

CONVERSATIONS WITH DUST AND MORTAR

TONGLI CONSERVATION CAMP AUGUST 2012

by James Green

Summer is usually a time of holidays but for the more adventurous and hardy there is always work to be done. The project to conserve a hospital and former private residence seemed an ideal way to spend a summer, whilst making contact with people from all walks of life that one normally wouldn't be lucky enough to encounter, let alone work alongside. In a previous year I had been digging under the banner of Rempart, a French volunteer organisation that works across the world to restore buildings for the public good. The excellent company of young and old, craftsmen and students, French and Chinese (myself the only Englishman), made for a perfect balance of humours. A British group in the same vein of project might be at risk of the same bacchanalian songs and early morning arguments, but you never knew what would be unearthed on a project of this kind.

Following the combined efforts of the National Trust, The British Council and the Ruan Yisan Foundation, a site was found in the water-town of Tongli. The house had been built in the early 20th century by a Mr Chan in a prominent position by one of the main bridges on the canal. Over the centuries the area had been a retreat for poets, bureaucrats and artists, who had gathered to escape the heat and outdo one another at garden design.

Official blessing from the Wujiang local government was given to undertake work under the direction of a local contractor, who expected to complete repairs on the structure within a four month period starting from the moment we arrived. This was a step into the unknown for all sides, as partnerships were forged for the first time, bringing different conservation approaches into dialogue with one another. Understanding each side's criteria was important to achieving a successful venture; to local officials the benefits to tourism were paramount, whilst for the heritage bodies this small project sat amongst their strategies to promote conservation to a wider public. The contractor wanted to finish quickly and on budget, and everybody wanted the

project to be received well locally and nationally so that future collaboration could develop. It was my first chance to have a greater part of responsibility for this kind of project - beyond ensuring supper was served on time!

As it happened, food remained one of my duties – an army marches on its stomach after all! Our thrice-daily victuals took place in one or more of the old local tea-houses (alongside innumerable, all important tea breaks). This gave us a routine of one morning work period that began at 8 a.m. and an afternoon period that started from around 2.30 p.m. The first day of the camp commenced with a public forum, attended by local officials and the super-star Chinese conservationist Prof. Yisan. Various speeches were made, translated and digested with little reaction from the multitude of listeners.

Only the 70 year old Yisan made the audience smile, with a re-enactment of his former mission to the town; *“20 years ago I was knocking on every door (miming the actions), saying this and that garden needed protecting (impersonating the local accent) and at the time you all told me to go away!”*.

The great skill of this pioneer of the heritage movement was to put officials at their ease, meanwhile enthusing those around him about conservation – and in the end always getting his own way. I saw this later on that evening at a banquet, where Yisan had everyone make toasts with milk instead of the usual potent liquor.

The day of speeches was also the first time that all nine members of the UK group met together. Sam Spence, Samantha Malitskie, Luisa Respondek, Lucy Miyo and myself were all students of architecture or in conservation and development programmes. Catherine Townsend and Jacquie Martinez belonged to conservation trusts, for the Church of England and the Oxford Preservation Trust respectively, whilst a fellow Londoner, Ben ‘High-Street’ Pearce was working as a historic buildings officer with the London Borough of Tower Hamlets. The youngest team member, Callum McCaffrey, was an apprentice joiner with the National Trust in Northern Ireland, whose wide experience of working in wood also equipped him with the detective skills needed to decipher the building’s structure.

Each of us had our interests and motivations for wanting to work in China. Broadly speaking these were about understanding a different tradition. Between us we had only a few words of Chinese, but hoped that we would communicate through our love of buildings and come to gain the respect of those who also practised knowledge with their hands. Alongside us was a team led by Xiaoming and Ding Feng from Tongji University, Shanghai. This group was also formed from students and professionals, including a Hong Kong architect Chunkin Cheung (who was also our main translator from Mandarin, through Cantonese to English and back again!) and the

journalist Cao Peihong (whom we affectionately named Mr Red after he translated his name into English). Without exception these interested and interesting personalities would be the making of the camp over the next few weeks.

Our time in China was broken into three sessions, of four days each, with one for recuperation. On the first day of work it felt as though we were breaking the seal on a tomb. The building had been boarded up for seven years, and had been used as a storage room for many of the old artefacts and curios of the hospital (*fig.2*). On opening the door, a grey landscape, perfectly silent and undulating with furniture, pots, bottles of pills and bandages, spread out before us into the shadows. Only the footprints of birds that dotted outlines in the dust offered any sign of recent inhabitation. Neat rows of beds revealed the wards as they had been abandoned; a doctor's leather satchel filled with tools, put down and never picked up again. A poster of Mao waved from the other side of the room. There was little time to take stock of the place before our Chinese contractor had us progressing through the rooms moving out bed-spreads, taking away carved partitions and churning up the dust of the cultural revolution.

W O O D & C L A Y

At this point we divided the group in two. Some of us continued with the work of clearing the site, which included cutting back the undergrowth in the courtyard and carting out waste around the perimeter so that scaffolding could be erected against the main wall. Meanwhile, the other half of the team began recording, in earnest, the existing condition of the building. In hindsight we all wished we had had a few days to achieve this before the building works commenced, for no sooner had we started drawing up plans of doors and windows than they were being removed and stacked off-site. A few of these had fine carvings of natural and animal motifs with glass panes in between, held in place by sets of wooden pegs (*fig. 4&5*).

On inspection, it seemed that much of the wood used in the structural and decorative parts of the building was a type of pine. In the example of the doors that formed the partitions to each room, this had been treated with a red burgundy varnish. Around the courtyard this colour had all but faded with exposure to the elements, although evidence of it was found as the joinery was dismantled. These outer doors were hinged into a block laid against the ground sill-joists. This formed a threshold between rooms and courtyard, which was sunk lower by a foot or more (*fig. 9*). Each ground sill-joists laid between sets of posts was hollow, with regular ventilation

holes in the shape of gourds or fans to allow the internal circulation of air and prevent rot. As with the majority of traditional Chinese houses, footings were built directly onto the ground with no basement or underground foundations. To take the weight of the upper stories a series of 'drum' stones were laid out on the floor, a couple of inches proud of the surface, to pick up the posts in the frame structure (*mugoujia jiegou*). Where these were incorporated into the external masonry, the load is carried independently from the walls, which only support their own weight. This timber structure therefore forms the primary support for the colossal weight of roof tiles.

Leading on from this observation, we could see why the roof was sinking in a number of places, where beams were in the process of rotting away. The most apparent damage had occurred where a hole in the tiles above the staircase had leaked water onto a major timber post and the surrounding joinery (*fig. 6*). At this point the roof was no longer being supported, requiring the main loading of roof tiles to be removed and the remaining roof structure to be underpinned with steel brackets.

A similar effect could be seen around the first floor balcony posts, whose rounded 'banister like' appearance was regarded as a suspicious European influence by our Chinese colleagues (*fig. 11*). These carved columns supported the most intricate woodwork on the site, a lattice guard rail (*fig. 12*), fixed into position with independent/separate tenons. Where the base of each column met the floorboards, it was supported off one of the main joists (*fig. 13 & 16*) cantilevered out to meet it; however, in one case the base had rotted at the end grain; what in European carpentry would have been capped with tar or lead to stop the capillary action of water had been left exposed, with the result that it was disintegrating a millimetre at a time under the weight of the roof (*fig. 15*). Judging by the archaeology of packers it seemed that problem had been a persistent one after construction, and had been mitigated by wedging one packer after another between the joist and the column.

The laborious process of removing all the roof tiles, gave us a first hand view of how the battens, purlins and rafters worked together. In the absence of a truss, all roof members transferred their loads through a series of staggered joists (*linag*) and struts (*guazhu*), and onto the main structural pillars (*zhu*) (*fig. 21*). All timber members were left in the round with the exception of the primary columns and decorated posts around the courtyard balcony. Lengthwise the purlins (*lin or hengtiao*) connect each of these bays together, with the battens on top (*fig. 24*).

Whilst balanced on precarious scaffolding boards, the various clay skins of the roof tiles became recognisable; a series of flat rectangular tiles spanned the gaps between the battens to form a continuous flat surface, coated by the builders with a grey clay wash after their removal. On top of this layer was laid semi-cylindrical clay tiles, convex side up to overlap with similar though slightly larger tiles laid concave side up. At the eaves, closure tiles with various types of moulding decoration were used (*fig. 19 & 20*). Ridge cover units were sets of stacked flat tiles that finished at either end with a figurative tile moulded in the shape of one or more animals. Apart from mortar used along the ridge, there was nothing to hold the tiles in place apart from their weight and manner of construction. Closer inspection of the underside of many of the tiles revealed various kinds of maker's marks, flags with the swastika, Chinese letters and Buddhist symbols.

With such a range of decorative mouldings in clay and wood, as well as the order of the structure to understand, most of our free hours were spent drawing and photographing our building. Gradually more and more came to be revealed as the building was dismantled into thousands of jigsaw pieces. After we left, we all wondered if the builders would remember how to put them back together again!

C O N V E R S A T I O N S

During the course of the project there were numerous opportunities to discuss the work we were doing. From our first day on site there were groups of local residents who took time-off sitting about, cracking nuts, cleaning the carcasses of home-butchered livestock in the canal and afterwards washing in the very same water, to stare at the foreigners clambering over their roofs! A few wondered why we had travelled so far to see a 'poor' part of China, and spend so long in one place. One old lady who lived beneath the enormous red star incorporated into the white plaster work of her house like an inflamed tattoo, was keen to retell her memories of the building in its time as a communist field hospital (*fig. 25*). She described the different diseases, such as cholera and psychiatric complaints, and later produced a map of the hospital with these marked out (*fig. 26*). It revealed a storage room where an ancient wooden slide projector and a set of anatomical models were found.

On the second day of the project a conference was organised in which the contractor and a conservation adviser spoke to the volunteers about the philosophy and practice of conservation

in the local area. They showed us examples from other projects, including guiding us around a recently restored house, paid for by a businessman from Shanghai.

Questions about the kind of investment needed in restoring rather than demolishing historic buildings were raised, from which it emerged that comparatively little was spent on restoration, something in the region of £150,000 on a large courtyard house. This was explained by the fact that, as all land was owned by the government, only short 10-15 year leases were given on properties. To investors this meant their work on a house was only intended to last the duration of the tenancy, defeating the long-term conservation plan for the building. It was apparent in the restoration, where attempts to cut costs had led to less than adequate detailing, the use of unsuitable materials and stripped down features remoulded in a standard style that would not have been found in the original decoration.

Amongst the UK team, who were versed in preserving existing material, the removal of timberwork and its replacement with approximate substitutes appeared to divest the building of much of its historical value. The opportunity to put these views across came at the end of the project in a symposium organised by Prof. Xiaoming, where local officials and the head of the building firm also contributed their point of view to the discussion.

For all sides involved, there was a positive move to understand the different approaches as well as to demonstrate the value of each. The head of the building firm, who had projects across the town, brought his teams of joiners and carpenters to site over four days to give us an opportunity to learn different ways of shaping wood for construction (*fig. 27, 28 & 29*). To him this living tradition of craft was more important than the object, a view which seems to be shared in East Asia, especially since the Nara Document (1994) stipulated that there were different modes of preserving authenticity in every culture. This came to include the practice of many artistic forms from dance to building craft.

Under the direction of the master carpenter (*shifu*), a mock-up of a typical structure was put together to explain the types of members and joints. Volunteers were instructed in how to use traditional tools to achieve the hand finishes; as main timbers were first stripped of bark, then marked up with an ink-level, before adzes and planes were used to reduce it to the desired diameter. Similar processes were used to add decorative features to beams, with an even finer set of chisels and saws for the latticework joinery. In the house itself we only saw direct carving into the beams at the apex of the room at either end of the ridge beam (*fig. 21*). The latticework

decoration below the eaves in the courtyard had a very different appearance to our rectilinear patterns test panels, instead using a more complicated floral and figurative bas-relief.

As we worked, members of the press arrived from local and national media, keen to ask the same questions as our local neighbour. Why had we come to a small town like Tongli rather than a metropolis like Shanghai or Beijing? What did we think about its conservation methods? What was our motivation to come to China? Would the project have any wider impact? Everybody was given the chance to make a response to the cameras (*fig. 30*) – many suggesting the things that could be done differently to set a better precedent. My answer was the same as I gave to our elderly neighbour: the opportunity to step into the unknown, to shine through use rather than to rust unburnished. In the future biography of our building it was good to know that it would once again be inhabited.

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