

GRAFTING ON TRADITIONS

China's monotonous apartment blocks, deprived of any references to local building practices, provide standardized, characterless, and often transitory dwellings. Soviet typologies have become default templates despite their physical incompatibility in geographically unstable zones such as the mountainous regions of Sichuan. In 2008 when prefabricated concrete slabs collapsed in the infamous earthquake, flexible wood constructions demonstrated their superiority with smaller casualty counts and structural damages. Similarly, traditional architecture such as the Pagoda of Fogong Temple in Shanxi withstood centuries of earthquakes while newer constructions toppled. Ancient towns overcame disasters by learning from past failures, perfecting resilient construction methods through cumulative knowledge. Modern day China shuns references to historical destitution and instead, opts for an image of national prosperity through exorbitant constructions. Contemporary architecture abandons regional identity, preferring globalized styles that disregard traditional knowledge. Hence, it is my intention to explore the possibility of *grafting* modern construction techniques on traditional building practices to enhance structural integrity and feasibility, perpetuating local architecture through *additive transformation*.

To graft is to implant contemporary building materials onto an existing trunk of historical knowledge, uniting two seemingly disparate constituents to create a synergy effect. The following two examples illustrate the value of applying the grafting technique in terms of material and joinery improvement. In the Yongren county of Yunnan, rammed earth houses with strengthened walls were constructed after an earthquake destroyed the original structures in 2002. By assessing the merits and deficiencies of the soil and determining the appropriate additives through laboratorial analysis, a formula for a seismically stable structure was manufactured. Ultimately, the use of local materials and wisdom, complemented with a sensible application of high-tech equipment led to the erection of half-a-million square meters of strengthened housings by 2006. Beijing implemented a similar approach in the renewal of temples and Siheyuans (courtyard house). The Xiangshan temple, conceived in 516, underwent a major renovation in 2002 to replace wooden columns that degraded with weathering. Due to a multitude of issues including the material scarcity, transportation difficulty, and strength inconsistency, glulam composites of the same species were used to replace the original members. The joineries were reconstructed and optimized with additional metal reinforcements to prevent the unloading of compressive forces in adverse conditions. By integrating inventions with moderation, the grafting approach advocates for the evolution – instead of the revolution – of aesthetics, construction, and cultural identity.

Driven by rapid developments and a desire to promote patriotic imagery, China is saturated with pseudo-renewal projects that claim to prolong traditions, but instead appropriate mere facades of ancient aesthetics; abandoning authentic internal cohesion for external glamour. Qianmen in Beijing is one of many cases where modern construction methods, irrelevant of historical practices, were used to reconstruct demolished Hutongs. Luxury retails supplanted communal homes and concrete casts replaced wood joineries. Despite exterior appearances, historical rituals disappeared along with authentic structures. To limit the proliferation of superficial practices and globalized styles, the investigation seeks to promote and eventually normalize additive transformations. The research will culminate to a set of drawings consisting of renewed structural details, material composites, and unfolded time-line sections of historical modifications. By juxtaposing new interventions with preservation motifs, *a topic often explored in my works*, I aim to offer an alternative solution to wholesale demolition-and-reconstruction, prolonging historical aesthetics and construction methodologies. Hence, I believe that there is a necessity to study the integration of modern construction techniques in traditional practices; strengthening and preserving local architecture through invention.

ITINERARY

- Yunnan – Modern rammed earth constructions [1 week]
- Beijing – Xiangshan temple, Qianmen luxury district, Shichahai bar district [2 weeks]
- Sichuan – Post-earthquake modifications to damaged wooden dwellings [1 week]
- Lijiang – Remodeled Ancient Town (Gucheng) [3 days]
- Shanxi – The Hanging Temple, Fuoguang Temple, Pagoda of Fogong Temple [1 week]
- Fujian – Renewal of ancient Tulou Dwellings [3 days]
- Zhouzhuang – Post-flood enhancements of the water town [1 week]



8 Weeks
 Flight: \$2000
 Train: \$1500
 Hotels: \$100*56 = \$5600
 Food: \$600