流浪“巢” ——福州琴亭高架桥桥下空间改造 “NESTS” FOR THE HOMELESS — REUTILIZATION OF THE SPACE UNDER QINTING VIADUCT IN FUZHOU

胡建国 / Jianguo HU

DOI:10.15302/J-LAF-20170311 | 收稿时间 RECEIVED DATE / 2016-07-10
中图分类号 / TU984
文献标识码 / B

1. 部分集装箱斜插入地下，形成通往地下空间的走廊。

1. Some of the containers were inserted at an oblique angle into the ground, forming a corridor leading to the underground space.

城市中的流浪者

随着城市建设节奏不断加快，位居社会底层的流浪人群一直被忽略，难以为城市所包容，只得蜷居在城市的夹缝中，缺少社会的关注与关爱。此次设计试图以福州火车站附近的流浪人群为代表展开现状调查，呈现流浪群体的生活状况及心理诉求，以呼吁社会加强对这一群体的关注，并提出可能的解决方案。

在福州火车站旁边的地下通道里，栖息着很多“睡觉者”。他们大多裸露双脚，披着破旧的军大衣，躺在被单、碎纸板，甚至冰凉的地板上睡觉。为了了解流浪人群的生存环境及需求，笔者进行了实地跟踪调研，与多位流浪者接触并详谈。调查发现，他们之所以选择福州站旁的地下通道，主要是因为这里无人看管。流浪者多为独自一人来到城市打工，白天在外工作，晚上就睡在地下通道中，他们为了将省下的租房费用寄回给老家的妻儿，而尽量节约自己的开支。也有一些流浪者是无业游民，每天的生活就只有睡觉、游荡、拾荒，他们甚至没有身份证，很难在城市中寻得一份生计。他们需要一个可以栖息的“巢穴”，获得一处温暖的避风港。

琴亭高架桥下的聚集地

在了解到流浪人群的生存环境和需求

后，笔者试图在福州火车站附近为他们寻找一处栖息空间。通过对附近环境展开调查，笔者锁定了火车站附近的高架桥桥下空间。桥下空间相对开阔，许多附近居民会自发地对其加以利用，如跳广场舞、喝茶聊天、下棋对弈、收听广播等。相较而言，位于火车站西北面的琴亭高架桥下的公共空间却难以吸引附近居民。究其原因，主要是因为这里环境条件恶劣。其一，附近交通发达、车辆往来频繁，噪声污染严重；其二，场地北侧的琴亭湖污染严重，各种垃圾淤积，导致鱼群大量死亡，水体浑浊不堪，且因湖水流经，桥下杂草丛生，充斥着刺鼻的异味。在琴亭高架桥下，笔者发现了一些遗留的废纸板、衣物和燃尽的火堆，这些正是流浪者曾在此落脚的痕迹。显然，此处未能被附近居民加以利用的地块成为了流浪人群的聚集地。如何对这处桥下空间加以改造，优化流浪人群的生活条件，使他们能在此落脚，成为这一项目的设计方向。

从集装箱到“巢”

福州是典型的港口城市，水路运输业发达，集装箱生产规模和使用需求巨大，几乎每天都会产生大量质量不达标的残次品或破旧磨损的废弃品。这些集装箱若被丢弃，将会对生态环境造成巨大的压力。而集装箱建筑不仅减少了钢铁回炉重造产生的环境污染

摘要

在当代城市中，流浪人群在路边、广场、桥底等地露宿的情况并不少见。针对这一现象，笔者展开了深入调研，试图为这一特定目标人群探寻改善现状的潜在方案。该设计提出“巢”的概念，并以福州火车站附近的琴亭高架桥桥下空间改造为例，展示利用废弃集装箱与高架桥桥下空间，为流浪人群打造生态、可持续的休憩“巢”空间的方案。在充分利用城市公共空间的同时，在快速发展的城市中呼唤人文关怀，注入新的活力。

关键词

流浪人群；集装箱；高架桥；巢；可持续性

ABSTRACT

It is common to see homelessness living in the roadside, square, under the bridge and other places in contemporary cities. In this project, the designer undertook an investigation in order to explore a potential solution of creating shelters for the homeless. Taking a concept of “nest,” the design reuses the space under the Qinting Viaduct near the Fuzhou Railway Station, creating a series of ecological and sustainable “nest” space by cutting, superposing, and arranging disused containers for homeless people. By reutilizing delicate urban spaces, this project injects humanistic care and vitality into the rapidly developing city.

KEY WORDS

Homelessness; Container; Viaduct; Nest; Sustainability

整理 汪默英 田乐

译 陈立欣 田乐

EDITED BY Moying WANG Tina TIAN

TRANSLATED BY Connie CHEN Tina TIAN

© 胡建国
2

2. 琴亭高架桥位于福州火车站西北侧
3. 在福州火车站附近的地下通道里，栖息着很多“睡觉者”。
4. 2015年12月28日，笔者与两名流浪者和一名环卫工人的交谈记录。
5. 2015年12月30日，笔者对一名流浪者一天的生活进行了追踪记录。

2. The Qingting Viaduct is on the northwest of Fuzhou Railway Station.
3. Many people live in the underpass next to Fuzhou Station.
4. The designer talked to two homeless people and a sanitation worker on December 28th, 2015.
5. The designer traced a homeless and recorded the process on December 30th, 2015.

© 胡建国
3

项目地址：
福建省福州市
项目面积：
1.4hm²
设计时间：
2015年12月~2016年6月
所获奖项：
第12届LA先锋奖公民意识与过程奖

LOCATION:
Fuzhou, Fujian Province
AREA (SIZE):
1.4 hm²
DESIGN PERIOD:
December, 2015 ~ June, 2016
AWARD:
Award of Civic Consciousness and Processes of the 12th LA Frontiers Award

和材料损耗，且不会产生建筑垃圾，同时亦具备原料足、成本低等特点。笔者选定集装箱建筑这一形式，试图将废弃集装箱改造为一个个“巢”，通过不同规格箱体的组合，形成新的空间结构，重新激活桥下未被充分利用的场地，赋予其新的生命活力。这一构想在缓解集装箱资源浪费问题的同时，也为流浪人群提供了一处温暖的栖身之所，并降低了流浪人群在地下通道中聚集对福州火车站这一交通枢纽所带来的压力。

设计将废弃集装箱重新切割、叠加、组合，并与桥墩或地形紧密结合，生成了一处

由集装箱构筑的公共空间。地表以上的集装箱构成了路径通道，连接起各个节点空间。还有部分集装箱结合桥墩出挑悬在空中，构成一个个平台，用于观景或休憩；部分集装箱斜插入地下，形成通往地下空间的走廊，而埋入地下的集装箱可以屏蔽交通噪音污染，流浪者可在此下棋、看书、睡觉。

自发生长的植物群落

由于紧邻琴亭湖水系，桥底水量充足，现有水体经过治理后，将会形成适宜水生植

物生长的良好条件。设计在保留场地内的大部分原有植物的同时，对枯老病害的植株进行了清理和修剪，随后在部分集装箱内外补充种植了能够自发生长的草本植物。为了保证光照和水分，在观景集装箱顶部钻有不规则的孔洞，使集装箱内的植物可以直接接触到阳光雨露。在集装箱墙体上，亦密布爬藤植物，以缓解阳光直射导致的室内高温。场地内大多数植物均无需精细养护，便能形成自发生长、自行演替的植物群落。

结语

城市环境是城市公民共享用的生存空间，城市设计师可以通过自己的设计，使资源进行更加合理的分配。如何利用已有闲置资源，为社会底层人群营造尽可能优越的生存条件，是城市设计师应充分考虑的议题。我们应理解和包容流浪者一类的城市边缘人群，倾听他们的所思与所需，让城市真正实现共享。**LAF**

女儿在苏州工作，独自一人到福州打工。
His daughter is working in Suzhou. He came to Fuzhou alone to make a livelihood.

我：来福州打工多久了？
他：两年了。
我：每天晚上都睡在这里吗？
他：睡了有大半年了。
我：为什么会选择在这里睡觉？
他：这里没人管，自在，有时候去饭店附近转转会给饭吃。
Me: How long have you been in Fuzhou?
Li: Two years.
Me: When did you start to sleep here?
Li: About half year ago.
Me: Why do you choose to sleep here?
Li: Unattended. Some restaurants around here sometimes provide food to me.

妻女在四川老家，女儿上学，独自一人到福州打工。
His wife and school-age daughter are living in Sichuan. He came to Fuzhou alone to make a livelihood.

我：来福州打工多久了？
他：三年了。
我：为什么会选择在这里睡觉？
他：省钱啊，房租太贵，我在这里睡觉别人爱笑我就笑我。省下来的钱给女儿买吃的我高兴。
Me: How long have you been in Fuzhou?
Zhao: Three years.
Me: Why do you choose to sleep here?
Zhao: I can save the house rent to buy snacks for my daughter. I do not care about what others think of me.

环卫工人：他们想找环卫工人的工作，但没有身份证。他们大部分都是没家的人，经常喝酒打架，说找工作都是骗人的。
Sanitation Worker: Most of them do not have ID cards so that they cannot get a cleaning job. These homeless people often get drunk and fight. I do not believe that they really want to get a job.

4 © 胡建圆

福州火车站
Fuzhou Railway Station

华林路
Hualin Road

水头路
Shuitou Road

福州火车站
Fuzhou Railway Station

13:07
睡觉
Sleep
on the ground

14:20
出行
Leave the
underpass
14:32
捡了根烟头
Pick up
a cigarette end
14:51
椅子上休息
Have a rest
on the chair
15:30
向环卫工人打听工作
Ask if he could get a
cleaning job

回到福州站吃饭休息
Back to Fuzhou Railway Station
to have a meal and rest
20:50
睡觉
Sleep
on the ground

5 © 胡建圆

Homeless in the City

With the development of city construction, homelessness are ignored by rapid development. They are hardly accommodated in the city, surviving in the bottom of the society. Taking the homeless individuals around Fuzhou Railway Station as a study case, the project shows the existing living conditions and demands of the homeless group based on an in-depth investigation, and hope to generate a possible solution of creating better places for their living.

There are a bunch of homeless people living in the underpass nearby the Fuzhou Railway Station. They sleep on sheets or pieces of cardboard with bare feet, covering themselves with ragged coats, or even lying on the ground. In order to understand the existing living condition and needs of the homeless, the designer conducted a follow-up survey by talking with a number of homeless individuals. It was found that the reason why they sleep in the underpass is there is a neglected place by city administration. Most of the homeless work alone in the city in the day and sleep in the underpass at night. They save rent expenses to support their family in the hometown. There are also some homeless people who do not work, sleeping, wandering, and being scavengers instead. Some of them do not have ID cards, so it is difficult for them to earn a livelihood in the city. A shelter “nest” is what they need the most.

The Gathering Place under the Viaduct

To meet the core need of the homeless group — having a place to stay and sleep — the design tried to create shelters near the Fuzhou Railway Station. The space under the Qinting Viaduct was selected as the project site. Usually the space under the viaduct is used a lot by nearby residents for dancing, having tea, chatting, playing chess games,

listening to radios, etc. But the space under the Qinting Viaduct is rarely used because of its harsh environmental problems, including loud traffic noise; severe waterbody pollution with stinking smell caused by garbage dumping; and overgrown weeds covering the whole site. Some cardboards, clothing, and fire ashes were found that were the traces left by the homeless. Obviously, the site has great potential to be reutilized into a gathering place for the homeless to live.

From Containers to Nests

Fuzhou is a port city characterized for its developed water transport industry. There is a large demand for container use. A great amount of defective or disused containers are becoming waste every day which causes

6. 琴亭高架桥桥下空间现状。
7. 平面图：设计将废弃集装箱元素重新切割、叠加、组合，并与桥墩或地形紧密结合，生成了一处由集装箱构筑的公共空间。
8. 东西剖面图：埋入地下的集装箱屏蔽了交通噪音污染，流浪者可在此下棋、看书、睡觉。

6. Existing condition of the space under the Qinting Viaduct.
7. Site plan: The design cut, superposed, and organized discarded containers according to the piers or terrain to create a public space.
8. East-west section: Buried containers shielded traffic noise, and created shelters where homeless people could play chess, read, and sleep.

© 胡建明

a huge environmental pressure on the city's ecology. Container building brings an alternative solution to this problem which recycles the waste container, reduces environmental pollution and material consumption, generates less construction waste, and lowers the building costs. In this project, a series of "nests" were designed by organizing containers of different sizes to form a new spatial structure with new appeal and vitality. Moreover, it not only provided quiet and warm shelters for the homeless, but also reduced the pressure on the traffic of the railway station caused by the chaotic gathering of homeless in the underpass.

The design cut, superposed, and arranged containers according to the piers and existing terrain to create diverse public

spaces for the homeless. The containers on the ground were mainly used as paths to connect each nodes. Some containers were arranged as platforms for viewing or rest; some were partly inserted at an oblique angle into the ground to form corridors leading to the underground space; and the others were completely covered underground to form shelters that can block traffic noise where homeless people could play chess, read, and sleep.

Spontaneous Vegetation

The existing waterbody can provide good habitats for aquatic plants when it gets efficient treatment of filtration and purification. The design kept most of the

9. 鸟瞰图：“巢”与高架桥的空间关系
10. 流浪者在集装箱外的草地上下棋。
11. 集装箱内外补充种植了一些能够自发生长的草本植物。
12. 观景集装箱顶部挖有不规则的孔洞，让集装箱内的植物可以接触到阳光雨露。

9. Bird's eye view of the "Nests" and the viaduct
10. Homeless people playing chess outside the container.
11. Some self-growing grass species are planted inside and outside the containers.
12. In order to ensure light and moisture for plants, irregular holes are cut on the top of the viewing containers.

original plants while planting some native self-grow grass species that could thrive inside and outside of the containers. In order to ensure enough light and moisture for the plants, irregular holes were cut on the top of the viewing containers. Climbing plants were planted to cover the outer surface of the containers that can reduce sun heat. Most on-site plants do not need fine maintenance, and can form a vibrant spontaneous community.

Summary

City is a living space shared by all its citizens. Urban designers must consider the issue of how to provide fair and equitable resources and urban services for all the city dwellers, particularly to improve the living standards of the low-income. In addition, urban designers should also know that a true sharing city can only be built based on inclusiveness and care. **LAF**

© 胡建國

10

© 胡建國

11

© 胡建國

12