Hakka Cultural Park

by Christine Hawley, Abigail Ashton, Andrew Porter, Moyang Yang (Metamode)
# Project Details

<table>
<thead>
<tr>
<th>Practice:</th>
<th>Metamode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designers:</td>
<td>Christine Hawley, Abigail Ashton, Andrew Porter, Moyang Yang. Hawley contributed to this project through Metamode, her collaborative practice with Porter and Ashton.</td>
</tr>
<tr>
<td>Title:</td>
<td>Hakka Cultural Park</td>
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<tr>
<td>Output type:</td>
<td>Design</td>
</tr>
<tr>
<td>Function:</td>
<td>Cultural centre, including museum, library, gallery, conference facility and landscaped grounds.</td>
</tr>
<tr>
<td>Location:</td>
<td>Heyuan City, Guangdong, China</td>
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<tr>
<td>Client:</td>
<td>First stage competition organiser: Central Government Agency China (2009); second stage competition organiser: Heyuan City Council (2010).</td>
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<tr>
<td>Awards:</td>
<td>First prize in first stage International Limited Architectural Competition (2009); first prize in second stage International Limited Architectural Competition (2010).</td>
</tr>
<tr>
<td>Other competitors:</td>
<td>IAPA PTY Consultants, Australia (second stage competitors).</td>
</tr>
<tr>
<td>Funding:</td>
<td>First stage: £30,000; second stage: £20,000.</td>
</tr>
<tr>
<td>Budget:</td>
<td>Not disclosed.</td>
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<tr>
<td>Area:</td>
<td>6,000m² building complex within a 500,000m² landscape.</td>
</tr>
<tr>
<td>Consultants:</td>
<td>Chinese Academy for Building Research (including structural, environmental and planning consultants). Professor Puay Peng Ho, Director of the Centre for Architectural Heritage Research, Chinese University of Hong Kong.</td>
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</tbody>
</table>
Statement about the Research Content and Process

Description
The Hakka Cultural Complex was an invited international two-stage competition to design a series of buildings that celebrated the culture of the Hakka clan. Originating from Northern China, the Hakka have now become the largest Chinese diaspora in the world. The project focused on the spatial understanding and representation of the Hakka migratory history through architectural heritage study and design research.

Questions
1. How can architectural language and space that reflected aspects of Hakka culture, from their migratory patterns to their written and spoken culture, be developed?
2. How can the scale and profile of the topography be used as a canvas to represent the complexity of Hakka history?

There are few examples of contemporary architectural design that attempt to integrate examples of Chinese social history and show their inextricable relationship to the land. The topography therefore became our research focus and a key component of design proposition.

Methods
1. Fieldwork, topographic survey and detailed analysis of site information.
2. Consultation with local ministry and regional government.
3. In-depth study of the Hakka culture, including language and writing, ethnic dress, agriculture, building forms and construction.
4. Historic and geographic research on the Hakka’s migratory patterns.

5. Design research into sustainable building and energy-saving solutions.

6. Diagramming, drawing, model-making and photography using analogue and digital means.

Dissemination

Exhibited in Shenzhen, China. Presented in international invited lectures/keynotes including in Hong Kong, Shenzhen, New York, Brisbane, Chiba, Aarhus, Perth and Sheffield.

Statement of Significance

The project won first prize twice with separate entries in two international competitions (1: commissioned by Central Government Agency, China; 2: commissioned by Heung City Council). Competitors included IAPA PTY Ltd Consultants, Australia; Urbanus Architects and GCA Architects, China. It has been the subject of 11 keynote addresses in Asia, Australia, the USA and the UK.
Introduction

In 2008 Heung City was awarded a grant to design and construction a building celebrating the history and the culture of the Hakka clan, one of the largest and most nomadic groups within the Asian continent. Cultural elements relating to this ethnic group were to be housed in three main pavilions, which contained an exhibition and reception space, library, gallery, museum and conference facility. The city allocated a 1km x 0.5km site on the northern outskirts of the city for the development of the project. Our project developed 6,000m² of cultural facilities that were both temporary and permanent, and aimed to celebrate all aspects of Hakka culture, from language and writing to music, architecture, agriculture and commercial trading.

An international jury awarded the initial submission first prize in the first competition, organised by the Chinese Central Government Agency, leading to its submission to the local City Council at Heung City, who rejected the scheme. The local jury disliked the lack of visibility and felt the design had little resonance with Hakka culture. We were then involved in considerable consultation with both the local ministry and representatives from the regional government who decided to stage a second invited competition. Our second competition entry also gained first prize.

Although it is only the final project that is described in detail in this document, it should be noted that considerable consultation was undertaken with the city council prior to this stage, creating an unusual process of research. As part of this research process, we prioritised examining information about the physical evidence of Hakka culture, such as the Toulu house, their methods of provision and defence, and the more ephemeral traditions of oral history and music. [fig.1]
Aims and Objectives

To integrate Hakka land use and culture into the design

The preliminary design was undertaken after initial fieldwork and survey information had been collected. The scale and topographical complexity of the site prompted decisions to cut and backfill the land in order to maintain visual continuity throughout the 1km corridor. The land was then used to create a formal representation of the migratory nature of the Hakka existence.

The landscape strategy was maintained from the original scheme. For the second competition entry additional historic information was gathered about migratory patterns, language and writing, ethnic dress, agriculture, traditional buildings and construction. This information was selectively abstracted and incorporated into the design.

To represent the Hakka migratory patterns physically through the landscape

There are a myriad of ethnic groups that populate China and every 10 years the Chinese government awards a grant to a selected city to design and construct commemorative buildings that reflect and display the richness and complexity of one of the ethnic groups indigenous to the area.

Our research on the Hakka’s nomadic tradition and their historic association with the land influenced a design strategy that would situate the architecture both within and over the entire length of the site. The full 500,000m² of land became as critical as the architecture. [fig. 2 & 3]

To use energy-saving design methods

The first proposal incorporated a clear energy-saving strategy: the thermal consistency of the ground was used, with parts of the buildings sunk into an excavated landscape. However, this proposal was amended because it did not meet the client’s requirement for building visibility.

View of site from the north: 1st stage competition, model
Hakka Cultural Park

国客家人在世界上主要分布在15个国家和地区而设置15个节点，各节点的指针方向均为主心向向世界各地。大大小小的休息平台作为舞台小情节点，有的还可以拉动收缩的走站等。

在代表15个主要国家的相应节点上，我们希望把客家文化在相应国家的活动，以雕刻的方式表现出来。
Questions

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Context

Hakka nomadic culture

The Hakka (a sub-group of the Han Chinese) are one of the largest cultural groups in China. They originally emanated from the northern plains of China, then travelled south to settle first in the central plains and finally in the southern provinces. Their nomadic lifestyle established the distinctive Toulu settlements. The Hakka are the most widely travelled Chinese group who have geographically dispersed to create a diaspora of around 80 million. The majority of Chinese communities established in other countries are of Hakka origin. [fig. 4 & 5]

Hakka housing typology

Originally the Hakka did not have a military culture, but they gradually needed to defend the territory they occupied. As their movement across China became more extensive, the land became inextricably linked to their folkloric references. The iconic formal
Landscape context

Hakka

A Longji terrace in Longsheng county, Guilin, China. Image in the public domain via author Anna Frodesiak.
identifications to the Hakka are the circular Toulu house and the ubiquitous terracing used primarily for the cultivation of rice. Both the geometries of the terrace and the orderly circular form of the community house were used as reference throughout the strategic plan. The organisation of these community houses (one of which could house up to 60 families) was always the same. The stratified organisation sheltered livestock on the lowest level, with the second level used for the storage of grain, and living accommodation for the families on the third and sometimes fourth levels. The circular form of the structure encompassed a central courtyard always used for communal gatherings, either left empty or having a cluster of communal buildings around. The houses were designed to resemble fortresses with only one point of access at ground level and a minimum of opening at higher level as a form of defence. The houses were always made from materials available locally, usually rammed earth and timber. The land gave them all the resources to survive. [fig. 6 & 7]

**Architecture as a symbolic vehicle for heritage representation**

The project can be seen in the context of other contemporary public buildings and landscapes that physically embody cultural representations in order to communicate particular heritage narratives.

**Methods**

Throughout this research and design process, the buildings and the landscape were understood as being in an interdependent relationship, where the buildings and their context provided the opportunity to investigate, reflect on and communicate a complex and sophisticated culture through architecture.

**Fieldwork, topographic survey and detailed analysis of site information**

In-depth site analysis informed both design schemes. In the second competition entry in particular, all the buildings were positioned at ground level and the entrance pavilion was situated to allow the obligatory cavalcade to arrive, the dignitaries to process and speeches to be made. The viewing frames were still kept as they established a unique link between the architecture and the vistas of the land, representing the topographic context of Hakka culture. [fig. 8 & 9]
Formal courtyard geometry of hakka dwelling. Chengqi lou
Image in the public domain via Creative Commons

Formal courtyard geometry of hakka dwelling.
Tianluokeng in Southwest Fujian province
Image in the public domain via Creative Commons

Formal courtyard geometry of hakka dwelling.
Qujang Village in Shuyang Town, Nanjing County, Fujian
Image in the public domain via Creative Commons
Illustration of modified terrain (overleaf)

Plan of the Exhibition and Museum building
Consultation with local ministry and regional government, and the Centre for Architectural Heritage Research

A series of meetings took place between the design team and representatives of the Heung City Council. These involved formal presentations followed by discussion where all the departmental representatives articulated their views. Central to these discussions were the different values that the local and central government placed on energy-saving design, versus the importance of the visibility of their investment. Economical means of construction were analysed, and through discussion it became clear that some aspects of traditional construction would be both appropriate and cost-effective. This historic information was provided through the archives and library of the Centre for Architectural Heritage Research at the Chinese University of Hong Kong.

In-depth study of the Hakka culture, including language and writing, ethnic dress, agriculture, traditional building forms and construction

Housing in landscape: The terrain was dramatically undulating, yet through the introduction of gradual terracing the land became more navigable and also served as a reminder of the Hakka’s agrarian past. Statistics showed that there are currently 26 areas in the world with settlements of over five thousand people originating from the Hakka clan. The circular motif of the Toulu house was used to depict these global settlements and 26 were constructed in the ground to become points of information and vista platforms situated along the route that connected one building to the next. These circular vantage points were designed to have a proportional size that corresponded to the size of each global settlement; a cursor within the circle pointed to the geographic location of each diaspora. Following the journey through the site, these circular interventions would offer modest facilities such as seating and shelter, and also inform the visitor of something of the Hakka’s historic journeys.

The second building, the exhibition and museum space, was now designed as a circular structure, an homage to the form of the Hakka houses (Toulou). Although the form of the envelope was a clear reflection of the historic geometry, the internal arrangement rejected the traditional organisation that relied on the dominance of radial geometry. [fig.10]

Procession/celebration: There was a need to make the second iteration of the scheme more celebratory and with direct reference to the Hakka’s ethnic cultural history. The dilemma for any non-local architect was that references to localism could degenerate into naïve stylistic pastiche; therefore a judgement needed to be made as to how the introduction of symbolic associations could avoid this problem. The original landscape strategy from the 1st stage competition entry was retained and was considered a defining component of the scheme.
Model view of the Exhibition and Museum building

Analysis of the major global Hakka diaspora through diagrams

Diagram of paths
Historic and geographic research on the Hakka's migratory patterns

To establish a solid research framework for the project we investigated the relationship of the Hakka to the land and its importance as the core of their sustainability. The land was not only a source of food (they were primarily a farming community), but was used nomadically and opportunistically as they moved from one grazing area and cultivation to another. [fig. 11 & 12]

The proposed building and landscape circulation paths and views integrated our research into the migrating patterns of the Hakka diaspora. The building had one opening for the entrance, and a series of small apertures that pierced the outer skin. Internally a micro-route mirrored the paths through the landscape and at each change of direction a platform and aperture offered views across the landscape and the city, allowing a different scale of contextual relationship to be understood. The central core of the space was a void with light penetrating from above; as the route ascended, it finally emerged on a rooftop platform allowing the visitor a panoramic view and the opportunity to reconcile the fragmentary vistas of the journey. [fig. 13–16]

Design research into sustainable building and energy-saving solutions

A series of design and material research tests were undertaken in order to determine the building envelope. The building was constructed with two skins, the inner wall built in traditional fashion from rammed earth and the outer skin a light metal foil onto which was printed linguistic notation. The rammed earth construction would use local soils, have low embodied energy and contribute to the building's overall energy efficiency and climatic comfort (high thermal mass and humidity regulation). The re-modelling of the landscape would provide sufficient quantities of soil to construct the walls without incurring additional cost for either material or transportation. Information about construction methods was gathered from Tsang Tai Uk, the walled Hakka village in the New Territories, Hong Kong; examples of Hakka houses in Guangdong; and the early houses built in the Shenzhen Administrative area. In addition, we were able to access the Chinese University of Hong Kong archives. [fig. 17 & 18]

Diagramming, drawing, model-making and photography using analogue and digital means

While undertaking typological research on the Toulou house, we constructed analogous diagrams and physical artefacts as tangible reminders of not only Hakka history, but also the land and its more ephemeral cultural resonance. Diagramming was a means to integrate cultural representations physically within the landscape. The Hakka were a nomadic clan and the site was to be carved to represent the journeys they undertook across not only China but the entire globe.
13
Plans to lower ground level and entrance and to show terracing around the building

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Plans of levels 1 and 2
15
Plans of level 3
and the roof

16
Axonometric
showing all levels
The circular vantage point within the landscape: 1st stage competition, model

Gallery sunk into landscape: 1st stage competition, model
Printed foil façade for Entry Pavilion, Museum and Library building

Aerial view of the Entrance pavilion
Envelope:
The outer printed metal foil visually communicates the language and dialect that existed across the Hakka nation. This foil-printed technique was repeated in the first and third buildings and became a series of motifs that referenced different aspects of the Hakka’s linguistic culture. The symbols were printed at a scale that could only be read at a distance and became deliberately abstract at close quarters. This double-skin construction, with the outer perforated layer allowed interstitial lighting to be used nocturnally, enabled the cultural centre to have a visual presence at night with surfaces that could be read mnemonically. [fig. 19]

Final design:
Each of the main buildings on the site – the entrance pavilion, the museum, the gallery, the library and conference centre – is positioned on a line that runs at the mid-point of the site from north to south. From each building there was a clear view to the next and previous building. The library and conference centre is bifurcated to enable uninterrupted views to a belvedere. Positioned at the highest point of the site, the belvedere provides a viewing platform from which the observer can look back over the three main buildings, the landscape and the city beyond. Each building, including the belvedere, has a viewing frame positioned to visually link one building to the next and to allow the observer the opportunity to contextualise not only the individual pieces of architecture but also their sequence within the landscape [fig. 2 & 3].

The final building in the sequence, the library, was divided into a local exhibition space, the library and administration. The building repeated thematically the notion of glimpsed views and layers, with the final being a framed view of the belvedere. [fig. 20–32]
Model of the Entrance pavilion
Entrance portal: viewing frame
Interior plan level 1 and 2
Interior plan level 4 and roof plan
Exploded axonometric showing all levels

Plan of the Library and Convention Centre
Model view of the Library and Convention Centre
Auditorium at level 2

Typical levels 4 and 5
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Exploded axonometric of all levels

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Belvedere diagram

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Plans, section and elevation of the Belvedere
Dissemination

Consultation

Series of consultation and discussion events at Heung City Council and Centre for Architectural Heritage Research (CAHR) at the Chinese University Hong Kong (CHUK).

Exhibition


Lectures

Hong Kong Institute of Architects, 2009.
Hong Kong University, 2009.
Chiba University Architecture School, Japan, 2010.
Cooper Union School of Architecture, New York, 2010.
Brisbane School of Architecture, Australia, 2010.
Chinese University of Hong Kong, 2010 and 2011.
Perth University School of Architecture, Australia, 2012.
Sheffield University School of Architecture, 2012.
Aarhus School of Architecture, Denmark, 2012.
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Gorchakov’s Wish
by Kreider + O’Leary

Video Shakkei
by Kreider + O’Leary

Megaframe
by Dirk Krolikowski
(Rogers Stirk Harbour
+ Partners)

Seasons Through the
Looking Glass
by Cj Lim

Agropolis
by Mam

Chong Qing Nan Lu Towers
by Mam

ProtoRobotic FOAMing
by Mam, Grymsdyke Farm
and REX|LAB

Banyoles Old Town
Refurbishment
by Mias Architects

Torre Baró Apartment
Building
by Mias Architects

Alzheimer’s Respite Centre
by Niall McLaughlin
Architects

Bishop Edward King Chapel
by Niall McLaughlin
Architects

Block N15 Façade,
Olympic Village
by Niall McLaughlin
Architects

Regeneration of
Birzeit Historic Centre
by Palestine Regeneration Team

PerFORM
by Protoarchitecture Lab

55/02
by sixteen*(makers)

Envirographic and
Techno Natures
by Smout Allen

Hydrological Infrastructures
by Smout Allen

Lunar Wood
by Smout Allen

Universal Tea Machine
by Smout Allen

British Exploratory
Land Archive
by Smout Allen
and Geoff Manaugh

101 Spinning Wardrobe
by Storp Weber Architects

Blind Spot House
by Storp Weber Architects

Green Belt Movement
Teaching and Learning
Pavilion
by Patrick Weber

Modulating Light and Views
by Patrick Weber