



# University of HUDDERSFIELD

## University of Huddersfield Repository

Gao, Yun and Gao, Jing

Joint Architectural Projects with Students in Visiting Countries During Field Studies

### Original Citation

Gao, Yun and Gao, Jing (2010) Joint Architectural Projects with Students in Visiting Countries During Field Studies. In: *Being There - reflections of 20 years of International Architecture Course in Huddersfield School of Architecture*. University of Huddersfield, Huddersfield, UK, pp. 25-35. ISBN 9781862180864

This version is available at <http://eprints.hud.ac.uk/9069/>

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: [E.mailbox@hud.ac.uk](mailto:E.mailbox@hud.ac.uk).

<http://eprints.hud.ac.uk/>

---

## JOINT ARCHITECTURAL PROJECTS WITH STUDENTS IN VISITING COUNTRIES DURING FIELD STUDIES

*Dr Yun Gao*  
*Department of Architecture and 3D Design*  
*University of Huddersfield*

*Associate Professor Jing Gao*  
*Department of Architecture*  
*Kunming University of Science and Technology*

---

The increasing globalisation in the world has generated a market for more and more international students studying abroad and increasing number of university graduates working on overseas projects. For these reasons, universities have been developing international oriented curricula to foster skills that meet the requirements of diverse cultures. As part of the process, overseas field trips have become even more important in architecture curriculum. One strategy to enhance students' design and communication skills in diverse geographical and cultural locations is to work with the universities in the visiting countries on joint projects.

Very often students ask how they can learn about the local culture in order to be able to design properly in a different place. The question should be considered in two ways. On the one hand, lectures and reading lists need to be systematically formalised to provide knowledge of the local culture. More details of this aspect have been discussed in the other paper *Architectural Field Study in an Unfamiliar Place – case studies in China trips* of this book.

On the other hand, cultures and societies change in time and place, the design skills not only need to be sensible to the local culture and environment, but also need to engage critical thinking in order to analyse the new context, find the problems, and come up with proper design solutions. As Friedman has argued that “design education can no longer be based on exercises intended to teach students how to reproduce or improve selected objects. Instead, we must equip designers with the intellectual tools of the knowledge economy: analytical, logical and rhetorical tools; problem solving tools; the tools of science.” (Friedman 1997:58). In the joint projects, different from designing in the studio, the design process is a communication and discussion process. The process of learning about the local culture is the process of finding the solutions to problems. Find the right problems locally, create solutions and understand the impacts of the design on the local users are parallel activities. This paper will concentrate on this second aspect to discuss the organisation and arrangement of the joint projects by using two China trips as case studies.

At the University of Huddersfield, two trips of third year architectural students to Kunming, China in 2008 and 2009 were both organised with a number of joint projects to work with the staff and students in Kunming University of Science and Technology. Briefs for joint projects had been considered carefully before and during the trips to benefit both visiting and

••  
*Being There*  
••

local students. British students' fresh ideas based on their past experience and design skills formed a new perspective of thinking about the existing problems in Kunming, whereas Chinese students had the valuable knowledge of local life and also had their special design focuses. Students from both countries had to work together to share their own skills in order to seek out relational aspects both within the context and to the design conceptual frameworks.

◆  
**First meeting**

Preparation is crucial to ensure the joint projects work well. The first meeting between the students from two universities can establish a common ground for conversation and communication to allow successful cooperation on design projects. To prepare for the first meeting, we had contacted the local university long before the trip, and arranged to have a similar design brief of an Art Centre for both British and Chinese students to work on. The site for the UK students was in York, a tourist city with a long history, whereas the Chinese students designed the Art Centre in a town close to Kunming city, where tourism has developed rapidly in the last five years because of the local ethnic culture. By designing an Art Centre with the similar space requirements yet situated in different cultural and social contexts, a comparative study could be done in group discussions. It sets up the opportunities for students to get to know each other by comparing the schemes they designed.

In this project, the requirement for a tourist area was the common ground for the site analysis, but a number of differences also existed between designs in these two places, not only because of the social and cultural diversity, but also because of separate design emphasis. Through presentations and discussions on the project in the meeting, it became clear that British students focussed more on the creative concept of design and model making, while Chinese students had more detailed analysis related to cultural and social aspects of the local communities and their design aimed to solve the practical problems. The group discussions were enriched by their knowing much more about different ways of finding and solving the problems.

*The group discussions were enriched by their knowing much more about different ways of finding and solving the problems*

◆  
**Joint projects**

In the first three days in Kunming, it was arranged for students to visit different districts in the city, newly developed residential compounds and museums for culture and vernacular houses of 26 ethnic groups in Yunnan province. Six lectures by local lecturers, practitioners and planners explained the history of the city, planning development, urban problems, and introduction to the vernacular houses of 26 ethnic people in the province. All these events were attended by both British and Chinese students.

Before the trip, our students had expectations of what Chinese architecture would look like. By doing a 'four step' task, they gained experience of using images and notes to understand more of a place through others' eyes and to express their own expectations for the visit. More details of the four step task has been discussed in the other paper *Architectural Field Study in an Unfamiliar Place – case studies in China trips* of this book. Most popular images about China from students' expectations of the trip included the Great Wall, traditional courtyard houses, curved roof lines and the Olympic Stadium "Bird Nest" in Beijing. Modern communication technologies also allow students to look at online photos of the visiting place on Google Earth before arrival. However, it was not until on site that they experienced the 'cultural shock'. The 2D images they looked at before did not reduce the emotional impacts when they stood on the streets amongst the over-crowded pedestrians and traffic, and looked at the fast going construction works and large number of high rise buildings in the city.

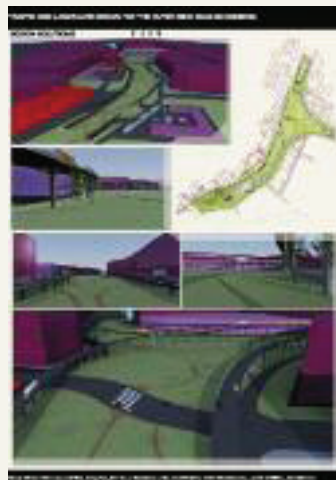
Upon arrival in Kunming, students met face to face with all the problems brought by the fast development of the infrastructure and urban facilities: traffic problems, immigrants, large population, as discussed in the lectures, all emerged vividly into reality. To find and solve problems in the design projects, Chinese students' local knowledge became very valuable as the British students couldn't rely on their past 'known' facts to design for local users. On the other hand, British students' fresh ideas brought a new perspective to the ways of solving existing problems. The design process became the communication process for both visiting and local students to learn the local way of life, find problems and invent creative solutions. Not all the Chinese students were excellent in English, but by helping each other in the group and using drawings and dictionaries to communicate, the intensive interaction in groups was maintained throughout the process.

After looking into the current urban issues in the visits and lectures, a wide range of joint projects were set up to tackle the real urban problems, with each focussing on a special issue. The first two projects investigated how modern facilities could be used in the local context. One of the intensely discussed topics in the China trip is that the development of Kunming city had adopted the historic Old City as its centre. It was believed that this was more economical than building a new centre, consequently many of Kunming's conservation and traffic management problems stem from the choice of this site. Students were engaged in the group discussion of the issue and investigated the advantages and disadvantages of the choice.

In 2002, Kunming started the operation of the advanced independent bus line system on its main roads, the first example of the kind in China. Students made videos of a large amount of cyclists, cars and buses passing through the streets, and looked at how local people adapted to the

••  
*Being There*  
••

contemporary facilities. The newly built fast traffic lane is one of the main arteries of Kunming. However, the carriageway has divided the city into sections and brought noise and air pollution to the residential compounds on either side of the traffic. The outer ring road to the south has more than one level of fly-overs and an underpass for pedestrians. It is not the easiest place to find directions for, and has brought numerous environmental issues. Students were asked to analyse the pedestrian, bicycle, and vehicle routes and look into transportation impact. The local tutors suggested looking under the high fly in the early morning and at night. The pedestrian space was adapted by different user groups. There were people who sought out newspapers in the early morning for delivery later and university students who advertised themselves to be tutors for school kids. Some spaces were used by pedestrians as a resting place. Students therefore found many more uses of a dual carriageway. Some commented that design in a developing country didn't mean one could not use modern technology and materials, but the focus would be on how the local people could make use of these facilities to solve their daily problems. A students' solution was to design the green space for different groups of users by using the ideas from a traditional Chinese garden (Fig.1 and 2).



*Fig.1 West Station roundabout/underpass development in Kunming<sup>1</sup>*

*Fig.2 Dual carriageway project<sup>2</sup>*

<sup>1</sup> Tutoring staff were Nang Ni, Biao Lui, Yun Gao, Liping Li, Hui Zhai, and David Brindley. Students were Helen Woodhead, Muhammad Iqbal, Jordan Cathcart, Luke Hurst, Hangyu Zhu, Qingyun Yu, Zhigang Liu.

<sup>2</sup> Tutoring staff were Lian Wang, Wen Lei, Yun Gao, Liping Li, Hui Zhai, and David Brindley. Students were Helen Washbourne, Unai Motrico-Gomez, Jamie Griffiths, Jake Barrow, Tao Yang, Yu Fan, Bo Li, Xiaozhou Li.

••  
*Joint architectural projects with students in visiting countries during field studies*  
••

Four projects were also set up to investigate the tensions between traditional and modern and urban and rural life in the country. In China, according to Liauw, “400 new cities will be built over the next 20 years with newly urbanised populations of over 240 million” (Liauw 2008). In Kunming, new roads with high rise apartments and offices rapidly replace traditional urban fabric and courtyard houses. Contrast to what happened in Kunming, in small towns, such as the Old Town in Lijiang that students visited in the same trip, the indigenous tradition has been celebrated and reinvented for the tourism industry. The category of old and new or tradition and modernity are clearly marked and amplified. The boundary of the local identity has been pushed, and kept generating new meanings (Gao 2008) (Fig.3 and 4).

Fig.3 Kunming in 2009



••  
*Being There*  
••



*Fig.4 Lijiang in Yunnan province 2008*

One project investigated the impacts of urban changes on traditional buildings. Wenmin Street was a Chinese traditional street full of courtyard houses. During the early 1980s, the flow of people and materials doubled with the economic development in Kunming, large amount of new residential quarters were built in a relatively short period to meet the urgent needs. Many locals who lived in old courtyard houses were willing to move into those new apartments. Because in most cases, the old houses in both the cities and towns were dilapidated, overcrowded and had a lack of basic hygiene and cooking facilities. Without enough funding for preservation or refurbishment to cater for the needs for the contemporary life, the householders saw their houses as obsolescent and backward and did not reflect their expected new ways of life. After the 1990s, however, not until large areas of traditional structures were removed and replaced by high rise buildings, did people start to revalue and appreciate the traditional courtyard houses. In this case, students learnt to study the relationship between architecture and people's daily life rather than simply labelling a building as traditional or modern. They commented that the only response to the stereotype of a Chinese curved roof could not give answers to the identity of a place (Fig.5).

Fig.5 Wenmin street project<sup>3</sup>



Rapid urban development has erased much traditional architecture and urban fabric. Due to the lack of effective policy of conservation and protection, traditional urban fabric is rapidly replaced with wide roads that lie on both sides with high rise apartments and modern shopping malls. Under the current commercial pressure, to find solutions to protect and renew the district is an urgent task.

Another project Wen Hua Lane was a very narrow lane close to the city centre park, Green Lake Park and three universities. With various small shops, cafes and restaurants supplying cuisine from different countries, it was popular with both Chinese students and foreign students studying in the adjacent universities. Like traditional Chinese streets, the shops had their goods laid outside to attract customers, which caused traffic and pedestrian jams. The task of the project was to analyse the existing problems in order to come up with a concept design to improve the existing planning methods. Students were presented with problems that confronted local residents and small businesses. Interviews with the local shop owners, students and local residency were conducted to reach decisions to smooth the traffic flow, emphasise the entrance of the road, and control the shop display on the pedestrian roads (Fig.6). In this project, Chinese students were also interested in the difference between Western and Chinese attitudes and understandings towards preservation and protection methods. The project was used as the case study to explore the cultural difference and to develop common ideas.

---

<sup>3</sup> Tutoring staff were Lei Gao, Lizhou Tan, Yun Gao, Liping Li, Hui Zhai, and David Brindley. Students were Eugenia Ziaka, Smita Patel, Raheel Yousaf, Belmarío 'Kiwa' Santos, Wen Cheng, Xinyun Zhang, Haozhi Liu.



••  
Being There  
••



Fig.6 Wen Hua Lane Project<sup>4</sup>

The third group of the projects was to do with the comparison of the life in the UK and China. One was to compare the residential models. It required students to study the details of daily life of a residential compound in Kunming and discover the difference between residential design in these two countries. In the site survey, students were particularly impressed by the intensely used courtyard in the compound, where the residents exercise, dance and sing every morning and evening. They then worked with the administration group in the compound to work out a better layout for the public space (Fig.7).



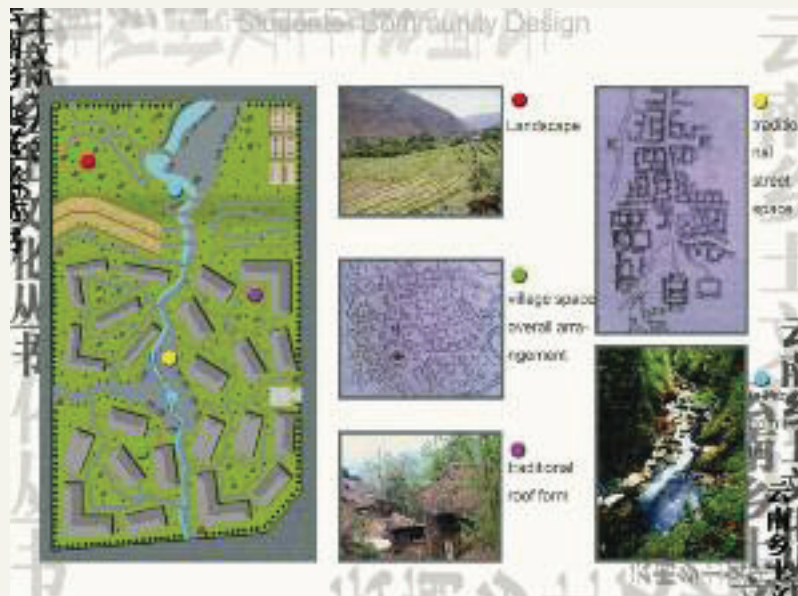
Fig.7 Residency comparison project<sup>5</sup>

<sup>4</sup> Tutoring staff were Jie Ma, Qinyu Ma, Yun Gao, Liping Li, Hui Zhai, and David Brindley. Students were Sarah Vickers, Roger Ashman, Benjamin Wilkinson, Zhengfei Han, Chuanyun Jian, Beiye Chen.

<sup>5</sup> Tutors were Can Wang, Wei Guo, Yun Gao, Liping Li, Hui Zhai, and David Brindley. Students were Siu Kai Pang, Thomas Rawnsley, Rachael Bayliss, Zhaojian Chen, Wen Jiang, Yanjun Meng.

Another project was about the increasing student numbers in the university campus that require additional accommodation. The changed lifestyle in Kunming meant that the historic pattern of six students sharing one big room was no longer an appropriate model. The group needed to work out a concept design for a low storey, but high density student accommodation. The project provided a good opportunity for students to develop schemes based on their own experience (Fig.8).

Fig.8 Student accommodation project<sup>6</sup>



On the campus, some facilities were also proposed to be transformed into 'Start-up' enterprise facilities and research incubators for the graduating students. The enterprises were to encourage a synergy between academic research and the commercial sector. Students were asked to consider the proposals to refurbish the old factory within the campus. The new facilities needed to encourage engagement from outside the campus. The design also needed to consider the buildings' history and environmental issues. The real problems in the life stimulated students' aspirations to find solutions, their design examined the issues underlying the appearance (Fig.9).

<sup>6</sup> Tutoring staff were Zhaoning Liu, Yin Lu, Yun Gao, Liping Li, Hui Zhai, and David Brindley. Students were Elini Kantidaki, Faraz Ahmed, Kieran Conway, Roger Wedderkop, Xiong Xiong, Xi Yang, Tianzhi Li.

••  
*Being There*  
••



Fig.9 Campus regeneration project<sup>7</sup>

◆  
**Assessment**

In the assessment of the joint projects, students had to analyse and compare the differences of design in China and design in the United Kingdom. It is in the design process that they can aggregate resolution and bring together all the knowledge and skills they have learnt and solve the problems as a unified entity. In the conventional assessment criteria there are generally four aspects being assessed: concept development, technical resolution, design processes, and learning skills. These four aspects had been examined from a different perspective with the consideration to the local situations. In the joint projects, solutions to the real problems in China demonstrated students abilities to focus on understanding and making sense of the relational aspects with the different knowledge they learnt in design, history and in the communication process with Chinese students. As Wilson has argued that “‘imagination’ is to do with viewing the world from different perspectives. Acting imaginatively is to do with generating alternative solutions to a given problem or set of problems.” (Wilson 2002).

Biggs has advised that lecturers need to ensure that their learning objectives, course activities and assessment tasks are clearly aligned (Biggs, 1999). Due to the limited time for the field study in another country, we made

---

<sup>7</sup> Tutoring staff were He Wang, Qin Yang, Yun Gao, Liping Li, Hui Zhai, and David Brindley. Students were Sarah Webster, Christina Forsyth, Khuram Mukhtar, Adrian Cope, Li Cao, Qiyang Li, He Zhang.

it clear that it was sufficient for British students to have a general understanding of the local situations. The detailed and profound knowledge of the local life would be helped by lectures and Chinese students working in the same group. The aim of the project is for students to use what they had learnt in China in their design for other projects, that is, to be able to use the knowledge they learnt about a place to influence their design processes. Rather than focus on the feel and look of a building, the emphasis should be solving the local problems with respect to local culture and environment.

#### **Moral Encouragement and Support**

In field trips, there is an element of culture shock; living in a different country and working closely with local students for a few weeks. Students can become quite emotional because they are exposed to an unfamiliar environment. The majority of students' fears for the trip are getting lost, and being unable to communicate with local people in English. It is important to give students moral encouragement and support before and during the trip. Much staff time is also needed on the arrangement of accommodation, food and daily travelling to and from the sites. There is also a need to closely monitor the work processes with all the groups on site. All of this can be helped greatly by staff and students of the local university in the visiting countries.

#### **Reference**

Biggs, J. 1999. *Teaching for Quality Learning in Higher Education*. SRHE: Buckingham.

Friedman, K. 1997. "Design Science and Design Education", in Gregory, P. (ed) *The Challenge of Complexity*, University of Art and Design Helsinki UIAH, Helsinki (Finland).

Gao, Y. 2008. 'A Changing Process of Traditional Built Environment in Yunnan, China', in *Traditional Dwellings and Settlements Working Paper Series, Vol. 210*, IASTE, University of California, Berkeley.

Liau, L., 2008. ed. *AD-New Urban China*. John Wiley & Sons Ltd.

Wilson J. T. 2002. Understanding Learning Styles: implications for design education in the university. In Davies A. (ed), *Enhancing Curricula: exploring effective curriculum practices in art, design and communication in Higher Education*. Centre for Learning and Teaching in Art & Design (cltad) 2002: 1st International Conference: London; pp.393-417.