in the research's results, both the man and woman noticed the lofty of arbors, but the tall arbors in the design are placed by the young trees because the developer is in pursuit of economic benefit. So it is necessary for the stylist to check on the program seriously.

In addition, the adult female particularly revolts against the arbors with pollen and the thorns because they can cause hypersusceptibility and it's not good for the children's health.

3.1.5 The space locations

In the research, we have noticed the phenomenon that whenever in the later afternoon, there are lots of adult women and aged people who arrived about half an hour earlier to wait outside the primary school and kid garden where little seats are setting for them to sit. And most consumers said the traffic is busy and the safety factors are very low. Analyzing the leisure time location, the adult males emphasize the importance of setting groggery and clamber in the block to meet friends.

3.2 The traditional village in the country

According to the research about the sexual difference in the traditional village, it's found that the feudalism

hierarchical idea is the origination of the phenomenon "Honor the man, humble the woman". It reminds us the necessity of the introducing of modern culture to change the female's traditional idea, which requires less activity locations and life space for them. And the main requirement relating to the male is how to improve the life quality of life embodying really the idea of the construction of modern civilization. In recently years, the construction of new countries has been the first task of the whole social construction among which the dwelling of the villagers has increasingly become the work's important aspect. So other than improving the establishments, it's more important to take the particularity of the inhabitant's concern into account. At the same time, the theme of the new country's design must be based on the preserving of traditional culture.

4. THE END

In order to illuminate the relation between the sexual discrepancy and the dwelling environment, having done the preceding literature research during which we have found the insufficiency of study on the modern sexual difference, we have explored the sexual discrepancy in the space environment in the community in the city and in the traditional settlement.

I have studied the number of the people presenting themselves in the sight spots in a day in Baibuting Block in Wuhan and comparing it with the older block in the same area. To ensure the reliability of the research result, there has been a questionnaire research involving adult male and female separately totaling dozens of participator. On the other hand, we have studied a few villages in the mountain in Nantong Mountain in southeast in Hubei, summing up the different requirements from different sexes, and make some suggestions to the construction of new villages.

REFERENCES

- Bao Xiaolan. (1995). *Study and evaluation on the feminism in the western society* [M]. Beijing: Sanlian Bookstore.
- Fei Xiaotong. (1985). *The Rural Area in Chian*[M]. Beijing: Sanlian Bookstore.
- Full circles: *Geographies of women over the life course* [M]. New York: Rutledge.
- He Ming. (2004). Reading Space of Traditional Settlements from Life-world Perspective [D]. A Master Essay in Huazhong Science and Technique University.
- Hu Jianyin, Sun Shanze. (2000). *The Theoretical Methods and Practice of Spot Check*. Beijing: Beijing College Press.
- He Ming. (2004). Reading Space of Traditional Settlements from Life-world Perspective [D]. A Master Essay in Huazhong Science and Technique University.
- JanGehl, LarsGemzoe. (2003). *Pubic Spaces, Public Life* [M]. Tang Yuyang, Wang Bing (Translator). Beijing: The Chinese Architecture Press.
- Kevin Lynch. (1960). *The Image of the City* [M]. Cambridge: IT Press.

- Liang Xue. (2001). *The Design of the Traditional Towns and Villages Entity* [M]. Tianjin: Tianjin Technology and Science Press.
- Peng Yigang. (2002). *An Analysis on the Sights in the Traditional Town and Settlement* [M]. Beijing: Chinese Architecture Industry Press.
- Qian Mingyi, Su Yanjie, Li Hong. (1995). *The Female Psychology and the Gender Difference* [M]. Beijing: Sanlian Bookstore Press.
- Wang Zheng, Du Fangqin. (1998). *The Social Gender Study and Choice*[M]. Beijing: Sanlian Bookstore.
- Wu Jinyan, Tang Youwen, Cheng Weidong. (1997). *The Design Principle of Women's Personal Safety in Urban Society* [J]. *The Journal of Gender and Space Lab*, 1~74.
- Xu Chen. (2004). *The Relationship between Gender Difference and Space Environment of School*[D]. The Master Essay in Huazhong Science and Technology University.
- Xu Leiqing, Yang Gongxia. (1995). *Environment Psychology*[M]. Shanghai: The People's Press in Shanghai.
- Yang Yulian, Hu Zhengfan. (1995). *Environment Psychology* [M]. Shanghai: The People's Press in Shanghai.

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