

Thinking about the Contradictions of Space Use of Square Dance in Chinese Cold Cities through Newspaper Reports

Liu Xiaobing^{1,2}, Zhao Xiaolong^{1,2} and Zhang Bo^{3,*}

1 Department of Landscape Architecture, Harbin Institute of Technology, Harbin, CHN

2 Institute of Ecological Landscape, Room 109, 66 West-Dazhi Street, Harbin, CHN

3 Department of Landscape Architecture, Oklahoma State University, Stillwater, USA
e-mail: 65746174@qq.com

Abstract. The square dance is one of the most popular new physical activities in China in recent years, and has become the hotspot of Chinese garden research. This study attempts to interpret the space use contradictions of square dance from the angle of newspaper report, and then make up the deficiency of the planning designer's understanding of square dance space. We collected 749 news reports in 8 years of four authoritative newspapers in Harbin, and probed into the square use contradictions of usability, accessibility and climate environment of square dance. We hope to provide the content basis for future social science research in the field of planning and design, and provide the direction for technical research.

1. Introduction

In recent years, the public enthusiasm for health activities is unprecedentedly high, and people spontaneously formed many popular sports cultural achievements. The square dance is one of the typical representatives. Because of the spontaneity of its formative process, participants often explore their own use of the venues and tend to be more inclusive. In addition, the development of square dance activities is rapid, resulting in the space planning and design industry cannot create a profound understanding of the space use of square dance.

At present, the research of square dance activity space mainly concentrates on the related content of "square dance disturbing the public": on the one hand, they discuss the noise regulation or policy of square dance, such as Liang Qin-chao (2016) [1], Wang Qian-ni (2015) [2]; on the other hand, discusses how to solve this problem through reasonable planning and design methods, such as Yuan Ji-fang (2014) [3], Zhang Xin-si (2014) [4].

In fact, it was the mass media that initially brought the space contradictions of the square dance into the public eye. The advantage of traditional paper media, especially newspaper, lies in interview right, credibility, professional news content productivity and professional news editing team. According to Nielsen's survey of "global Advertising Trust," Consumers have a 58% trust in newspapers. This is much higher than in television, radio and the Internet. This shows that the newspaper has irreplaceable role in the credibility and authority. On the one hand, it is an important way for the contemporary people to understand the outside world, and then to influence the consciousness and behavior of the masses. On the other hand, it is a wind vane for the superstructure, and it can give the society information feedback to the government, so as to monitor public opinion and the convey people's willing. So in social phenomena and contradictions, newspapers are one of the most influential sources of data. so as to monitor public opinion and the convey people's willing.



Therefore, this study attempts to interpret the space use contradictions of square dance from the angle of newspaper report, and then make up the deficiency of the planning designer's understanding of square dance space. At the same time, in the winter, residents of the cold area differ from other places in the use of square dance space. So take "Harbin" this typical cold city as an example, with the reports of four kinds of most influential local newspapers-"New Evening News" "Daily Life" "Harbin Daily", "Heilongjiang Daily", and reflect on the use contradictions of square dance space. We hope to provide the content basis for future social science research in the field of planning and design, and provide the direction for technical research.

2. Data collection

2.1. Data sources

All the reports we collected came from the "New Evening News" "Daily life" "Harbin Daily", "Heilongjiang Daily". According to the Meihua [5], these four kinds of newspaper are the best circulation in Harbin. Among them, consumers of "Daily Life" and "New Evening News" are mostly citizens. The consumers of "Harbin Daily" and "Heilongjiang Daily" are mostly government agencies. Through these four kinds of newspapers, we can look at our research problems comprehensively from both the public and the government perspectives.

2.2. Time filtering

In fact, the coverage of this study is limited to 2000-2015. But the number of press reports about square dance for 2000-2007 was 0. The number of reports in 2008-2010 is very small, and the content of the article is not strong. So the real research data for this study are all the news reports from 2011 to 2015.

2.3. Location filtering

"New Evening News" "Daily Life" and "Harbin Daily" are city-level newspapers. Its news reports are mainly concentrated in the city of Harbin, but there are still some reports on the surrounding towns of Harbin. "Heilongjiang Daily" is a province-level newspaper, covers a number of cities and towns. As this study takes the city of Harbin as a research object, so the news reports that focus on other cities and towns are not included in the study.

2.4. Content filtering

As the core goal of this research is to explore and discuss the space use contradictions of square dance (a kind of fitness activities), and finally provide advice and guidance for the urban planners and venues designers. As a result, the report's screening principle is to look for news reports about three aspects of "square dance", "venues planning and design" and "health", not just the "square dance" itself.

3. Results

"Square Dance" or "fitness dance" as the key words for full-text search, we initially received 749 reports in 2008-2015. Through the further content reading, we finally obtains 350 reports: 143 from the life newspaper, 77 from "New Evening News", 55 from "Harbin Daily", 75 from "Heilongjiang Daily". From the time distribution of the number of reports (figure 1), in the period of 2011-2015, both the 4 newspapers' respective and overall number of reports, generally show an upward trend. That is to say, since 2011, square dance has been getting more and more attention, and peaked in 2015. From the content of the report (figure 2), the number of reports involving usability contradictions is 194, that involving the accessibility contradictions is 82, and that involving climate and environment contradictions is 74.

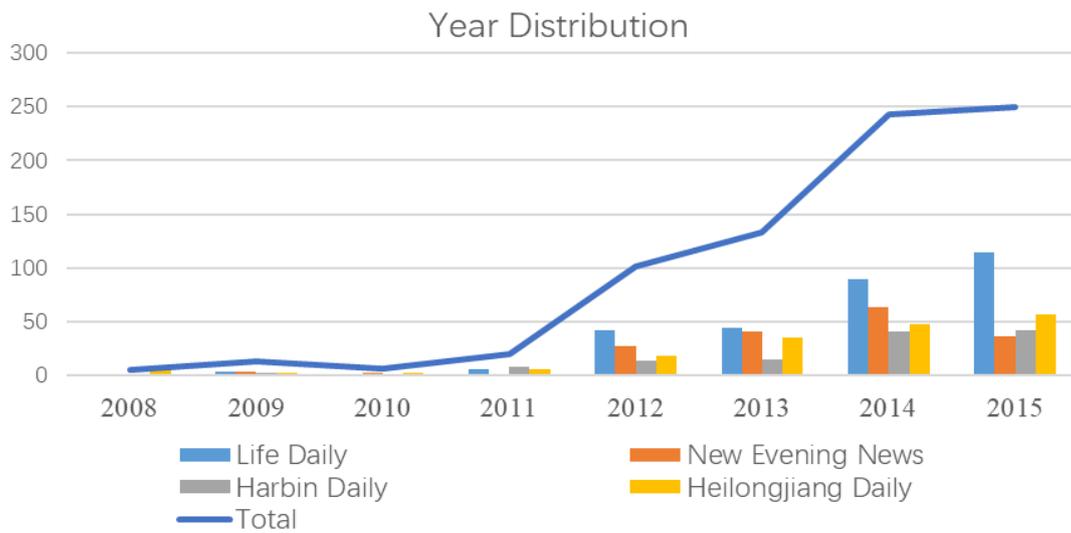


Figure 1. Reports' year distribution.

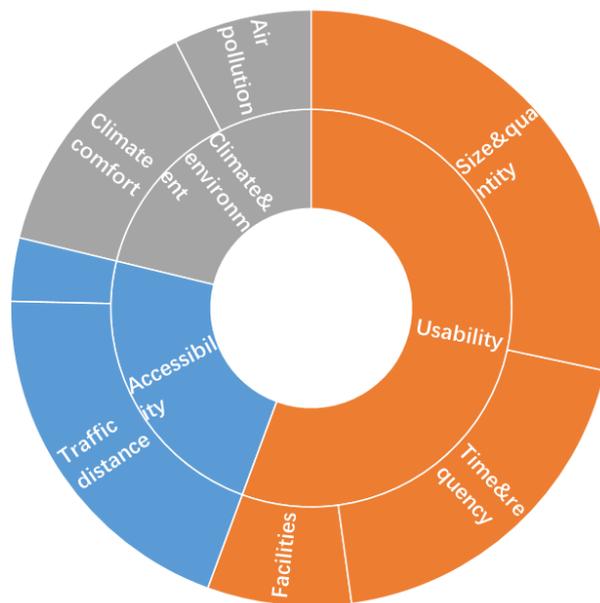


Figure 2. Reports' content distribution.

3.1. Usability contradictions

There are 194 reports covering the usability contradictions of the venues, 99 of which covered the size and quantity of the venues, 68 dealt with the time and frequency of space use, and 27 dealt with equipment and facilities in a venue.

3.1.1. Size and quantity of venues. In the reports on the size and quantity of the venues (Figure 3), 68 reflected the number of venues and 31 reflected the size of venues. The size and quantity of the square dance space are the main demands reflected in the reports. In a report, there were square dancers who danced in a community open space, feeling cramped and being reported by the surrounding residents because of the noise nuisance. The government later transformed a disused shanty town into a 2.1-hectare square, giving the square dancers a very good experience [6]. In addition, the study found that the study found that square dancers often occupied urban roads, car parks [7] and other venues like this. This not only made the square dancer's activity inconvenient, but also disturbed the normal

social order. This reflected the current number of square dance venues was difficult to meet the needs of square dancers.

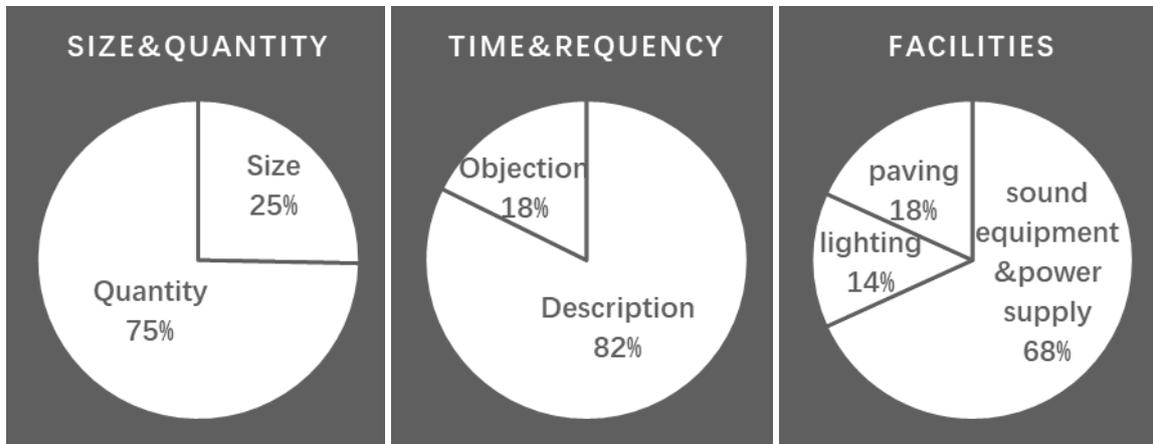


Figure 3. Quantitative distribution of reports on size and quantities of venues.

Figure 4. Quantitative distribution of reports on space use time and frequency.

Figure 5. Quantitative distribution of reports on facilities.

3.1.2. Space use time and frequency. In the reports on space use time and frequency (Figure 4), 56 objectively reflected the space use time and frequency of square dancers, and 12 objected to the rule of space use. Square dances are usually carried out regularly. As the square dancers are mainly middle-aged and elderly people, so the use of the site is usually in every morning and evening. However, there have been reports of objections to this practice, which suggested that the square dance would hinder the dancers from eating on time, thus negatively affecting the health of the square Dancers[8].

3.1.3. Facilities. Among the reports on facilities(Figure 5), 16 mentioned audio and power supplies, 6 mentioned site paving issues, and 5 mentioned site lighting issues. Audio equipment is a necessary soundtrack tool for square dances. For some organizers of square dance, the music equipment and power supply are important questions they considered at the beginning of their planning [9]. The venue facilities required by the square dancers include lighting and site paving. There were square dancers who thought that a good lighting environment will make them feel a lively atmosphere [10]. The pavement was closely related to the health of the square dancer, and the chilled concrete floor has a negative effect on the dancers ' legs and joints, especially in winter, when the cold and snow would make the situation worse [11], [12].

3.2. Accessibility contradictions

A total of 81 reports mentioned Accessibility contradictions, which involved the traffic distance 69, traffic safety 12.

3.2.1. Traffic distance. As a group activity, the square dance usually had a relatively fixed place of activity. Its group organization was divided by geographical space, so a square dance team was usually composed of residents living in the vicinity of active space. The vast majority of square dancers arrived at the arena by walking, with a small number of dancers arriving at the venues by bus [13]. Some square dancers would suspend the square dance or change the venue because the traffic was too far away. And the square dancers who traveled by bus would increase the public traffic pressure at rush hour [14]. But there was no accurate reference to the square Dancer's perception of the farthest distance of walking or bus.

3.2.2. Traffic safety. There were 12 reports mentioned square dancers had a traffic accident during the trip to and from the venue. This showed that the square dancers had traffic safety problems when

commuting between home and venues, which to a certain extent, reduced the square dance venues of accessibility.

3.3. Climate and environment contradictions

There were 74 reports on climate and environment contradictions, including 48 reports on climate comfort, and 26 on air pollution.

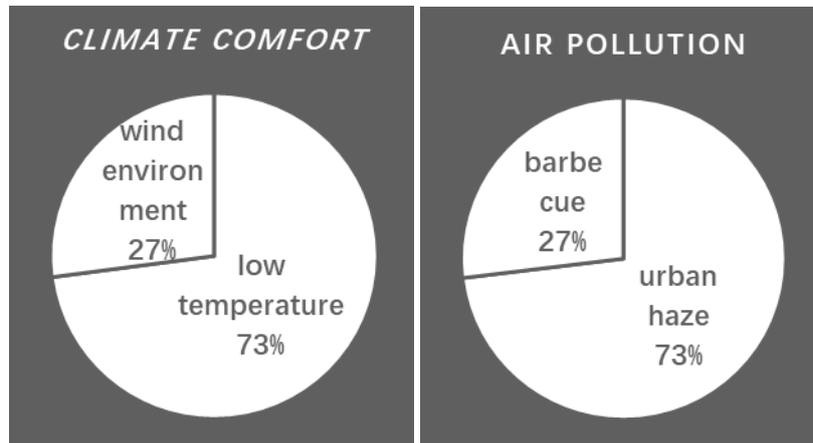


Figure 6. Quantitative distribution of reports on climate comfort.

Figure 7. Quantitative distribution of reports on Air pollution.

3.3.1. Climate comfort. The reports on climate comfort (Figure 6) mainly reflected two kinds of climate comfort, such as low temperature environment (35), wind environment (13). Winter mornings and evenings tend to have lower outdoor temperatures, which not only make people feel cold, but also increase the risk of joint injuries in square dancers. Therefore, it was reported that the winter square dance should be carried out as far as possible at noon, because the midday temperature is high and sunny enough to make up for the lack of sunshine caused by long time indoor activities. But the report did not verify the extent to which the square dancers were receptive to the proposal [8]. In the report, most of the problems surrounding the wind environment appeared in a riverside square in the early morning. Square dancers tended to be more inclined to the waterfront space activities, but the microclimate in the waterfront space is often not comfortable enough. But the report failed to arrive at the exact cause of the phenomenon.

3.3.2. Air pollution. The main sources of air pollution (Figure 7) affecting the square dance were barbecue (7) and urban haze (19). The former caused the participants to feel unwell during the square dance, while the latter directly affected the participants' physical health seriously. There were square dancers had asthma attacks because of dancing in the haze. In the summer, some square dancers also complained about the serious air pollution in the venues near the open-air barbecue stall [15].

4. Discussion and conclusion

4.1. urban planning

For traffic distance, traffic safety, size and quantity of the site, adjusting urban planning and land use plan is an important method to solve these problems. Square dance usually has a relatively fixed place of activity and personnel composition. This makes it possible to determine the number of square dancers and the range of activities, so as to determine the location, size and quantity of the site, and to make rational allocation of resources through urban land use and planning methods. The objective of site selection is to control the traffic distance and to avoid factors that obstruct the square dance (such as the summer barbecue area) or reduce the accessibility of the site (the fast motorway on the way). In

addition, the urban land tension is also an important factor to limit the total space of the square dance. This requires the urban Planning department to find ways to increase the utilization of urban land, to make landscape regeneration (such as rebuilding obsolete shanty towns or factories) or vertical construction (such as building a rooftop plaza, etc.). And the regulation of the size and quantity of venues is based on the number of the square dance team in a certain area. And it is necessary to ensure satisfying the square dancers without causing the waste of urban land resources.

4.2. Space Activities Planning

Square dance often occurred in the city's multi-functional public space (such as city square, park, etc.). That is to say, the different activities in such spaces could have time and space conflicts. In addition, because the square dance needed music, it was difficult for different square dance teams to share space without interfering with each other. At the same time, in terms of health, there were still objections to the activity time (early morning and evening) of the square dancer (such as the low temperature of the morning in winter could damage the fitness of the square dancer). Therefore, the activity mechanism of square dancers still needs to be guided by more scientific norms. At present, some government departments have begun to register and manage the square dance teams in some areas of Harbin [16], [17]. This initiative can help planners to make reasonable site resource allocation. But this only alleviates the space use conflict between the different square dance teams, however the space use conflict between the other activities and the square dance has not received enough attention. This requires the investigation of potential activity types and their space use conflicts on the site, then to plan the space for the reasonable activity contents and time and put forward the management and guidance program.

4.3. Space design

Space design is an important means to improve the utilization rate of space and enhance the user experience. Sound equipment, power supply, good lighting environment, suitable site paving, comfortable micro-climate can improve the square dancers' usage experience, reduce the negative impact of the site on the physical and mental health of square dancers. For the site designers, by means of design, add sound and power, improve the lighting environment and paving quality is relatively easy to complete, and the regulation of micro-climate environment, such as wind environment, is relatively complex, which need more research support.

5. References

- [1] Liang Qin-chao, Li Yuan and Shi Zhen-guo 2016 The deep reason and the control of "the public square dance disturbing the public" *Journal of Wuhan Institute of Physical Education* **39** pp 36-41.
- [2] Wang Qian-ni 2015 Stigma and conflict: square dance in the middle of times *Culture Crossings* 02(2014) pp 74-81
- [3] Yuan Ji-fang and Chen Jian-guo 2014 The lack of public space in urban sports recreation from the square dance *Journal of Wuhan Institute of Physical Education* **48** pp 34-38.
- [4] Zhang Xin-si, Liu Ming-hui and Zhao Li-na 2014 "Square Dance Contradiction" and the planning and management of urban public cultural space *Chinese Landscape Architecture* **30** pp112-5
- [5] http://mediasearch.meihua.info/ListingHybrid.htm?q=-1-1-False-False-True-8,_,1,_,0,0_False,2,0,_,1,_,0,_,False,2,0,_,1,_,0,_,False,1,0,_,1,_,0,_,False,1,0,_,1,_,0,_,1,2,0,0,_,1,_,0,0,0,_,1,0,0,0-1-
- [6] Wang Yan-lin 2014 Generous inside landscape woodland and Harbin East Street garden has been put into use *Daily Life* (Harbin: Heilongjiang Daily) **4 August** p 2
- [7] Duan Xiao-ning and Zhao Wei 2015 Pushing three cars for the square dance *Daily Life* (Harbin: Heilongjiang Daily) **24 July** p C15
- [8] Qian Long 2015 Winter square dance with health tips *New Evening News* (Harbin: Harbin Daily) **29 January** p B06

- [9] Jiao Bo 2012 Three Ms. Liu make the joyful dance popular *Daily Life* (Harbin: Heilongjiang Daily) **17 May** p 48
- [10] He Xing-li and Li Wei-bing 2014 In August the central street area changed a lot *Daily Life* (Harbin: Heilongjiang Daily) **31 July** p 06
- [11] Anon 2015 How to protect the joints *Daily Life* (Harbin: Heilongjiang Daily) **24 September** p B08
- [12] Zhang Jie 2015 10 miles a day women two months practicing bad knees *Daily Life* (Harbin: Heilongjiang Daily) **7 July** p A07
- [13] Lu Ming 2015 89-line bus turns rolling down aisle middle-aged woman *Daily Life* (Harbin: Heilongjiang Daily) **23 July** p A13
- [14] Zhan Xin-yu 2014 Morning and evening traffic peak of the elderly accounted for 20% *Daily Life* (Harbin: Heilongjiang Daily) **26 November** p 08
- [15] Tian Di and Yuan Ye 2015 Air pollution around outdoor barbecue stalls *New Evening News* (Harbin: Harbin Daily) **8 July** p A03
- [16] Liu Ying 2015 Harbin Xiangfang District Square dance music does not exceed 80 db *Daily Life* (Harbin: Heilongjiang Daily) **4 March** p A04
- [17] Yu Hai-xia 2014 160 fitness spots to keep you moving *Daily Life* (Harbin: Heilongjiang Daily) **29 August** p A21.