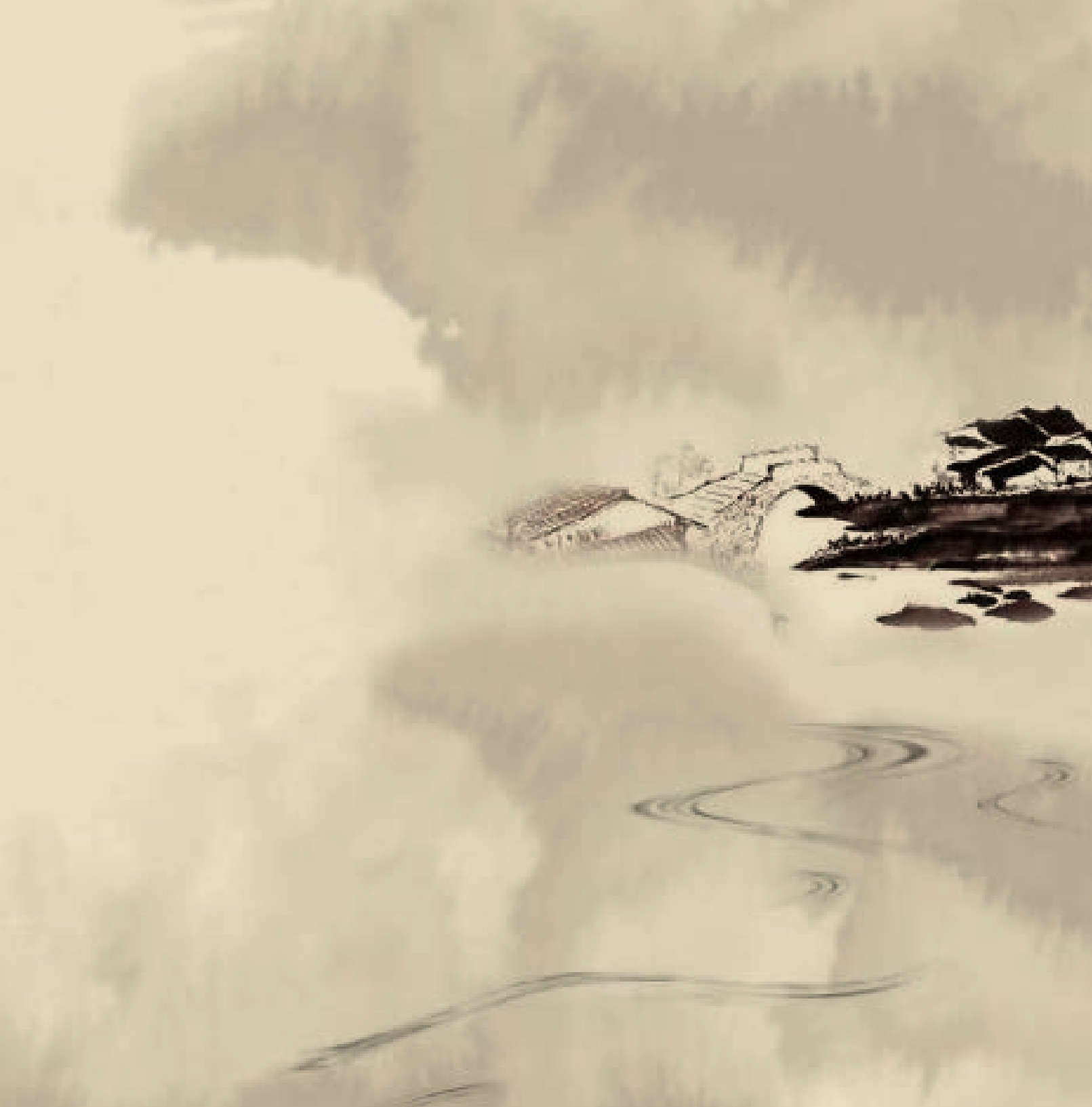


朝陽橋

Chaoyang Bridge





好雨知時節
當春乃發生
隨風潛入夜
潤物細無聲

杜甫



愛， 如同春雨，灑灑落落，綿綿長長，潤物細無聲。

Love, is just like the rain in the spring, pouring, splashing, and moistening the ground unconditionally.

序。

2013年6月，廣西融水縣同練鄉英洞村新修建的朝陽橋正式落成，開展了明德工程新的一頁。自楊澍人博士於2004年發起明德工程，由土木工程系學生負責助建愛心工程以來，已先後在融水援建了兩個項目——一是下里小學的教學樓<<明德樓>>，二是融水職中的女生宿舍<<格物樓>>。英洞村朝陽橋是明德工程第一條助建的橋樑。從此村民不需再懼怕大雨洪水，都能安心的走過朝陽橋到河的另一邊上學和工作。

回顧過去，每一個項目都可說是簡單亦可說是個不簡單的工程。朝陽橋項目亦不例外。簡單的是橋是建在平地而總跨度只有廿六米；不簡單的是地方偏遠加上崎嶇不平的道路，令材料運送困難且工人難找。簡單的是大家就像社會上其他參與愛心工程的人士一樣，默默地幹著扶助弱勢社群的事情；不簡單的是項目涉及多個權益關係者，如何平衡各方的利害關係實不容易。而事實上，朝陽橋項目得以展開，亦是柳暗花明又一村！

原來上海駿地建築公司的愛心基金負責人之一蔣慧詰老師，最初是帶來捐款想參與明德工程與另一捐款人在融水紅水鄉的小學項目。唯因種種原因最後擱置這合作。幸得融水愛苗之家主任蒙可陸先生繼續穿針引線，得知英洞村的唯一過河用的橋，因連年天雨已破損得不能再承擔連接河兩岸的橋樑作用，急需修復。蔣老師與當時明德工程的項目經理郭大江博士到英洞村瞭解後，認為的確有需要修復朝陽橋且所需費用符合捐助金額，朝陽橋項目便正式上馬！

雖然經歷種種困難，朝陽橋項目由磋商到完工也只是用了半年多便可供村民使用，橋樑更安全地通過了第一次的“發大水”的考驗。項目的成功，實有賴各方有愛心人士專業地、無私地的安排和付出，與及村民的通力合作。當中明德工程的項目經理郭大江博士可謂功不可沒。英洞村朝陽橋是郭博士榮休前最後完成的一個項目。而這十年來他為明德工程盡心盡力的帶領及付出，實在難能可貴。

起初朝陽橋項目把愛心人士與有需要的村民連起。現在朝陽橋不僅僅是一道連起了河的兩岸的橋樑；它也是一道讓住在偏遠的英洞村的村民與香港的愛心人士和大學生接連起來的橋樑！看來，明德工程也像是一道橋。希望有心人繼續參與推動明德工程，不僅讓這條“橋”持續的接通被高山、河流隔開的地方；使它能連接起愛心人士與苗山鄉民，更連接了理論與實踐、理想與現實。

黃仕進教授
香港大學土木工程系主任
2015.01.08

PREFACE.

In June 2013, Chaoyang Bridge of Yingdong Village, Tonglian Town, Rongshui County, Guangxi, was constructed. This marked a new page in the history of Project Mingde. Since Project Mingde was founded in 2003 by Prof. Nicolas Shu Yan YEUNG, students from the Department of Civil Engineering, The University of Hong Kong, have been engaged in several construction projects in Rongshui. There have been two so far. The first one is Mingde Building which is the teaching building of Xiali Primary School. The second one is Gewu Building. It is the female dormitory for Rongshui Vocational Training Centre. Chaoyang Bridge is the first bridge that members of Project Mingde have helped with. From now on, villagers need not fear the flooding and can travel to the other side of the river safely.

In retrospect, every single project was not easy, nor was the construction project of Chaoyang Bridge. Although it was built on flat land and had a total span of 26 meters only, it had to be built in the rural area far away from the cities. This made logistics of construction materials difficult. Everyone was committed to helping the poor. It seemed simple; however, it involved interests from various stakeholders, which was not easy to manage. The project of Chaoyang Bridge has come a long way and, its success is a great blessing to all indeed!

Initially, one of the persons-in-charge of JWDA Charity Foundation, Ms. Huijie JIANG, and another donor would like to fund the construction of a primary school in Rongshui Hongshui Village. This did not work as expected unfortunately. The person-in-charge of Rongshui Love Seedling Community Service Centre, Mr. Kelu MENG, realized the need of constructing a new bridge for villagers in Yingdong Village. Ms. Jiang and the project manager of Project Mingde, Dr. Dajiang GUO, saw the urgent need of repairing the bridge after a site inspection trip to Yingdong Village. Therefore, the Chaoyang Bridge project was kicked off.

Though the team met a lot of problems against expectation through the way, the bridge was finished in about half a year. The success of this project was not only due to the professional arrangement and the selfless contributions from all the parties involved, the concerted efforts of the villagers were also crucial. Last but not least, special thanks must go to Dr. Guo, the Project Manager, for his devoted contribution. The Chaoyang Bridge project was the last project of Project Mingde before Dr. Guo retired. His dedication to Project Mingde in the past ten years was commendable and exemplary.

At the beginning, it was just a project linking donors and people in need. Now, the bridge is not only a passage linking the banks of the river, but also connecting villagers in Yingdong Village with those caring people and university students from Hong Kong. Your unflinching support for it is greatly appreciated. Project Mingde seems like a bridge too. Though mountains divide and rivers are wide, it can link up those who are eager to share with those Miao people who need our care. The bridge also provides a chance to put theories into action and makes dreams come true!

Professor S.C. WONG
Head of Department of Civil Engineering, HKU
2015.01.08

序。

英洞村朝陽橋是JWDA駿地愛心基金會的第一個實踐類的項目。

所謂實踐類，一是指親力親為的公益行動，二是指設計師們把自己的愛心捐款分毫不差化為實際的建設成果。

JWDA駿地愛心基金會建立已近十個年頭，我們深切地體會到做慈善、做公益，最容易的就是捐款，而要做到親力親為，不僅要付出時間和精力，更重要的是需要一份真正的愛心付出！英洞村朝陽橋的落成凝聚了香港大學明德工程師生和JWDA駿地設計員工的大量心血。尤其要感謝楊澍人博士，郭大江博士，吳玉儉先生，蒙可陸先生和蔣慧詰女士，以及多次奔赴實地現場的明德工程師生們和JWDA駿地的設計師們！

我相信：這次親力親為的公益活動，不僅為英洞村的學生和村民帶來了實實在在的幫助，解決了過河交通不再受洪水衝擊之苦，更有意義的是讓所有參與者經歷了一次終生難忘的人生歷程！

作為設計師，在日常工作中一直承擔著乙方的角色，而這一次，設計師們不僅是乙方，也是甲方，同時承擔了一部分施工方的角色。多重的角色拓寬了思維視角，鍛煉了協調能力，也更瞭解社會的現狀實況以及我們力所能及的義務和責任！

如何因地制宜、完成高性價比、實用美觀、對社會負責任的設計，一直是設計師們的實踐準則。在這次建設過程中，我相信大家對此獲得了難能可貴的體驗和經歷。

朝陽橋讓我們與同練鄉，與英洞村結下了不解之緣，也讓我們與公益、慈善結下不解之緣，願我們攜起雙手，繼續共同努力！

上海駿地建築設計諮詢有限公司 總經理
胡勁松
2015.01.08

PREFACE.

Chaoyang Bridge of Yingdong Village is the first project in which JWDA Charity Foundation was involved.

A sustainable responsible company should always put its objectives and values into action. Firstly, it means actively joining charity programs. Secondly, it also refers to delivering love by funding construction projects.

JWDA Charity Foundation has been set up for nearly 10 years. We know that the easiest way to do charity work is by donation; yet, devoting oneself into the charity work is not easy at all. It requires time and effort and last but not least, a true heart to serve. The construction project of Chaoyang Bridge is a product of great efforts from teachers and students of the Department of Civil Engineering, The University of Hong Kong and also the designers from JWDA. I would like to give special thanks to Professor Nicolas Shu Yan YEUNG, Dr. Dajiang GUO, Mr. Yujian WU, Mr. Kelu MENG and Ms. Huijie JIANG. Also I would like to thank all the participants aforementioned for their hard work and efforts.

I believe that this charitable event not only provides a safe means for the students and villagers in Yingdong Village to cross the roaring creek, but it is also an unforgettable experience for all the participants in their lifetime.

As designers, we are always involved in the preliminary work of a construction project. This time, we are also responsible for the construction work. This multirole participation has allowed us to have wider perspectives, trained us up in our cooperative ability and enlightened us to the current situation in the society, our obligations and duties.

How do we tailor-make a design considering the local constraints, cost-effectiveness, aesthetics and sustainability? These are the questions that designers always ask themselves. Through this project, I believe that everyone has acquired precious experience.

The project of Chaoyang Bridge gave us a chance to make friends with the people from Yingdong Village and to do charity work. Let us join hand in hand and work together to achieve a bright future!

Chief Manager, Shanghai JWDA Design Co., Ltd.
Jason HU
2015.01.08

目錄。

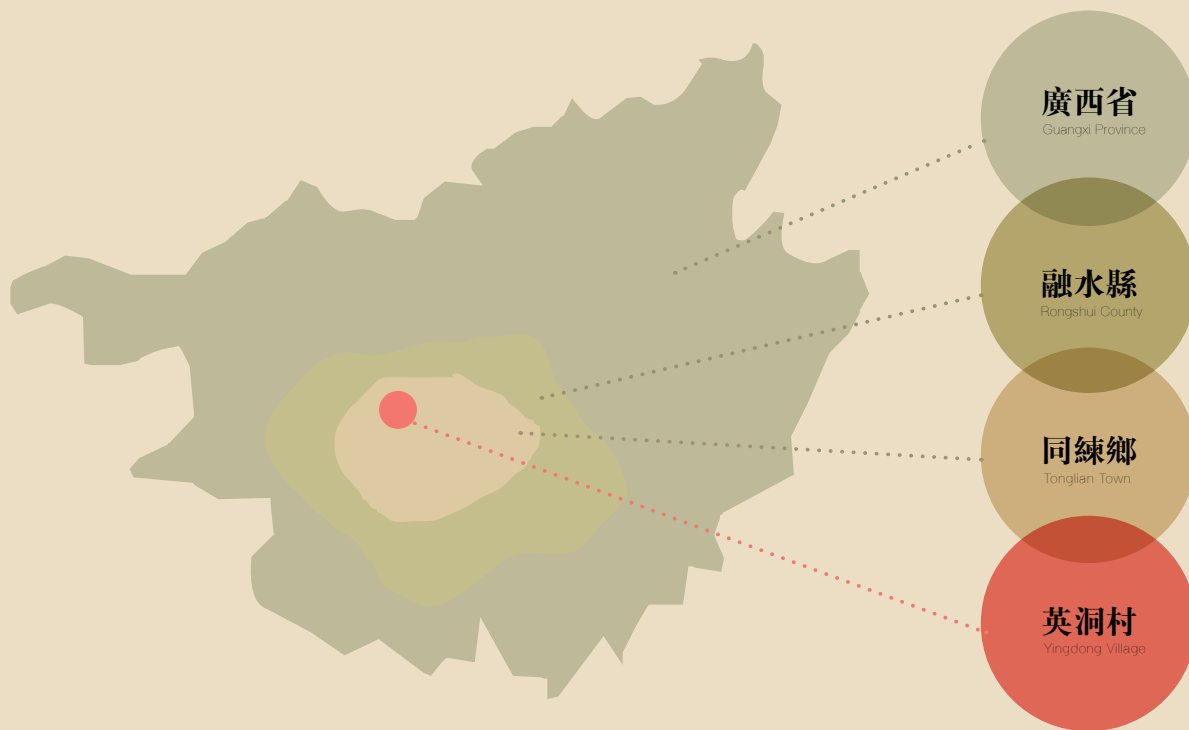
愛	是風，	吹遍每個角落	· 起因	9
愛	是雲，	點綴整片天空	· 勘查	25
愛	是雨，	滋潤大地萬物	· 設計	33
愛	是蔭，	遮擋炙熱夏陽	· 施工	43
愛	是橋，	連起大山內外	· 驗收	51

CONTENT.

Love is breeze, it reaches every corner of the land	- Cause	9
Love is cloud, it paints a picture in the sky	- Site Investigation	25
Love is rain, it nurtures living things on earth	- Design	33
Love is tree, it provides shade from the sun	- Construction	43
Love is bridge, it links the heart of everyone in the mountains	- Completion	51

愛 是風，吹遍每個角落 · 起因

Love is breeze, it reaches every corner of the land - Cause

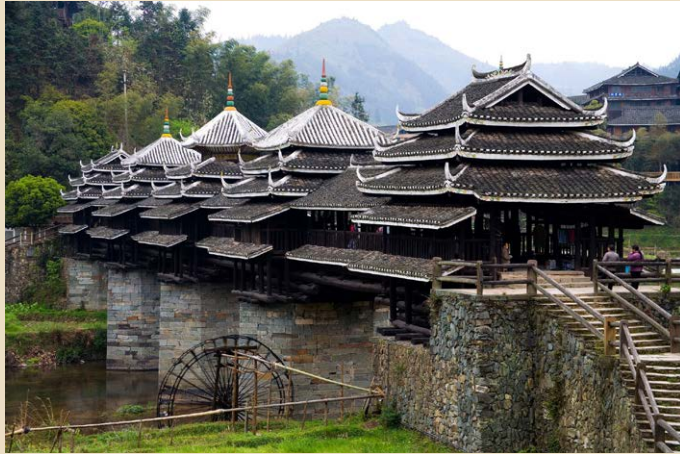




廣西省——壯族自治區(中國五個少數民族自治區之一)是少數民族聚集最多，不同民族集居最多的地區之一。南臨北部灣與越南接壤。

Guangxi Province ---

Guangxi Zhuang Autonomous Region (One of the 5 autonomous regions for ethnic minority groups in China) is a place with the highest concentration of ethnic minority groups and races. It is located north of Beibu Gulf, bordering Vietnam.



融水縣一

春秋戰國為百越之地，隋稱融州，唐改稱融水，現為融水苗族自治縣，境內居住著苗、瑤、侗、壯、漢等民族，這裡山青水秀，民族風情濃郁，卻因地處偏遠，交通不便，周邊的鄉、村、屯都較貧困。

Rongshui County ---

During the ancient period of Warlords in the Chinese history, it was in the territory of Baiyue. Later in Sui Dynasty, it was known as Rongzhou. In Tang Dynasty, it was called Rongshui. Now, this place is known as Rongshui Miao Autonomous County. Ethnic minority groups such as Miao, Yao, Dong, Zhuang, Han, and etc., live in the area. The scenery is beautiful and people have their own unique cultures. It is, however, located far from any city and is rather immobile. The area is relatively poor.







同練鄉——同練瑤族鄉於1987年11月建鄉，下轄同練、朋平、和平、如勞、英洞、大平六個行政村，108個自然屯，人口約11008人，其中瑤族人口佔48.18%。

Tonglian Town ---

Tonglian Yaozu Town was established in November 1987. It was formed by grouping 6 main villages namely Tonglian, Pengping, Heping, Rulao, Yingdong and Daping with 108 other small villages. Out of a population of around 11,008, majority are people from Miao, accounting for 48.18%.

英洞村— 地處偏僻，資源短缺，是個貧困的舊式農村，村裡建有“英洞小學”至今已超過30多年的歷史，全校共有4個班級，6位教師負責80多名學生。

Yingdong Village ---

Located far away from any modern city and with shortage of resources, it is an old village with most people living in poverty. Yingdong Primary School was built over 30 years ago. There are 4 classes with 6 teachers looking after over 80 students.







朝陽橋一

學生們從村裡步行到學校，沿途要經過一條20多米寬的河道-朝陽河，十多年前架起了連接學生居住的村落與學校的唯一跨河通道---朝陽橋，這是學生上學的唯一通道。但經過數年的風吹雨打，朝陽橋已年久失修搖搖欲墜，橋面木板腐爛不堪，過橋時，一不小心就會掉下河去，老朝陽橋已無法承擔學生安全過河的重任。

為了保證學生安全上學,村民在朝陽河裡以石塊鋪了一條臨時的小路過河，以解燃眉之急。不過在雨季的時候，河水高漲，水沒及腰，在石塊上行走隨時有被急流沖走的危險，曾經不止一次在汛期，小朋友過河時被河水沖走，為了保證孩子們上學的安全，校方在雨季漲潮時，不得不放學數天。

鑒於上述情況，儘快修復橋樑，以保證學生安全上學和村民的安全出行已是迫在眉睫的當務之急！但村、鄉政府苦於資金短缺，無力修橋。

Chaoyang Bridge ---

To go to school, village students have to cross the 20-meter wide Chaoyang Creek on their way. Chaoyang Bridge was constructed more than 10 years ago for these students to cross the creek and it had been the only link for them. The bridge was seriously deteriorated under the challenge of severe weather. It could no longer serve as a safe pathway for students.

A temporary solution from the local people was to “build” a “road” by placing stepping stones across the creek. However, it became very dangerous after every heavy rainfall when water in the creek rose. Students could easily be dragged away by the flood water. To ensure safety of students, school had no choice but to close on those days with pouring rain.

It is therefore an urgent mission to reconstruct the bridge to ensure safety of students as well as other villagers when crossing the creek. Due to lack of funding support from local government, villagers have great difficulty in moving forward with the reconstruction work.





新朝陽人行橋一

在融水愛苗之家主任蒙可陸的牽線協調下，JWDA駿地設計有意出資修建愛心之橋，香港大學的土木工程系有意續寫明德工程，建築與結構專業互補，愛心的奉獻相即，廣西聖和建築工程有限公司有意愛心承包，三方一拍即合，迅速開展勘查、設計、修建新橋的工程。

在與村、鄉的互動中得悉政府十年計劃內將建公路橋跨越朝陽河，因此大家討論決定修建一座鋼結構的人行橋，從當下開始為村民和孩子提供安全、便捷的出行通道，架起一座溝通大山內外的愛心之橋。

The New Chaoyang Bridge ---

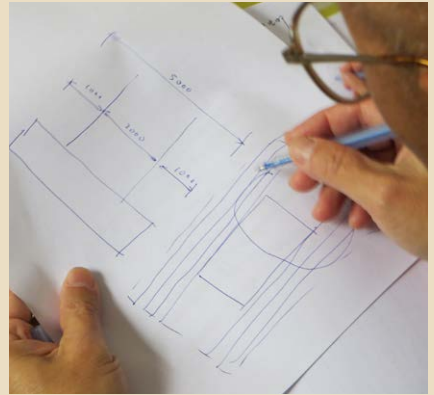
With the coordination of Mr. Kelu MENG, the Manager of Love Seedling Community Service Centre, JWDA agreed to fund the reconstruction of Chaoyang Bridge. The Department of Civil Engineering of The University of Hong Kong was interested to be involved under the flag of Project Mingde. Guangxi Shenghe Construction Company Ltd. also joined this meaningful move. Through close collaboration, the three parties started to proceed with surveying the site, designing the bridge and the piers as well as the construction of a new bridge right away.

It was given to understand that a road bridge had been proposed to be constructed across Chaoyang Creek in the government's 10-year plan. After consultation with villagers, it was decided to build a steel footbridge to provide a safe crossing for the villagers and the children.



**新朝陽人行橋
討論方案現場**

The project team is discussing the design options of the new Chaoyang Bridge.



愛 是雲，點綴整片天空 · 勘查

Love is cloud, it paints a picture in the sky - Site Investigation

2012年8月，下著濛濛細雨，明德工程的師生與駿地公司一行踏著泥濘的小道，冒雨入村進行現場勘查。雨淅淅瀝瀝下個不停，師生手中的卷尺量個不停，爬高摸低，稍不留神就滑入水中。頭髮淋濕了、眼鏡模糊了、褲腿打濕了、全然不管不顧，大家專注於現場第一手資料的收集。

On a drizzling day in August, 2012, students from Project Mingde and members from JWDA stepped on the muddy road and walked in the rain to arrive at the site for surveying work. The rain did not stop and neither did the students. They continued working no matter how heavy it rained. They moved around efficiently with measuring tapes and instruments in their hands. They climbed high and low, they slipped and they were soaked with water but they did not care. They all concentrated their efforts in collecting the most accurate first-hand data necessary for their design.







原有橋墩三座，中間的橋墩直徑2米由參差不齊的大小石塊和著水泥堆砌而成，雜草叢生，鋼筋外露，銹蝕嚴重，隨著湍急水流的衝擊，橋墩隨時有坍塌的可能。河兩邊的橋墩較之中間稍好，因此決定：加固兩側橋墩，重造中間橋墩。

There were originally 3 piers for the bridge. The one in the center was about 2 meters in diameter built with stones, pebbles of various sizes, mud, sand and clay. It was found that there was a lot of weed growing on it. Some steel bars were exposed showing signs of serious corrosion. With the force of the rapid flowing creek water, this center pier is susceptible to collapse anytime. Conditions of the end piers were generally better. The decision was therefore to strengthen the end piers and to rebuild the center one.





橋墩方案已定，橋面採用什麼結構？

木結構？鋼筋混凝土結構？鋼結構？有待設計階段繼續討論。

After decision on the piers, the form of the bridge deck and whether this is to be built with timber, concrete or steel were studied and considered.



愛 是雨，滋潤大地萬物 · 設計

Love is rain, it nurtures living things on earth - Design

結構專業由香港大學明德工程的師生承擔

Structural design – by Project Team of Project Mingde, The University of Hong Kong

• 橋墩

根據橋面的荷載、山區的風力、河水急流的衝擊力綜合計算，中間的橋墩將築壩截流，深挖至河底，用鋼筋混凝土做基礎新造，南北兩岸的橋墩則清除淤泥，用水泥鋼筋似籠子包裹舊墩，形成保護，新老結合支撐橋面。

• Bridge Piers

The center pier was designed to sustain the pedestrian loading on bridge deck, the wind forces as well as water pressure from the rapid current of the creek. During construction of the center pier, flow of water had to be temporarily redirected. New foundation of the pier was founded deep into the bed of the creek and built with reinforced concrete. After clearing away the silt and other soft material from the base, end piers were strengthened by wrapping around it with an external coat of reinforced concrete for support of the new bridge deck.



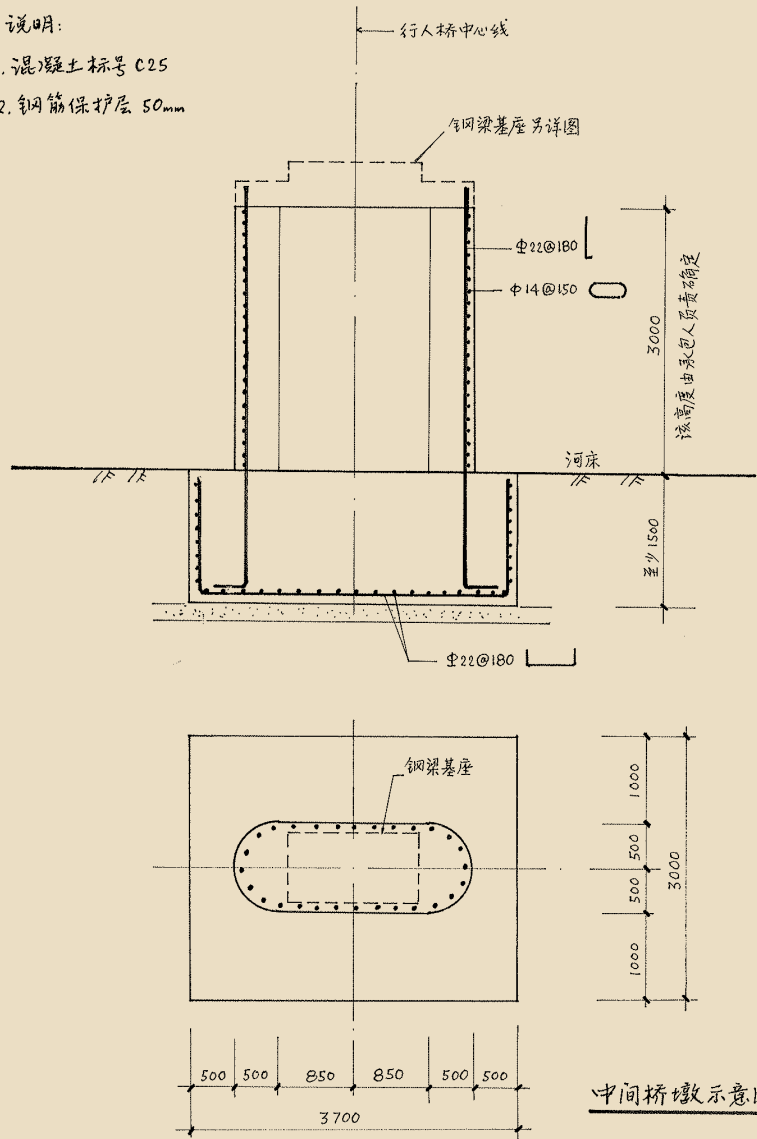
2012年JWDA員工與明德工程共同勘察現場 Members from JWDA and Project Mingde carried out a site investigation together in 2012.

• 中間橋墩示意圖

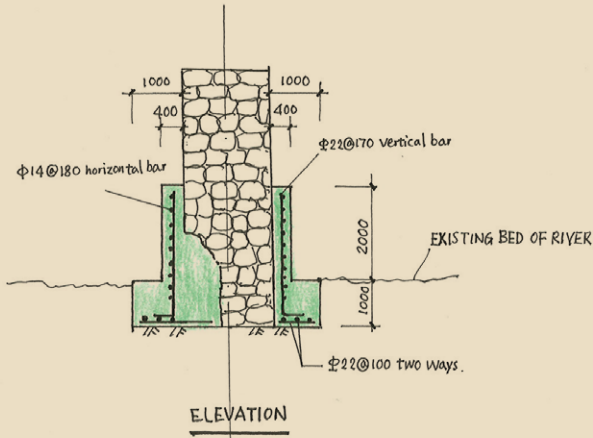
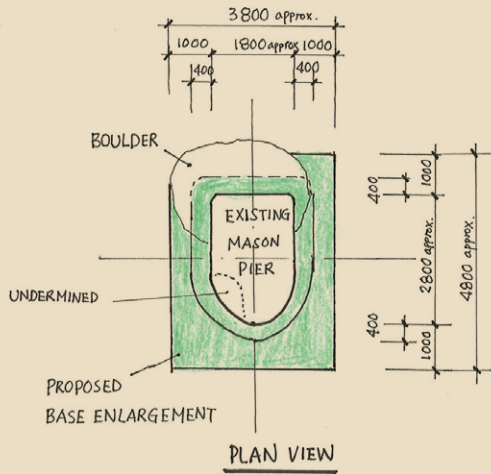
• Schematic Diagram of Intermediate Piers

说明:

1. 混凝土标号 C25
2. 钢筋保护层 50mm



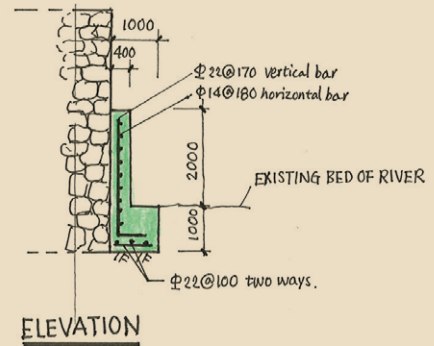
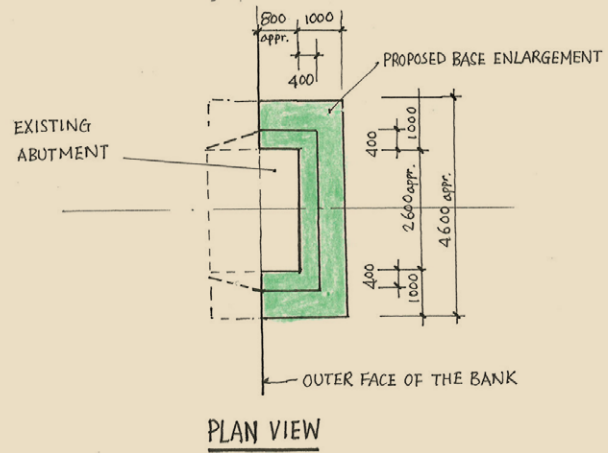
中间桥墩示意图



STRENGTHENING PROPOSAL FOR THE CENTRAL PIER

proposed by the villagers

recorded by DJ Guo at the meeting of 29th Oct. 2012.



STRENGTHENING PROPOSAL FOR THE ABUTMENTS

proposed by the villagers

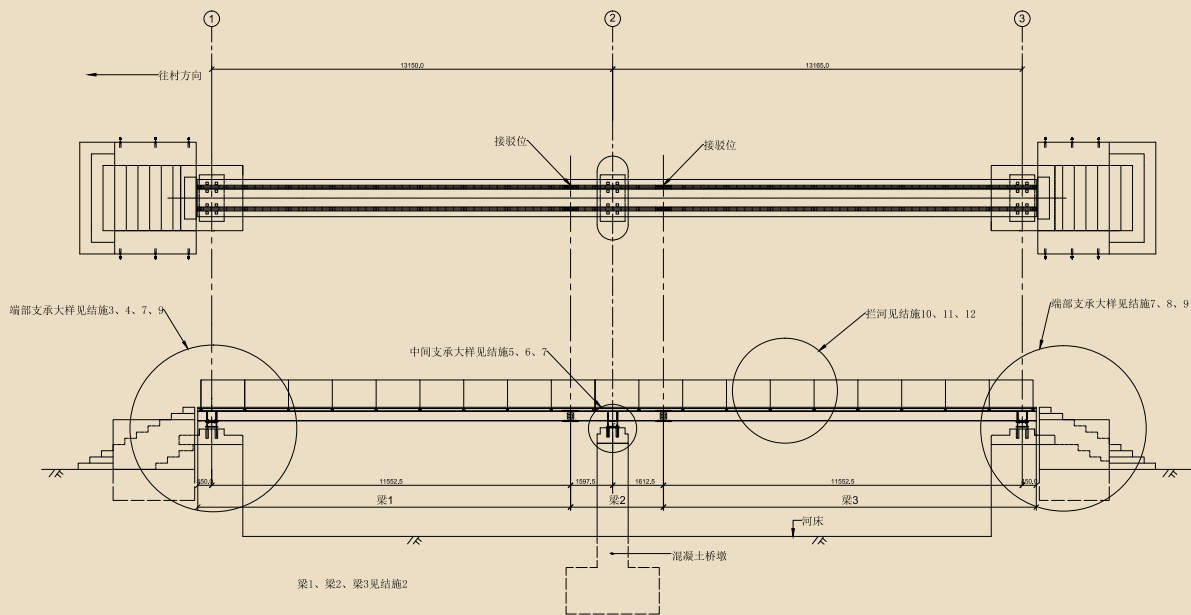
recorded by D.J. Guo at the meeting of 29th Oct. 2012

• 橋面

採用鋼結構，簡單而美觀，但最大的問題是連接處理。
鋼結構的連接分焊接與螺栓，考慮到施工現場的條件限制決定採用螺栓連接。

• The Deck

The deck was built with steel members featuring a simple and streamline appearance. However, connection of steel members became a construction problem. Due to the unavailability of skilled welders on site, bolt connections were eventually adopted.



梁1、梁2、梁3见结施2

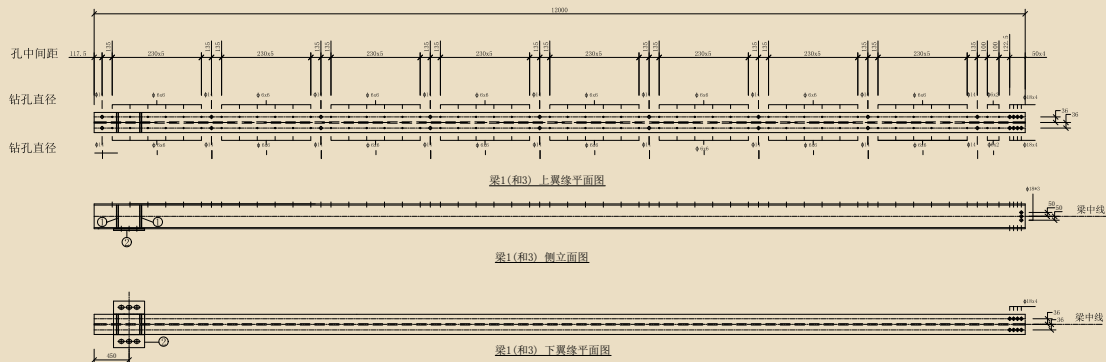
施工说明:

- 1、基座混凝土强度等级C25;
- 2、基座钢筋 $\Phi 14@150$;
- 3、钢筋保护层厚度35mm;
- 4、钢板Q235;
- 5、拼接采用角钢2.5mm围焊;
- 6、钢梁: 32a工字钢;
- 7、拦河: 采用60x60木坊制作(按建筑师图做);
- 8、桥面板: 采用实木板40mm厚1200mm长;

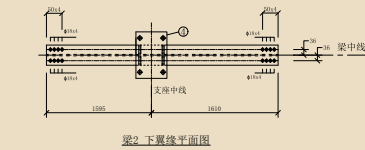
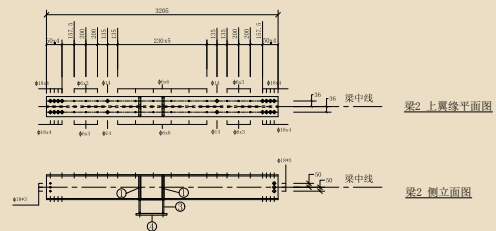
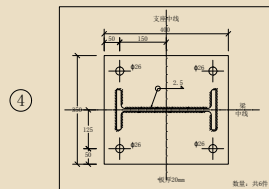
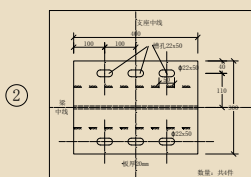
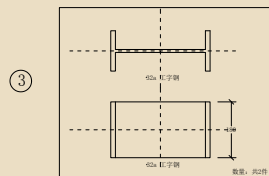
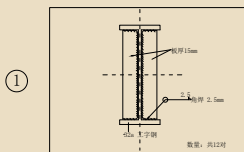
- 9、钢梁接驳、拦河与钢梁联结均采用螺栓联结, 不用现场烧焊;
- 10、联结螺栓均用8.8级螺栓;
- 11、所有钢部件的切割、钻孔及烧焊均应在厂房进行, 并在运至工地之前上好防锈底漆;
- 12、所有钢部件在运送工地前需有足够的保护封套, 确保运输途中不受磨损碰撞;
- 13、钢部件的防锈处理:
 - a. 清除锈斑、清除焊渣、清洁表面;

- b. 含锌防锈底漆一道, 厚100 μm ;
- c. 面漆两道, 各厚50 μm , 面漆颜色按建筑师要求;
- 14、钢梁支座的锚固螺栓的预留孔, 及支座底板与混凝土基座的空隙, 用低收缩性的水泥质灌浆材料填充(例如“五星泥”)。

香港大学土木工程系	
大学生助理小组	
广西融水县同德乡英洞村行人桥	
图名: 总图	
图号: 结施1	日期:
设计: 1001	日期: 2019/12/19
审核: 1001	日期: 11/20



梁1大样图 (和梁3相同)
数量: 共4件



香港大学土木工程系 大学生助建小组	
广西融水县同练乡英洞村人行桥	
梁1梁2梁3 大样图	
图名	图别
图号	比例
日期	设计、审核
日期	制图

鋼結構的計算對在校的學生是個嚴峻的考驗，他們尚未接觸複雜的理論計算，更缺乏實踐經驗，好在指導老師郭大江博士是位學風嚴謹、經驗豐富的長者，在他的悉心指導下，根據有關設計規範，同學們利用課餘時間一個月內確認了設計方案，又花了一個月完成了圖紙。

這跌跌撞撞的過程簡單而漫長，老師手把手帶著學生打開一扇又一扇理論之門，大至橋墩、鋼樑的受力分析，小至每一枚螺栓的材料使用，都有條不紊地精心計算。而大苗山深處孩子們期盼的眼睛追逐著每個公式、每張圖紙，激勵著學生學會了認真與責任。

Structural design of the steel bridge was a challenge to student members of the Project Team. As most of them were in their junior years, their knowledge and experience were insufficient in handling this task. It was fortunate to have Dr. Dajiang GUO as the teacher-in-charge of this project. Through his extraordinary patience and effort, students were able to develop and complete the design in 2 months.

The process was in fact straight-forward yet time-consuming. Various teachers from the University gave advices on topics ranging from stress analysis of bridge structures, design of bridge piers and steel beams involving bolt connections as well as relevant construction methodology. Everyone was working hard. However, the faces, the laughter, the hopes and the expectations from children of Miao were in the heart of everyone in the Project Team. Through involvement in the project, students realized the importance of the truthfulness of their work as well as the responsibilities on their shoulders.

建築專業由JWDA駿地設計承擔

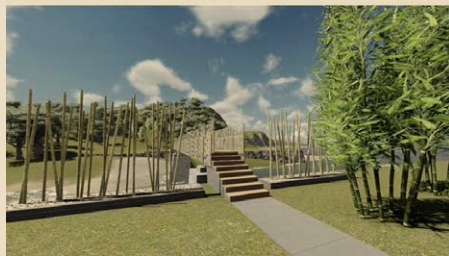
· 欄杆

結構的大局已定，橋身的護欄設計提上日程。

駿地公司平日的項目大至城市規劃，小至數萬平米的公寓、別墅，面對著26米長朝陽橋的欄杆設計卻不敢掉以輕心，因為它承載著英洞村村民與孩子的盼望，承載著扶貧助學的宗旨，承載著所有參與人的愛心…效果…。

幾經反覆，決定採用當地的松木與竹子為基材，38根松木框架用螺栓準確地固定在鋼樑上，1800條竹片簡潔而整齊地排列在松木框架之上，雙層竹片護欄上下錯位，不僅增加立面層次，隱藏了鋼樑結構，竹片間的縫隙滲透出山山水水的美麗風景，苗寨的自然元素成為橋體的立面組成。

放眼望去，英洞的山風，苗家的情懷，眾人的愛心盡在朝陽中！



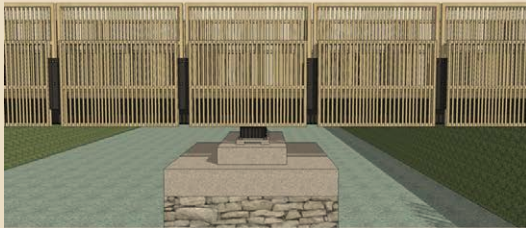
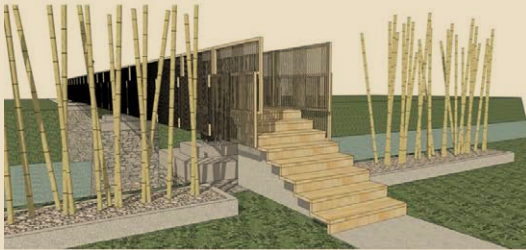
Architectural design – by members of JWDA

- Handrail

After the pier and the deck design of Chaoyang Bridge was confirmed, handrail was the next to be considered. JWDA has been involved in the development of many important projects ranging from urban planning to buildings for apartments and villas. Given that experience, however, JWDA still handled the overall design of this 26-meter span footbridge seriously and in particular the design of the handrail. It is because the bridge not only symbolizes the hope and the dream of villagers and children in Yingdong Village, it also carries the culmination of the heart and effort of everyone involved.

After numerous studies and discussions, it was decided to use timber and bamboo as the major material. 38 frames made up of local pine were accurately bolted onto the steel beams. 1800 bamboo slides were attached onto the frames. The alternate arrangement of bamboo slides on both sides of the frame created a 3-dimensional pattern to hide the structural steel members. Through the gaps of the bamboo layers, one could feel that the bridge was weaved in unity with the beautiful scenery of the nature and the tranquil Miao community behind.

Looking from afar, there is no doubt that the new Chaoyang Bridge had become an integral member of Yingdong Village.



愛 是蔭，遮擋炙熱夏陽 · 施工

Love is tree, it provides shade from the sun - Construction

施工由廣西聖和建築工程有限公司承擔

Construction work – by Shenghe Construction Company Ltd. of Guangxi

激動人心的設計圖紙出爐了，如何將紙上的橋變為朝陽河上真實的橋？廣西聖和建築工程有限公司伸出援手，愛心承包建橋的工程。

2013年3月，再度進軍英洞村，經過連續8小時的顛簸十分疲憊，但當抵達英洞時大家的精神立即振奮，摩拳擦掌投入工作。

The inspiring design had been laid out in the drawings and the next step was to turn those on paper to reality. The village was fortunate to have Shenghe Construction Company Ltd. of Guangxi to contribute to the construction of this meaningful project.

In March 2013, the team visited Yingdong Village again. After spending 8 hours travelling on bumpy roads, everyone was tired. Nonetheless, everyone was energized once they got off the bus and started working.



先將雙梁鋼結構的設計圖向施工方交底，特別關於橋身與橋墩連接的詳細節點反覆推敲，關於橋的主鋼樑接駁的水準及施工的機械也一一討論，既要確保設計的安全，也要確保施工的可行。

在施工現場，一絲不苟，認真核對每一處的位置，仔細測量每一個螺絲的尺寸，小小的卷尺此刻重如千斤，因為它承載著嚴謹、認真、安全、責任……

The design of the twin-girder steel bridge was first presented to the construction team. Special attention was drawn to the connection of the bridge beams and the construction of the piers. Construction plants to be used were discussed and quality control of construction was emphasized to ensure safety and feasibility of construction.

Everyone on site paid serious attention to their work. They made sure that every detail was carried out in compliance with the drawings. They all realized that there is a heavy responsibility on their shoulders carrying the hope, the dream and the safety of many people in the village.













愛 是橋，連起大山內外 · 驗收

Love is bridge, it links the heart of everyone in the mountains - Completion

2013年6月，正值暴雨季節，踩著泥濘的土漿，冒著洶湧的洪水，又進英洞村，車行至半途只聽轟隆巨響，前方一塊巨石橫臥路中，好險！山體滑坡！上帝保佑！有驚無險！

剛進村，只見遠處一橋飛架南北，大家興奮不已，爭先恐後向著橋飛奔而去！細細摸著光滑的扶手，細細觀測著每一個螺栓，細細檢查著每一條竹片，喜悅的淚水奪眶湧出！26米的人行橋，豈止26米長！連接著大山內外千里之遙！

英洞村的新朝陽橋終於建成了，在這座橋上凝聚著多少人的心血，多少個不眠之夜，多少個深夜繪圖的背影，多少回飛越千里的郵件，多少次搶奪工期的風餐露宿……。在這座橋上，每個人的專業不同，角色不同，位置不同，但每個人的期望相同，奉獻相同，收穫相同！

It was the stormy season in June, 2013. Treading on the muddy road and through the roaring creek water, the project team once again set foot on Yingdong Village. It was a blessing that the team was not hit by a huge rock falling just inches in front of the cars carrying them.

The incident did not scare off team members from continuing the journey up and down the hills on foot to the bridge site. On arrival, everyone became excited and was fascinated by the bridge in front of them.

They touched the smooth handrails. They inspected every bolt and every bamboo slide. At the same time, they kept on wiping away the tears of joy in their eyes. The 26-meter long bridge not only connects people on both sides of the creek, it also links up the hearts of people thousands of miles apart.

The dream for a new Chaoyang Bridge was eventually realized. The effort in coming up with an ingenious design and preparation of the drawings through sleepless nights plus hundreds of email correspondences between the design and construction teams could all be visualized from this bridge. The bridge is a culmination of the hearts of people from many different walks of life but all carrying the same dream.

今天站立橋頭，水，格外藍；山，格外青；天，滿天彩霞格外美！

Standing on the bridge today, you will find the water is exceptionally clear, the mountains are exceptionally green and the sky is dotted with exceptionally stunning colours.









收獲。

The Fruitful Gains.



都說大學需要有一些值得回味的記憶，明德工程的體驗，我想，一定是里程碑之一。

大學第二年級剛開始，一聽到科目“Capstone Design Project”裡面有明德工程就有一種眼前一亮的感覺，一次一年的腳踏實地的鍛煉機會可以讓我們脫離簡單的紙上談兵，更好地理解實踐。義不容辭地報了名，事實證明，這是在大學期間做的不多的正確選擇之一。

由於二年級之前的基礎課程，再加上平時和前輩談話中拾起的星星點點，一直對建築工程項目的流程沒有系統的瞭解，剛好自己參與的英洞橋項目週期短。麻雀雖小，五臟俱全，可以讓自己參與一次從出圖，改圖，計算，洽談，工地參觀等完整的項目過程，實在受益匪淺。明德工程還讓我結識了一批可靠的小夥伴，第一次你可以放心地將工作交給自己的組員，一起在機房奮戰到晚上十一點走回宿舍，一起在寒假放棄假期待在電腦前將設計趕出來，一起到廣西工地白天實地考察晚上聊天談心，明德工程確實是一個可以找到志同道合朋友的平台。更重要的是，在這個平台下，我們不是自生自滅，楊樹人教授，郭大江博士和黃春權博士還有一眾的前輩會在旁為我們護航，給我們建議，他們的每一次會議，對我們來說都是“要袋住”的寶藏。也許是個人習慣的原因，我總感覺言傳身教的效果還不如一個真刀真槍的演示來得真切，郭博士跟當地村民跟政府部門和建築師的協談，讓我明白一個資深工程師的自我修行和功底是多麼的厚實。

一個又能玩又能學又能交朋友奉獻社會的活動，確實給我的大學生活增添了許多光彩。

陳宇
2014香港大學土木工程系畢業生
2014.12.31

One should have an unforgettable and inspiring university life. I think that being a member of Project Mingde must be one of the milestones.

At the beginning of Year 2, I heard that Project Mingde is one of the learning projects in the course “Capstone Design Project”. I was fascinated and did not hesitate for a second to join the course. I treasured the opportunity to work out a solution in a real situation practically rather than studying theories. Now, time can prove that I have made the right choice.

Despite taking some fundamental courses and having some interactions with seniors in civil engineering field, I still had little understanding on the flow of handling an engineering project. The construction project of Chaoyang Bridge has given me this chance. From preparing design drawings, amending drawings, performing necessary calculations, collaborating with various parties in the project and site inspection, the team had to be responsible for all. I have really learnt a lot from each part of the process. On the way, I had my reliable mates with me. We did our job whole-heartedly. We stayed till 11pm to finish our work. We competed with time to have the drawings done during winter holidays. We lived near the site. We managed the inspection work during daytime and had a chat throughout the night. This was where I have found people with similar interests, and the same ambition. We knew that we were not on our own. We had Prof. Nicolas Shu Yan YEUNG, Dr. Dajiang GUO, Dr. George C.K. WONG and many other experienced seniors with us. They gave us valuable suggestions, useful advices and pointed the right way to us. In every meeting, we learnt a lot. The manner and communication techniques with different stakeholders were what I have found most inspiring during a visit led by Dr. Guo. I think that this is what an experienced and sophisticated engineer should possess.

It has been a great chance to learn, to make friends and to contribute. What is more, it has brightened up my university life!

Yu CHEN (Byron)
2014 BEng(CivE) Graduate of HKU
2014.12.31



英洞橋的落成，從無到有，愛心機構，學校的老師，還有同學們，克服了各種各樣的困難，一步步走下來。

對我而言，每一次團隊的設計過程，討論過程，和每一次的進村考察，都讓我學到了很多，小到工程設計的細節，大至對援建意義的思考。在親眼見證落成的英洞橋之後，我體會到了前所未有的快樂和成就感，單純由愛心出發而結成的果實竟是如此香甜。

明德工程，一代一代前赴後繼，一次次深入荒僻的小山村，或許並不只是為了一座小小的教學樓，甚至是一條微不足道的人行橋，它讓更多身處繁華都市，平日養尊處優的年輕人得以有機會從另一個角度瞭解自己身處的世界，自己的國家，體會到自己作為大學生身上應當肩負的社會責任。

衷心祝願明德工程能走得更好，走得更遠！

林煒東
2014香港大學土木工程系畢業生
2014.12.06

Thanks to the love, effort and faith of various dedicated parties, the Department, teachers and students, who have overcome the crests and troughs encountered, Chaoyang Bridge comes into being at last!

To me, it was a long journey to learn and explore during designing, meeting, discussing, surveying and inspecting and more I could have named. I have gained so much, from preparing the structural design drawings to reflecting upon the whole project. I felt so proud and had a strong sense of satisfaction when witnessing the completion of the infrastructure. It is a sweet fruit of love and toil!

Project Mingde can always continue with more new members joining. Each journey to the rural villages is not just for the building of a school or a bridge. It is a precious chance for the new generation to stay out of their comfort zone and put themselves into others' shoes. It is a way to learn about one's country and one's world. It is a way to realize the social responsibility that a university student should take.

I hope that Project Mingde can grow better and soar further!

Weidong LIN (Eldon)
2014 BEng(CivE) Graduate of HKU
2014.12.06



參與明德工程，我有幸見證行人橋從“零”開始，構思出一個個建造方案，通過無數的圖紙和計算，不斷設計及改良，逐步令工程得以施工，建成現在的行人橋。

過程中，不僅僅是獲得工程上的知識和經驗，還讓我認識到一班熱心的助建小組成員。要完成整個建築設計是一個長期的工作，而學校的計算機室就成為了我們的基地。同學們有負責設計的、有畫圖的、有寫報告的，各司其職。花了近一個月的奮鬥，我們的建築設計開始成型，不知不覺地團隊間亦建立了友誼，大家互相支持，懷著堅忍的毅力，合力讓大家的心血能夠建成。

每次入村到工地考察，都令我感觸良多。雖然村民都過著樸素的生活，但他們卻活得自在，活得快活。令我體驗到簡樸的生活更容易讓人滿足，沒有城市的繁華亦可以快樂。我們希望助建工程能夠改善到村民的生活，帶來一份禮物。但同時，村民的生活方式卻深深感染了我們，對自己的生命作出反思。

葉家熹
2014香港大學土木工程系畢業生
2014.12.06

I have witnessed how Chaoyang Bridge started from zero to its completion. First, we had to brainstorm for a preliminary design. Through repeated calculations, discussions and revising designs, the team came up with the final decision. Soon the construction was kicked off and the bridge is in use now.

In those few months, I not only gained knowledge and experience in the engineering field, but also developed friendship with a group of sincere project team members. It took a long time to finish the architectural design. We stationed at the computer laboratory in campus in the beginning. Some members were responsible for design work while some were preparing CAD drawings. Some were busy writing reports. After working hard for nearly a month, our design came into shape. With mutual support and perseverance, our team was formed, and so was the product of our effort.

Every time I went for site inspection, I felt inspired. The villagers were living a simple life yet they were happy always. People were satisfied with the present condition easily even without the prosperity found in modern big cities. I hope that we have done a great job to improve their standard of living. At the same time, they have inspired us to reflect on our life goals.

Ka Hei YIP (Jimmy)
2014 BEng(CivE) Graduate of HKU
2014.12.06



兩年前，我帶著期待而又興奮的心情加入了明德工程。2年後，當我回顧我在明德工程裡所做的一切，我覺得，我的大學生活無憾。

英洞村朝陽橋的項目可以說是我參與的第一個工程項目。這個具有紀念意義的工程，以及郭大江博士，教會了我很多關於土木工程的东西，影響著現在的我，以及我以後的職業生涯。

過程雖然說不上艱辛，但也經歷了很多。當最後親眼看到朝陽橋落成的樣子，心裡真的很開心，很欣慰。我還清晰的記得，那天到達英洞村，下了車後一路小跑時，心裡激動的心情。當時有一個組員說了一句很有共鳴的話“就好像看見自己的孩子出生了”。

多年以後，不管我做了多少個工程項目，我也一定不會忘記，我第一個做的項目—朝陽橋。也一定不會忘記，一直以來教會我們很多東西的郭大江博士。

吳家傑
2014香港大學土木工程系畢業生
2014.12.06

Two years ago, I became a member of Project Mingde. I was so excited to be in the team. Looking back at what I have done in the project, I have no regret for my university life.

The construction project of Chaoyang Bridge was the first engineering project that I have taken part in. It was meaningful and memorable. Dr. Dajiang GUO has taught me a lot about civil engineering, which has a life-long influence on me.

We came over a lot during the project. When we saw the completed footbridge, we were so overjoyed that I remembered every detail clearly till now. When our team arrived at Yingdong Village, my heart flew to the midair. I could not help running towards the bridge. One of our teammates said it was like having delivered a new-born baby. We all agreed.

Now, no matter how many projects I have worked through. I would never forget the first engineering project that I was involved in, Chaoyang Bridge. I will always remember Dr. Guo, our life mentor.

Jiajie WU (Tony)
2014 BEng(CivE) Graduate of HKU
2014.12.06



英洞村朝陽橋 — 只差一點距離

自己本身並不是負責設計朝陽橋的隊員，只是閱讀週有空，就到橋組幫忙，看看有甚麼事幹。一踏進計算機室，郭博士見到我立刻大喊：「Felix，你回來真好，你是我的熱火救兵！」原來橋組有不少組員都回鄉探親，只剩下幾個人。意想不到，我的回來令橋組可以運作下去。

其實我們做學生的，本身對工字鋼橋認識不多，設計同監督我們畫圖都是由郭博士親自主理。原來一條小橋都大有文章，一件工字鋼零件都花不少時間才畫到圖紙上，每一條線，每一個尺寸都是有仔細考慮的地方。結果，本以為打醬油的我學到了不少設計與施工的知識。誠然，郭博士真是我大學生涯中一位良師。

只差二百公分

設計本身問題不大，但理想與現實往往有差距，這個確實對一個工程師危機應變的一大考驗。一封平平無奇的電郵，差點兒出了大錯！

蒙可陸先生在電郵上提到橋墩實測的距離，不過他所提到的數字比原來設計相差200公分。200公分，對結構本身並無大礙，但對預留洞以至欄柵的排位都大相徑庭，擔心施工隊未必有足夠能力應付，所以我連夜發訊息請示黃博士。幸好，橋組的同學知道此事後都跟郭博士商量，事情很快就解決了。原來，當一個工程師就是要連一個不起眼的數字都要看得出問題所在，真的不容易！

還差一米

橋墩的高度是按照村民口述的水位高度再加高一米而定出來的，我們都有一個疑問，河水真的這麼高嗎？因為這跟成本都有莫大關連，橋墩愈高，價錢愈貴。結果，朝陽橋落成，村民向郭博士彙報：「前兩天英洞下大雨，幸好橋身比原來高一米，村民和學童才可以過河。」我又上了一堂寶貴的課：一米，對我們來說只是圖紙上多畫幾筆的事而已。但對使用者是多麼重要呀！

總結

我所以讀工程，是因為自己對工程的興趣和實用性。同樣，明德工程，就是把我們這團火好好地運用到有需要的人身上。所以，我經常提醒自己，做工程一定要對得住天地良心，即使是少少的尺寸，都要對得住捐款人，更要對得起使用者。明德格物，大概是這個意思吧。

冼嘉俊

2014香港大學土木工程系畢業生

2014.08.10

Chaoyang Bridge – Nearly a miss!

I originally did not belong to the project team of Chaoyang Bridge. As I was free during the reading week, I volunteered to help. I remembered the moment that I stepped into the computer laboratory; Dr. Guo waved to me and said, “Welcome, Felix. It’s great to see you here. You save us!” I then realized that many members of the team had returned home for family reunion and the team lacked working force. I was pleased to be in the group.

As a student, we knew little about the technical part of building a steel bridge. Dr. Guo gave us lessons about design and preparing drawings patiently. I first realized that there was much to learn outside classroom. We had to pay special attention to every small detail and draw them seriously with exact dimensions. This coloured my life. I really need to thank Dr. Guo for inspiring me so much.

A miss of 200 centimeters

The design was acceptable. However, in reality, it did not work as we thought. We knew that we had made a fatal mistake from an email. It is always a challenge for engineers to deal with uncertainties.

In the email, Mr. Meng mentioned about the actual measurement of the distance between the bridge piers. There was a 200 centimeters difference from that stated in the original design drawing, but for the design and safety of the structure, it should be fine. However, it would impose a significant implication to the construction due to the space reserved and the arrangement of the barriers on two sides. I immediately contacted Dr. Wong and asked for further actions to be taken. Luckily, the team was able to solve the problem soon. Being an engineer is really not an easy job. They have to take care of a tiny mistake and tackle it promptly.

Almost one meter to go

We decided to set the height of the bridge piers to a meter higher than the full bank water level as mentioned by the villagers. “Do we really need to do so?” we asked ourselves. This greatly increased the cost of construction. After Chaoyang Bridge was built, the villagers reported to Dr. Guo that due to the pouring rain lately, the water level had been raised. Fortunately, the piers had been set higher, or else, villagers and children could not make their way across the river. I have learnt a lesson again. Though a meter is little to planners, it means a lot to the users.

Conclusions

I love engineering and I am really interested in it. That is why I have chosen to study engineering. Project Mingde is a channel for us to express our passion in helping people in need. I always remind myself that I must do my very best. I think that it is what Sapientia et Virtus means.

Ka Chun SIN (Felix)
2014 BEng (CivE) Graduate of HKU
2014.08.10



第一次親身到英洞村朝陽橋已經是落成了，為它做最後檢查，看一看那邊的水流對橋的影響。看到一條新橋為村民帶來的便利，使我深深明白工程為人民帶來的好處，改善生活。即使我對朝陽橋的參與不多，但看到新橋落成我也感到非常高興。希望明德工程繼續薪火相傳，做更多的愛心工程。

The construction of Chaoyang Bridge was almost completed when I first visited the site. The main purpose of that visit was to assess the effects of current to the bridge and to do the final check. When I saw the new bridge in use, I knew it has indeed brought great convenience to the villagers and it also makes me realize that civil engineering could benefit people and improve their quality of life. Although I have not been involved much in this project, I am happy to witness the moment of the project completion. I hope that our fellow schoolmates can go on with this kind of project with Project Mingde's spirit.

廖健鈞
Kin Kwan LIU
香港大學土木工程系三年級學生
BEng(Civ) III of HKU
2015.01.08



英洞村朝陽橋項目的成功，全賴於蔣慧詰老師，郭大江博士及吳玉儉老闆的專業精神與無私的奉獻。學生們能夠從他們身上學得嚴謹而又不失風度地處事，實在是福。願朝陽橋及明德工程的精神與人長存。

The success of this project should be credited to the professionalism and selfless devotion of Dr. Dajiang GUO, Ms. Huijie JIANG and Mr. Yujian WU. They set a very good standard for students to learn how to design, carry out and supervise a construction project. I hope that the spirit of Project Mingde and the Chaoyang Bridge would remain ablaze.

黃春權博士
Dr. Chun Kuen WONG
香港大學土木工程系
Department of Civil Engineering, HKU
2015.01.19



英洞朝陽橋竣工時，郭博士帶領港大學生和駿地公司的設計師還有各界愛心人士一同到現場參觀考察，大家的心情是複雜的，有喜悅，有感激，有自豪，也有不捨。

彼時彼刻，山清水秀，藍天白雲，朝陽橋精緻的木式結構坐落在山間河上，渾然天成，橋和山水融為一體，過河即賞景，一步一換景，即使匆匆的過客也不忍離去。

Upon the completion of Chaoyang Bridge, Dr. Guo led the students from the University of Hong Kong, designers from JWDA and all who have played a role in the construction project of Chaoyang Bridge to inspect the works. The feelings were hard to describe. We cheered; we thanked; we were proud of ourselves; and we missed it.

At that moment, the scenery was beautiful. The sky, the clouds, the mountains and the creek, together paint a stunning picture. Chaoyang Bridge is located firmly across the creek. The wooden structure becomes part of the painting. Passers-by must be fascinated and not willing to leave.

胡添羽

Hu Tianyu (Tim)

2014香港大學土木工程系畢業生

2014 BEng(CivE) Graduate of HKU

2014.12.31



明明以德，知行合一。從選擇土木工程專業的第一天起，我一直期待著這麼一天：能夠自己設計並且協助建造出為社會做出貢獻的工程。明德工程 - 英洞村朝陽橋項目給我一個這樣珍貴的機會，不僅讓我把學到的知識用在幫助山區孩子搭建通往學校的橋樑，並且也在實踐的過程中學會了很多做事做人的道理。自己在項目中也認識到了很多志同道合的隊友，大家一起為公益奮鬥努力是我在大學做過的最有意義的事情！希望明德工程越辦越好，薪火相承！

It is important to combine words with actions. From the first day I chose civil engineering as my major, it has always been my wish to serve the society with my professional knowledge. Chaoyang Bridge was the first project that I had engaged in once joining Project Mingde. It was a precious opportunity. I could apply what I have learnt in lectures to build a bridge for children in a poor village in China so that they could go to school safely. I also realized that the value of life and the happiness of helping others in need. I got along well with team members. We had the same aim. We tried our best to work through the difficulties. This was the most meaningful project that I have done in my university life. I hope that Project Mingde can go ahead for decades and centuries.

鄭鈞文

Junwen ZHENG (Archer)

2014香港大學土木工程系畢業生

2014 BEng(CivE) Graduate of HKU

2014.12.31



在英洞村的朝陽橋工程，不僅是一個為著方便當地農村學童過河上學的工程建設項目，也是一個給香港大學工程學院學生參與一個卓越工程的好機會。她帶著「明德工程」的使命、願景和熱誠。

朝陽橋的建造揉合了上海和香港兩地專業人士的知識和經驗，我們帶著同一的使命：要建造一道耐用而融合當地環境的橋，造福當地小區，讓村民得裨益。我們擁有著同一腔的熱誠。

透過實地考察和通過電子郵件通信，我們討論並制定了結構分析、地基設計、提升橋面、評估水流、設計竹籬笆欄柵、施工材料和施工程序等。朝陽橋項目的建立，標誌著愛心工程共同協作努力的里程碑，更重要的是培養了年輕一代的心在中國的土地上萌芽生長。

劉偉藻博士工程師
1993年香港大學土木工程系畢業生
2015.01.27

The Chaoyang Bridge Project at Yingdong Village is not only a bridge construction project facilitating the local village students to cross the river, but also a remarkable task for the engineering students of The University of Hong Kong. It carries the mission and vision, as well as passion, of Project Mingde.

The Chaoyang Bridge integrated the knowledge and experience of professionals from Shanghai and Hong Kong. We have the same mission: to construct a bridge which is durable and compatible to the local environment, for the benefit of the local community. We are one in the bond of love.

By means of on-site inspections and email communications, we discussed and worked out the structural analysis, foundation design, raised bridge deck, hydrological assessments, bamboo fence railing, construction material and method statements, etc. The project has established a milestone of joint effort for the charity project in villages. The more important was to cultivate the hearts of the young in the land of China.

Ir Dr. Ivan Wai Cho LAU
1993 BEng (CivE) Graduate of HKU
2015.01.27



愛，跨越一切阻隔

JWDA駿地設計是一家從事建築設計、城市規劃和室內設計等業務的境外設計公司，自愛心基金會成立以來，所涉項目很多，但英洞村橋的援建是比較特別的一個項目。一來，他和我們以往的助學、幫困有別，是一個涉及到設計本身的項目。JWDA的員工設計了該橋的橋面以及欄杆。二來，此次援建的現場勘探與香港大學明德工程合作，港大師生負責結構，JWDA負責設計，雙方的緊密合作不僅高質量地完成項目，結下故人情，更是為今後的設計類慈善項目打下互信的基石。

距今，英洞橋援建已完工半年，而三年內比較特別的回憶，都濃縮在這個薄霧環繞、山青水秀的英洞，無非是因為——愛，曾經來過。

JWDA的愛心基金會成員飛來廣西現場勘探四次，每一次的旅程用“長途跋涉”其實毫不為過。桂林機場至融水縣的盤山公路有四小時，融水縣下至英洞村的盤山路也有四小時，若是交通時間，恐怕也有一天顛簸在路上。越往深處開，交通的情況便越發不穩定，有些路段必須得靠人行，無路的地方用雙腿開路，車陷泥濘時用雙手推車。然而，愛仍是得勝的，對村民和兒童能否安全過河的關切，遠超路途的時長、顛簸和山中險情。

建橋需要較為準確的土木測量數據，為此，明德工程的師生花費了大量的精力。2012年10月的那次現場勘探，下著大雨。下雨導致路面更滑，溪流更湍，聽說類似的天氣條件，曾經沖走過要渡溪上學的孩子。下一個汛期就要到了，時間顯得尤為緊迫，我們要趕在汛期前，將橋建好，在天氣變寒前，完成混凝土澆築的橋墩。在那段時間內，電子郵件飛來複去，同學們徹夜趕圖，為的就是和時間賽跑。

當朝陽橋如期建好時，大家站在橋上查驗細部，如同溫柔地看著懷中的孩子一般，在愛中見證了從殘破到完整，從流淚撒種到歡呼收割的喜悅。

我曾想，當民間慈善深入鄉裡鄰間的基礎建設時，會不會出現另一種形式的不作為。這個疑惑，短期內或許無法得到答案。更為重要的是，當我們如此行的時候，看見的不再是一雙雙在黑夜中無望等待的雙眼，一顆顆被拒絕後的挫敗傷心，而是那一把又一把傳遞愛之火苗、生之希望的火炬，那光，能將最堅厲的心溫暖。

JWDA駿地設計
陳然
2015.01.09

Love across barriers

JWDA is an overseas company which focuses on businesses related to architectural designs, urban planning and interior design. Since the JWDA Charity Foundation was set up, the company has been involved in several projects. Chaoyang Bridge is a special one. It is different from those helping the poor and needy through donations. It is a design project. JWDA designers are responsible for designing the deck and barriers on the two sides. Site inspection was done with members of Project Mingde, The University of Hong Kong, who took care of the structural design while JWDA focused on architectural design. Through cohesive co-operation, the construction project was done with high quality. This has laid down the foundation for the forthcoming charity programs.

Till now, Chaoyang Bridge has been built for half a year. The memories and love have been nourished in this misty and beautiful place.

Members of JWDA Charity Foundation have been to the site in Guangxi for inspections for four times. Each journey was a long and tough one. Travelling from the Guilin Airport to Yingdong Village took about eight hours in total. If the road was busy, it took even longer. The inner village was not developed at all. There were no roads for cars to travel on. We had to walk. We had to push the cars when they were stuck in the mud. Yet, love was the winner. We cared more about the safety of villagers and children crossing the creek than the difficulties that we were facing.

As we need more accurate surveying data, advisors and students from Project Mingde spent a lot of time collecting them. They went to the site in October 2012. The rain was pouring heavily and the road was slippery. The creek was roaring. It was reported that children crossing the creek on their way to school had been dragged away by the water. Flooding might occur. We had to complete the construction project as soon as possible. Before winter came, we had to finish the reinforced concrete piers. During that period, we emailed and phoned each other frequently. Students were preparing construction drawings day and night. We, the team, treasured each minute and second in the race with time.

When Chaoyang Bridge was built, we did some checking. We burst into tears and laughter as well, like we saw our new born baby.

I have been wondering if it is right to help on construction projects in unprivileged regions. This is a question that cannot be answered within a short period of time. What is more important is that we see more smiling faces, more hopes and more love rather than hopeless stares and frustrated hearts.

Shanghai JWDA Design Co., Ltd.
Ran CHEN
2015.01.09



幾年前一次機會來到柳州，深入當地山區考察公司的愛心基金項目，雖然多次在電視上、書籍中見到過類似的畫面，但是當我真正的走進其中，不禁還是被眼前的場景所震驚。僅有的兩間教室中間吊著唯一的一盞電燈，室內採光主要依靠屋頂上的幾個用塑料遮罩的洞，牆壁上的木板中間留了幾條縫就是窗戶。因為買不起玻璃，全村都沒有一戶人家用玻璃窗，清一色的木板窗。雖然條件異常艱苦，小孩們還是盡力努力的讀書，因為他們知道，這也許是他們唯一走出去的機會。

當下中國的教育體制一直被人詬病，但我還是一直比較支持的原因是因為它成了絕大多數貧苦家庭翻身的唯一出路。而目前，這條路也越來越窄，因為家境貧困，很多小孩子根本沒有機會走到這條路上來。中國已經非常富裕了，但是還是有很多貧困地區的小孩子無法念得起書，即使每月的花費僅僅是大城市裡一頓飯的費用。貧窮並不可怕，但是如果前方沒有希望，如果我們這些旁觀者的心冷漠了，才是我們文化真正貧瘠的開始，才是我們真正貧窮的開始。

中國的經濟在持續增長，中國在國際上的影響力也越來越大。希望有一天，在中國能夠人人有書念，人人有學上，人人都有前途和希望。

JWDA 駿地設計
王曉晨
2014.12.30

Several years ago, I had a chance to visit Liuzhou to do surveying and site investigation for a JWDA Charity Foundation funded project. Although I learnt much about the poor living and learning condition of students in rural China on television and from books, I was shocked by what I saw. There was only one lamp in the middle of the two classrooms. Natural light was captured from the roof through small holes covered with plastic materials. There were cracks on the walls and they were so called the windows. The villagers could not afford to buy glass for making windows. The standard of living was low yet the young generation made full effort to study as they knew that knowledge might change their destiny.

The present education system of Modern China has been criticized over the past few decades. Yet I always support it as I believe it is the only way out for children from poor village to climb up the social ladder. I feel disappointed. Poverty has hindered the chance of poor children from receiving education. China is rich now. The hidden problem is yet to be seen and solved. Children living in rural areas do not have enough resources to go to school, not even a penny a month. Poverty is not yet the worst but hopelessness is. It will be a tragedy to us if we give up our hope. While the economy of China is rocketing and so is its international influence, I hope that people enjoying the prosperity in China will not forget the left-behind villagers. I hope that one day everyone will have an equal chance to go to school. Everyone will have faith in their future.

Shanghai JWDA Design Co., Ltd.
Xiaochen WANG
2014.12.30



橋的記憶

我想談談所有關於橋的記憶。

最早的記憶總來自腳下這片土地，比如那首代代相傳的江南童謠——搖啊搖，搖到外婆橋。那可能我是第一次聽到“橋”這個字，也第一次模仿這個有趣的讀音，儘管並不知道其中的涵義。其實直到現在，我也未必知道。只是偶爾再聽到這首童謠時，會遙望那早已朦朧的童年，泛起淡淡鄉愁——不論有沒有背井離鄉，這鄉愁都真真切切存在，仿佛在內心深處真有一艘烏篷船，在童年每一個瀰漫金色暮靄的黃昏裡，搖搖擺擺駛向外婆橋。當我們漸漸長大，這艘船也漸漸行遠，離開了家，離開了橋。

這段記憶，關於家，關於鄉愁，關於告別。

少年時有關橋的記憶圍繞兩部電影，一部叫《卡桑德拉大橋》，另一部就叫《橋》。前者的背景是冷戰，後者是二戰。巧合的是，這兩部不同時代背景的电影，都以橋的毀滅作為結語。這是兩個關於正義戰勝邪惡，人道戰勝法西斯的故事，如同那個時代多數電影一樣，所有的角色就像投射在意識形態這塊幕布上的剪影，非黑即白，沒有活色生香的斑斕。有時也如剪影的輪廓般清晰可辨，那麼真實，又那麼不真實。於是在我的記憶深處，橋再一次被賦予了形而上的象徵，它犧牲自我，用自毀的方式埋葬了人間的罪惡，只剩下不朽的殘垣。

這段記憶，關於毀滅，也關於永恆。

最後一段記憶來自於蘇州河。它曾經是上海租界區的邊界，隔離了兩個世界，一個在北，一個在南。很久以前，輪渡幾乎是聯繫兩岸唯一的交通方式，後來在河下游的盡頭，一座鐵橋聲名鵲起，它叫外白渡橋。顧名思義，外即外灘，白渡即免費渡河，無需花費半文銅錢。這座橋的出現使河道不再成為天塹，城市的天然裂痕開始被縫合。然而，當時通往外白渡橋另一側的，是另一處租界，“白渡”淪為少數人被施捨的恩惠。在蘇州河的其他流域，人們仍舊依賴輪渡過河。

斗轉星移。就這樣，城市的這條裂縫衍生了河岸兩側截然不同的風貌，聚居了截然不同的人群，也因此形成了供需的矛盾。後來，河道上出現了越來越多的人行橋，輪渡漸漸消失。人們發現，那些橋，不僅可以連接兩個不同的世界，也可以連接人，連接業已形成的供給與需求。於是，很多人行橋上出現了集市，日出而席，日落而散，幾分狼藉，也有幾分熱鬧。這就是我對蘇州河記憶的起點——在我騎車讀書的時候，每天都會推著自行車，穿越一座這樣的人行橋，穿越橋上的集市和人群，還有橋下那飽受污染的蘇州河水。

這段記憶持續了很多年，直至後來，人行橋被星羅棋佈的公路橋所取代。隨之一起消失的還有橋上那些集市，那些閒庭信步的路人。歷經十餘年的治理，蘇州河變乾淨了，可人們寧可坐在自家的陽臺上憑欄遠眺，也不願站在橋上多逗留一秒——因為這些新建的公路橋，屬於疾風而馳的汽車。它們矗立在河上，只為讓人穿越，並忘記河的存在。

這段記憶，無關鄉愁，也無關永恆，只關乎柴米油鹽。

我不確信英洞村的這座人行橋是不是屬於我記憶中的一部分。因為記憶是藏在心底卻已經消失的東西，而它沒有。也許有一天，它也會殘破，如同鋼鐵會銹蝕，竹木會腐敗一樣，它會成為這座村寨遙遠的回憶，成為孩子們離開故土後的鄉愁。或許也會留下不朽的殘垣，封存這世界的善意。但於我而言，它更關乎柴米油鹽，關乎此時此刻的生活。

它很遠，遠到我也許再無機會看清它的全貌。但它也很近，近到觸手可及，時刻能感知它的存在。我時常會閉上眼睛想像這樣一副畫卷：放完學的孩子們拖著球鞋在木橋面上追逐嬉鬧，頭纏布巾的老人坐在石階上佝僂地抽著煙槍，一身瑤服的姑娘背著竹籃翩翩起步，走向橋的另一端，偶爾路過村寨的異客只是駐足在石墩上方，倚靠著竹護欄凝望遠方。潺潺細流，花鳥為伴……

我不認為這是我記憶的一部分，就像我不認為它會消失一樣。

JWDA 駿地設計

顧錚

2014.12.11

The memory and the bridge

I want to share all my memories about bridges.

I first came across the word “bridge” when I heard from the lyrics of a folk song from Jiangnan region - swinging and swinging, to Waipo (Granny’s) Bridge. I was not sure what it really meant but I was interested in the sound. When I sometimes hear this song, the lyrics remind me about my native place and my childhood. It also provokes my miserable feeling. Time carries my memories away, away from home, and away from the bridge in the song.

It is about memories, about my home which I missed, and about farewell.

I knew about bridges at my teens because of two movies. They were “The Cassandra Crossing” and “Moct”. The first was set in the Cold War and the second in World War II. Coincidentally, the two movies told us the dark side of a war which ended with the destruction of a bridge. On the other hand, they showed us the importance of justice over evils and humanity over fascism, to bring hope in such chaos. I saw how the characters in the movies struggled to live. They lived just to survive. I relate these to bridges. To me, the bridge symbolizes sacrificing. The evilness of human in history is buried in the architecture. The remains of the bridges are left there to tell their stories and the lessons learnt.

It is about destruction and eternity.

I met a bridge once again because of Suzhou River. It was the border of Shanghai Concession Area in the past. It divided Shanghai into North and South. Long time ago, people could only travel across the border by ferry. Later, Waibaidu Bridge was built at the end of the lower course of the river and it made logistics more convenient. People could pass it for free as suggested by its name. Crossing the river was no longer a mission impossible. The cities were once again connected. However, people at the upper or middle course still had to rely on ferries.

Originally, there were two different kinds of people living on the two sides of the river, the north and the south. They were different because of their culture. As time passed, more bridges were constructed. Ferries were eliminated. The bridges did not only connect the places geographically, but also the people. It encouraged cross-border consumption. There were more markets and trading activities along the river. The markets were full of crowds during daytime. When I went to school by bicycle in the past, I always pushed my bike along the bridge. I walked and observed the people in the markets. I also watched the polluted water flowing in Suzhou River.

This memory lasted for many years until it has been replaced by highways now. The markets and the wandering people have also disappeared. The water of Suzhou River became clearer. Yet, people seem to be detached from the bridge and have forgotten the river. The road is busy with cars. I see no one willing to enjoy the moment crossing the bridge.

It is not about missing my home, nor about eternity; but the change of life styles.

I am not sure whether Chaoyang Bridge is a part of my memories. Memory is about something that has passed and disappeared but I still remember. Chaoyang Bridge has not disappeared. Maybe it would decay and become some memory of the children in Yingdong Village. Maybe it is still there telling stories after centuries. To me, it is part of my life now.

It is far away and I may not have the chance to visit there again. It is somehow near and I seem to be touching it with my heart. When I close my eyes, I can imagine the scene. Children are playing joyfully on the bridge after school. Some elderly are resting on the stairs, smoking and enjoying the moment. Ladies in Yao costumes with a basket on back are walking leisurely across the bridge. At times, visitors may lean above the bridge piers and look afar, admiring the fascinating scenery around.

I do not take it as part of my memories as I do not think it will ever disappear from my heart.

Shanghai JWDA Design Co., Ltd.
Zheng GU
2014.12.11



隨想

大苗山寨，白雲深處；
雲霧繚繞，洪水洶湧；
赤足過河，險情重重；
滬港聯手，風雨兼程；
串串腳印，飛橋英洞；
雲上太陽，朝陽橋成；
愛似細流，潤物無聲！

JWDA駿地設計
蔣慧喆
2015.01.08

Some thoughts

High upon the mountain top is Miao Village
Shrouded in mist among the torrents.
Barefooted, we cross the rivers, risking treacherous terrain;
Hand in hand, we brave wind and rain.
Little by little, an arch rises above Yingdong Village.
When the sun rises, Chaoyang Bridge has come into being!
Like a stream, love flows quietly in our hearts.

Shanghai JWDA Design Co., Ltd.
Huijie JIANG
2015.01.08



愛心朝陽

獨具特色的朝陽橋坐落在風景如畫的英洞村溪流之上，橋的設計者在橋的外觀設計上獨具匠心。在這風光秀麗的山水間，設計者在確保橋安全性和實用性的基礎上，為了使橋本身的存在不破壞英洞村整體的自然環境，我們用了38樅杉木板鋪設橋面，而護欄則由1800條竹片構成，這使橋與周圍環境相輔相成、相得益彰。

2013年6月朝陽橋通行，來往的人們由衷地讚美橋建築美。有官員評價道：“這不是橋，我從來沒有見過這麼美的橋，簡直就是一件大型藝術品。”誰說不是呢？此處有崇山峻嶺，茂林修竹；又有清流激湍，映帶左右，朝陽橋在藍天之下，溪流之上，青山之間，連接著兩岸青山，連接著村寨和學校，這更是村寨與小學唯一的交通紐帶。可見朝陽橋對村寨的重要性。

聽到人們的讚美，我倍感欣慰，一切艱難的付出都是值得的。中國是橋的故鄉，自古就有“橋的國度”之稱。朝陽橋只是山間一座人行橋，也許在世人眼中它是微不足道的，但它對英洞村民卻十分重要。雖然整座橋僅有26.48米長，但建造過程的種種困難是別人難以想像。2012年，蔣老師找我商量能否接手承建朝陽橋？原因是，本由英洞村本地施工隊承建的朝陽橋，從2012年底開工，三個月間工程一直沒有進展。我知道做愛心工程會遭到許多質疑，何況是接手“半路”工程。因為之前我承建“明德樓”和“格物樓”就遭到許多人的冷嘲熱諷。聽到能否接手朝陽橋時，我起初拒絕，怕再遭到別人的質疑。瞭解到當地的舊橋已經不能使用了，如果新橋不儘快建成，那麼孩子只能涉水渡河。如果汛期山洪到來，孩子們怎麼上學？我在山裏工作多年，知道每逢夏季傾盆大雨，山洪瞬間爆發，洪水肆虐，洪水捲著碩大的鵝卵石，木頭等雜物傾瀉而下，非常危險。最終，我還是接手了朝陽橋的建設，不為別的，僅為那些莘莘學子。

2012年，上海駿地公司蔣慧潔和香港大學明德工程的義工，不辭辛勞，多次到英洞村實地考察，協商援建朝陽橋。橋的設計圖很快就到我手上，我在接下該橋建設後，緊鑼密鼓地進行施工。2013年3月15日部署開工。水工由陸秀學負責，鐵工由鄭崇貴負責、木工由盤龍飛負責、大型機車租賃由吳彩清負責，而我負責全面協調溝通各方工作。開工的序幕正式拉開，理想是豐滿的，但現實是骨感的。在建設朝陽橋的過程中，我們遇到許多困難。首先，建造橋梁的工字鋼找遍整個柳州市無貨，只好奔赴南寧尋購，大樑所需材料採購就花了七天時間；其次，大樑的製作更令人咋舌，融水所有的車床間僅有一家願加工，且價格驚人，人工費比材料費貴近三倍，實在無法承受，只好捨近求遠到玉林找師傅加工；再次，從融水縣城到同練鄉英洞村盤山而行，需四個多小時，路彎曲陡坡多風險大，所以找了多家運輸車和吊裝車都不願意去，認為得不償失，最後一位融安的朋友幫忙才解決了這兩難的問題；最後，感謝盤龍飛，是他貢獻自己油杉老木頭做橋面枋板，這些老木頭他保存多年計劃用來做木地板的，正是他捨棄小我、成全大家，村民們才能擁有朝陽橋高品質的橋面。竹片也是他走訪了多個加工點，最後選定了安太鄉某廠完成竹片半成品，再運回懷寶廠房親自加工完成板面板。在施工過程中，我多次往來穿梭在各個加工點監督產品質量，來回顛簸在彎曲的山路上，這些都不算苦。最讓人鬱悶的是施工地理環境惡劣，有兩公里長的黃泥路，此時偏逢雨季，黃泥路泥濘難行，許多材料難以運送到施工現場… 有一位村幹部問我，你這麼辛苦做這這點工程，值嗎？商人重利輕別離，這是人們對商人的普遍看法。周圍的人何嘗不是這樣看我。走自己的讓別人去說吧，商人就一定唯利是圖嗎？商人就不能獻愛心？陳光標做了那麼多善事被許多認為是做秀，但他不管別人怎麼嘲諷，他一如既往地做慈善，這種人值得尊重。相對陳光標而言，我只是一個小商人，做我認為值得的事情，做我力所能及的事情，對於別人的不解和質疑，我無須解釋。

在承建朝陽橋之時，我就預想會遇到諸多困難，但實際上在施工過程中遇到的困難比我預計的多。遇到困難時我彷徨，氣餒，甚至想到放棄。但想到老父曾經對我說過，答應別人的事情，就一定要做到，不僅要做到，而且要做到最好。是的，任何事要不做，要做就做到最好。如果遇到困難就想退縮，自己不敢面對，那麼就很難期望有其他人對你支持。所以我必須勇敢克服所有困難。我就是秉承這些信念完成朝陽橋的建設。

孟子說：“愛人者，人恒愛之；敬人者，人恒敬之。”我認為楊澍人先生，蔣慧潔女士以及援建朝陽橋的愛心人士就是值得我們愛和尊重的人。我目前所做的一切相對他們來說只是微小的善事，但我深知勿以善小而不為。只要我們人人都做善事，那麼我們世界將變得更加美好！

朝陽橋是由諸多愛心人士鋪就而成，它不僅解決了當地居民過河難的問題，而且保障了學生們的安全，更拉近了家鄉人之間的距離，拉近了人與人之間的距離。

朝陽橋是用愛心鋪就而成，這是一座愛心橋、是向著陽光的橋、是通往希望的橋。

廣西聖和建築工程有限公司
吳玉儉
2015.07.15

Love in Chaoyang

Chaoyang Bridge is located in the midst of the scenic Yingdong Village. Designers tried their best to ensure the safety and functionality of the bridge while at the same time keeping the uniqueness of Yingdong Village with the surrounding natural habitat. To achieve this, wood and bamboo were extensively used. Chaoyang Bridge was opened in June 2013 and it was amazingly beautiful. Some officials admired and said that it is a piece of art more than just a bridge. Amidst the trees, the woods, the flowers, the sky, and the river, the bridge becomes an integral part of a beautiful painting. Besides, Chaoyang Bridge also serves as the only connection between the villages and the school.

The difficulties encountered during construction become worthwhile when words of praise are heard from people who have been there. Chaoyang Bridge may just be one of the millions of bridges in China but it means a lot to the villagers. Though it is just 26.48 meters long, the difficulties involved are unimaginable. In 2012, Ms. Jiang of JWDA asked me to take over the role of contractor of Chaoyang Bridge. I refused in the beginning as I did not like to give a wrong impression to people who had queried the purpose of my involvement in previous charitable engineering projects, like Mingde Building and Gewu Building. However, I realized later that without the Chaoyang Bridge, students have to cross the raging river with their bare feet. This can become very dangerous when roaring water moves violently down the river after heavy rainfall in the summer. Finally, I agreed to take up this onerous task just for the sake of the students.

In 2012, Ms. Jiang from JWDA and volunteers from Project Mingde visited Yingdong Village a few times and carried out survey of the construction site. After receiving the drawings, I quickly started the necessary preparation for construction. The site work was officially kicked off on 15 March 2013. I formed a team with Lu Xiuxue as the key person for work in the river, Zheng Chonggui for steelwork, Pan Longfei for wood work and Wu Caiqing for monitoring the heavy machineries. I remained the coordinator and managed the progress of work among the concerned parties. We encountered a lot of challenges and difficulties as we proceeded. These included the shortage of relevant construction materials, availability of skilled workers for the sophisticated construction processes and difficulties in delivery of materials and plants through the unpaved muddy mountain roads, etc. With the thankful support and hard work from the team and other people involved, the high quality Chaoyang Bridge was constructed. I myself travelled to site frequently to ensure quality of construction. However, when compared to efforts contributed by others, my contribution was trivial. Occasionally, I question myself why I am doing this because it is a general conception that businessmen just work for money. Fortunately, there is an encouraging example of Mr. Chen Guangbiao, a successful and wealthy businessman who has been consistently engaged in charity work despite criticisms from other people. He is respectful and I am doing what I think is right and worthy. I do not need to explain myself to anyone.

I foresaw right in the beginning that it was not an easy task. Actual challenges during construction scared me, made me feel depressed and at one time, I was thinking of giving up. But when I remembered what my father had told me that once you have promised; you should finish it with your best. I learn and understand from this that if one gives up whenever he encounters challenges, no one will come forward to support him. The greatest power is from oneself. I have engraved this deep down in my heart and I have been able to finish the project with this believe.

I am respectful to Professor Yeung, Ms. Jiang and all who had been involved in the Chaoyang Bridge project. Though my contribution is small, I believe that if everyone takes a small step forward to contribute, the world would become much better. Chaoyang Bridge is constructed with a lot of love from many people. It solves the villagers' problem in crossing the river. It ensures students' safety when they go to school. Furthermore, it shortens the distance between people.

Chaoyang Bridge is a bridge of love. Chaoyang Bridge is a bridge to the sun. Chaoyang Bridge is the way for hope.

Shenghe Construction Company Ltd. of Guangxi
Yujian WU
2015.07.15

跋。

「修橋鋪路，惠澤鄉梓」是中華民族固有的道德觀，在事業和生活中能夠有「修橋」的機遇，更是很多修習土木工程人士內心的期盼。在傳統的中國農業社會，我們經常會踏足鄉間的「報恩橋」、「順母橋」，可見「修橋」不光是純經濟或政治的活動。對中華民族來說，「修橋」很多時候更是一種感情的投射、一種心靈的充實。民間傳說中的「奈何橋」，跨越本來相隔的陰陽；而牛郎織女被銀河拒阻的相思，亦因為有了「鵲橋」，金風玉露、一年一度的淒美相逢得以成全。「修橋」是一種逾越阻隔的嚮往、是一種追求美好的盼望。

英洞村朝陽橋的修建本身就是一種跨越。朝陽橋的跨越不只是把河水兩岸的村民連接起來，更是把人的感情與追求跨世代地連接起來。朝陽橋把地域上的阻隔、語言上的分歧、甚至是習俗上的不一樣都跨越了，而橋的修建，還在同一時空裡，跨越了一國三地人民之間文化歷史上的差異、思維組織上的不同，而更特出的是一般專業之間的成見，也因為朝陽橋而被跨越了。在科技發展以飛躍速度邁進的今天，分工愈來愈細，專業領域的衍生愈演愈頻；在各自為規、公開為利的商業社會，有些專業人員遂不自覺地固步自封，思想日益偏激狹隘，致使人與人的交往，不論在實用操作上還是感情溝通上，都慢慢形成了一種難以跨越的無形阻隔，若果不能以一種有效的催化劑為媒介，這樣的阻隔往往就極難跨越。或者參與過修建朝陽橋的眾多專業人士、學者、導師、學生、義工們都可以見證，這道阻隔在調研、立案、勘察、設計、施工、驗收的過程中從來沒有出現過。在這個「修橋」團隊裏沒有不和、沒有競爭，隊員們沒有私心、沒有嫉妒、沒有自誇，他們互相包容、互相忍讓、互相信任，他們自覺的參與和奉獻不是要為自己帶來益處，而是要為他人帶來益處，他們有共同的盼望、不二的追求。雖然不是每個隊員都曾經讀過或聽過使徒保羅在基督聖經中宣示的愛，但是每個隊員把保羅宣示的愛都實實在在地展現出來了。

朝陽橋跨越了人性的弱點，連接起人類心靈最美好的一面。愛是朝陽橋成功修建的催化劑。朝陽橋讓我們知道「愛是永存不息的」，就如保羅說的一樣。

楊樹人
1971年畢業生

EPILOGUE.

“Building bridges, Constructing roads” and availing such to one’s hometown is an inherent morality of the Chinese race. Having the opportunity to bridging up places in one’s professional life is too an ever aspiration of many civil engineers. In rural China, one easily finds oneself setting foot on bridges named Benevolence Bridge (報恩橋) or Piety Bridge (順母橋). To the Chinese, building bridge is often more than a pure economic or political pursuit; it is also a manifestation of one’s very own sentiment and spiritual aspiration. Legends of the No-Return Bridge (奈何橋) connecting to the nether world, and of magpies gathering up once every year to form a Bird Bridge (鵲橋) across the Milky Way for the “Farmer Boy” and the “Weaver Girl” separated by the heavenly dowager to meet, portray well this age-old sentiment of the Chinese. Building bridge thus epitomizes a fundamental human aspiration to overcome barrier and a longing for consummation.

The building of Chaoyang Bridge (朝陽橋) at Yingdong Village no doubt is a spanning work unprecedented in itself. In spanning over waters to connect people up from its two banks, Chaoyang Bridge connects up simultaneously people’s sentiment and aspiration across generations. It transcends physical and linguistic barriers, and it overcomes social and custom differences. The singular bridge-building objective of the project group banishes cultural and historical diversities, and it dispels idiosyncrasy and paradigm of members drawn from three separate localities in China. What is truly remarkable is that professional prejudice and bias never surfaced; if any, such are either spontaneously resolved or quietly dissipated. With today’s rapid technological advances, division of labour becomes increasingly diversified and refined, and the pace of trade specialization quickened and intensified. Under a highly competitive and extensively commercialized environment many professionals unconsciously turn protective and narrow-minded in their daily disposition, rendering communication difficult and building up over time impenetrable barriers, whether emotionally or operational-wise. Without the catalyst of an effective emulsifying agent, such barriers can become obstinate and oftentimes unassailable. Yet, as can be testified by the many professionals, scholars, tutors, students and volunteers involved in the project, such barriers never exist throughout the whole process of reconnaissance, inception, investigation, design, construction, completion and final commissioning. Among group members, there has been no dissension, rivalry, jealousy or boasting; nor are there any private agenda of individuals. What prevail within the group are but mutual tolerance, forbearance and trust. The unpretentious participation and dedication exhibited by members are clearly not for benefits to themselves, but instead benefits to others. They share an undisputed vision, and they work together for an undivided ideology. Though not everyone has had the opportunity to read or to hear of the Love revealed in the Christian Bible, yet each one lives out that same Love proclaimed therein by the apostle Paul.

Chaoyang Bridge rises above human weaknesses; unites the good of the spirit. Love is the emulsifying catalyst that assures overall success of the project. Chaoyang Bridge informs us that Love never fails – as so does the apostle Paul.

Nicolas S Y Yeung
1971 Graduate

後記。

懷念大江

朝陽溪絕對不是大江，但朝陽橋的修建卻絕對離不開大江。

郭大江博士于精壯之年離開了工作十四年多的土木工程系、離開了他引導長達九年的眾多明德學生。為了照顧年長的母親及撰寫新書，郭博士帶領學生成功修築朝陽橋後，就沒有回顧明德工程了，從他在香港大學榮休的日子算起，至今快接近兩年。

郭博士第一次帶領明德學生踏足廣西是2004年4月，那次他給我和我夫人同志^a的印象很深；他一個人把行李一件件搬下車，學生們卻袖手旁觀看風景，我看到此情景，實在忍不住了，只好請他馬上停車，並囑咐學生們要自己提取個人的行李，我以為明德學生的行為不應該是這樣的。之後的九年，郭博士帶領一屆又一屆的學生，馬不停蹄地往返廣西，2008年發生汶川大地震後，又領著學生前赴四川，在崇州市重建災後倒塌的正東街幼兒園，加上暑假期間編排的培訓計劃，他和學生的足跡還踏遍了北京和長江三峽工地的現場。我沒有郭博士這樣的魄力，我不隨行的時候，他再有沒有為學生搬行李就不得而知了。

明德工程的第一個項目是在融水縣大浪鄉援建下里小學的明德樓，廣西環保局春芽行動的發起人張英副局長和我們一見面，就把郭博士與地方對上號了，她說這大江大浪^b註定是要在融水紮根的。張副局長沒有說錯，這大江大浪最後負責的明德項目是援建大保屯的文化中心，地點依然在融水，可惜尚未完工，郭博士就榮休了，而大保屯這個項目，明德工程到今天還在進行。與郭博士曾經共事的同工，都懷念他對工作一絲不苟的精神，當地的群眾懷念他待人接物的誠懇與親切，曾經跟隨他攀山涉水的學生，懷念他諄諄善誘、晨昏不倦的教誨。郭博士當年不單個人把明德工程這個重擔肩挑起來，他還把他夫人宋小微和過去在設計事務所工作的上司何棠蔭工程師也帶到廣西的深山助學去了。當我的夫人同志在醫院病危的時候，郭博士和他夫人匆匆趕來探望，可他從來都不知道夫人同志生前曾多次跟我提到，在曾經與我共事過的諸多人物中，她認為郭博士是最踏實而又可靠的其中一個。

自郭博士離開香港大學後，我與他見面的機會聊聊無幾，明德工程的活動他一概不再參加；雖然他那謙虛勤懇的面容經常會不經意地在我腦海中閃現，更多的學習與增益，卻只好留待他新書^c問世之時了。

楊澍人
1971年畢業生



1. 冒雨勘察現場
2. 繪制圖紙
3. 集體照
4. 與當地村民交流
5. 郭大江先生漫畫



註

- a. 華人圈子一般尊稱對方妻子為夫人，共產社會泛呼志同道合者為同志；廣西壯族自治區環保局張英副局長摘取香港特區與中國大陸兩地的用語特色，戲稱內子為「夫人同志」，前北越國家主席胡志明據稱為「兄弟同志」。
- b. 廣西壯族自治區環保局張英副局長對郭大江博士的親昵稱謂。
- c. 郭大江博士曾經出版的書包括《百年檔案藏一代風流-香港大學早年工學士的故事》和《逆來順受集》，後者記述作者本人于文化大革命期間插隊海南島當「知青」的經歷和得失。

POSTSCRIPT.

REMINISCING DAJIANG

Chaoyang Creek is no dajiang (big river), but the reconstructed Chaoyang Bridge would not have come into being without Dajiang.

Dr Guo Dajiang left the Department of Civil Engineering at his prime year after having served his term there for over fourteen years. He left the many Mingde students he led during his last nine years with the department to care for his aging mother and to write his new book. He never cast a glance back after completing Chaoyang Bridge with his students; counting from the date of his retirement from the University it is now almost two years.

The first time Dr Guo took his students to Guangxi was in April 2004; it was during this trip that he left me and my late wife with an impression never to be forgotten. With no assistance but by himself alone, he was unloading baggage one after the other from the coach while students were enjoying the stunning scenery all around. I never thought such should be the correct behaviour of Mingde students, and I simply could not refrain from ordering them right at the spot to take proper care of their own possessions instead of leaving those heavy bags entirely to their tutor. In the nine years following, Dr Guo led students assiduously to Guangxi term after term. Immediately after the 2008 Wenchuan earthquake, he began leading students to Sichuan Province to rebuild the devastated Zhengdong Street Kindergarten in Chongzhou City. Together with the programmed vocational field trips during summer term breaks, footprints of Dr Guo and his students covered also Beijing and the Three Gorges along the Yangtse River. Unable to keep up with his incredible stamina I had no knowledge on whether he continued to unload baggage for his students when I was not around.

The Mingde Building for Xiali Primary School was Project Mingde's first project at Dalong (literally big wave) Village in Rongshui (water of River Rong) County. At their first meeting in Dalong, Deputy Director of the Guangxi Environmental Protection Bureau and Founder of the Spring Seedling Campaign Madam Zhang spotted immediately the intimate connection by name between Dr Guo and the locality. Without hesitation she announced that this Dajiang-Dalong was destined to conjoin to abide in Rongshui. And Madam Zhang was right. Dabao Primary School and Cultural Centre, the last Mingde project undertaken by Dr Guo, was located nowhere else but again in Rongshui; regrettable though that the project today has yet to be completed whereas Dajiang is no longer seen around Dalong on account of his retirement. Those who had the opportunity of working with Dajiang remember his serious and meticulous approach; locals who had contact with him remember his friendliness and sincere attitude, and students who had hiked with him in deep mountains and rough waters remember his unreserved counselling and tireless tutoring. Apart from single-handedly shouldering the heavy burden of administering Project Mingde's affairs, Dr Guo went as far as to motivate his wife Sung Xiaowei and his former employer He Tangyin to assist with his department's training programme in rural Guangxi. When my wife was critically ill in hospital, Dr Guo and his wife lost no time to pay her a visit; though he never knew that many a time his name had been mentioned by my wife as being one among the few most dependable and diligent co-workers that had ever come across my entire career and professional life.

I rarely have any chance of running into Dr Guo since he left the University, for nowadays he no longer takes part in Project Mingde activities. Though his industrious and humble look does at times parenthetically flash through my reflections, further tutorial or discourse I surmise will have to wait till the publication of yet another new book of his.

Nicolas S Y Yeung
1971 Graduate

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