

RECOVERY OF THE TARIMI MANSIONS FROM THE FLOOD OF 2008, TARIM, YEMEN

Pamela Jerome

Theme 4: Conservation and Development of Human Settlements and Cultural Landscapes
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Abstract

Tarim in Wadi Hadhramaut, Yemen is one of the three main cities in the valley, along with Seyoun, the regional capital, and Shibam, a World Heritage Site. Well known for its iconic 50-m tall mud-brick al-Muhdhar minaret, Tarim is also significant for its three important historic cemeteries, manuscript library, and its collection of eclectic mansions dating from the 1870s through the 1930s.

On 23-24 October 2008, heavy rains resulted in devastating flash floods that destroyed over 5,000 mud-brick structures in the Hadhramaut Valley. Although only the eastern extremity of Tarim was affected, the mansions, many of which were already in poor condition due to abandonment, suffered greatly from the prolonged downpours. Since their expropriation in the early 1970s by the then-Marxist government of the former People's Democratic Republic of Yemen, until their return to their rightful owners following the civil war that united north and south, these buildings lacked cyclical maintenance, became "white elephants," and underwent demolition by neglect. The Tarimi Mansions Preservation Project's documentation-training program worked from 2000-08 to record the significant abandoned mansions, as well as prepared two feasibility studies for their adaptive reuse.

Because of the flood, the Prince Claus Fund for Culture and Development and Yemen's Social Fund for Development provided emergency funding in 2009-2012 to conserve the exteriors of ten of the mansions, thereby mothballing them until adaptive-reuse functions can be agreed upon with stakeholders. In addition, Tarim was also selected to be the 2010 Islamic Cultural Capital, and simultaneously with our work, the Ministry of Culture restored additional mansion exteriors, so that a total of 17 were preserved. Using the impetus from these events, a Tentative List dossier is also being prepared based on Tarim's role in the spread of Islam throughout the Indian Ocean.

1. INTRODUCTION

Located in Wadi Hadhramaut of the former People's Democratic Republic of Yemen, Tarim, along with Seyoun, the regional capital, and Shibam, a World Heritage Site, is one of the three main cities in the valley. The area has been referred to as the valley of the mud-brick architecture (Damluji, 1992), and is well known for it tower houses, which in the case of Shibam, reach up to 12 stories in height.

Tarim, however, is full of massive mud-brick mansions, typically no taller than five stories. A city of over 100,000, Tarim is sited in the eastern end of the valley and is regarded as the spiritual capital of Wadi Hadhramaut. Its 50-meter tall mud-brick minaret, al-Muhdhar, is considered a monument of national importance and is depicted on the 500-Yemeni-rial bill. Other important mosques can be found throughout the city, including the 1,000-year-old Ba Allawi mosque, as well as various institutions of religious learning, particularly in Shafa'i jurisprudence. Three historic cemeteries are full

of saints and the source of devout pilgrimages. Parts of the city's fortification walls are still extant, as are forts and a customhouse. Tarim's al-Ahgaf Manuscript Library holds a wealth of significant hand-illuminated texts.

Tarim is also known for its ensemble of mansions dating from the 1870s through the 1930s. These villas reflect the ambitions of a Tarimi merchant class that made their fortunes in Southeast Asia and imported colonial styles from there, but are executed in the local construction technology of mud brick and lime-plaster finishes, and planned following the local typology in terms of spatial organization (Conlon and Jerome, 2011, pp. 56-57). Remarkably, at least 15 mansions in Tarim and two in Seyoun are attributable to the gentleman architect, Alawi Abu Bakr al-Kaf, one of only four historic architects whose names have been identified in Yemen.

1.1 Tarimi Mansions Preservation Project (TMPP)

Initial field seasons were executed in 1997 (Jerome, Chiari and Borelli, 1999) and 1999 (Borelli, 2001, p. 13 and 2007, p. 123; Lazio, 2000, pp. 6-7) with funding from the American Institute for Yemeni Studies (AIYS) and the American Institute of Architects. A preliminary feasibility study was conducted in the fall of 2000 (Jerome et al., 2003, p. 320) with the support of the Samuel H. Kress Foundation, a NYC-based NGO. This led to the establishment of the Tarimi Mansions Preservation Project (TMPP), which the author directed from 2002-2012 under the auspices of AIYS and Columbia University's Graduate School of Architecture, Planning and Preservation (GSAPP), with collaboration from Columbia University's Visual Media Center (1). The project was precipitated by listing the abandoned Tarimi mansions on the World Monuments Fund's (WMF) Watch List from 2000-2004. Twelve of the mansions were expropriated during the former Marxist government in the early 1970s and reused mainly as housing for the poor. The buildings languished from lack of cyclical maintenance, and by the time they were returned to their proper owners two decades later at the end of the civil war that saw the unification of the north and south, these mansions were in extremely poor condition (Jerome, Conlon, al-Radi and Crevello, 2003, pp. 319-320).

An initial assessment found four of the buildings beyond repair. Two of these have subsequently been demolished. The surviving abandoned buildings were in the process of demolition by neglect. Recognizing the significance of the abandoned mansions, the Yemeni Society for History and Heritage Protection (YSHHP), a local NGO, negotiated a long-term lease on al-'Ishshah palace, which has operated as a house museum and cultural center since 1997 with Muhammad al-Junied as its director (Conlon, Jerome and al-Radi 2003, p. 14).

The Tarimi Mansions Preservation Project, a documentation-training program, brought graduate students in historic preservation to work alongside colleagues from Yemen's General Organization of Antiquities and Museums (GOAM) and, during two of the seasons, undergraduate architecture students from the University of the Hadhramaut. Scaled AutoCAD drawings and photographic documentation were produced for seven of the significant abandoned villas (Conlon and Jerome, 2011, p. 58). Funding for these efforts came from Yemen's Social Fund for Development (SFD), a quasi-non-governmental organization, as well as the Samuel H. Kress Foundation, AIYS, and GSAPP. Additional grants from the US State Department's Ambassador's Fund for Cultural Preservation and SFD were used to reconstruct collapsed areas of al-'Ishshah palace (Conlon et al., 2003, p. 18), for which TMPP and its collaborators were awarded a Certificate of Outstanding Accomplishment by WMF in 2003. The Department of Cultural Heritage of UNESCO's Unit of Arab Countries also commissioned an updated feasibility study, completed in January of 2004. All of this work provided a means of raising the local, national and international community's awareness for the significance of these structures and Tarim as a whole.



Fig.1 The Hamtut after restoration of the exterior (credits: Pamela Jerome, 2010)

2. FLASH FLOOD OF 2008

From 23-24 October 2008, violent rains caused flash floods throughout the Hadhramaut province. Although the Hadhramaut region receives monsoon rains in the fall, greater intensity typically happens along the coast. However, flash floods are not unknown in Wadi Hadhramaut, and there is a traditional system of water management that takes advantage of periodic rainfall. What was unusual was that the deluge occurred throughout the wadi and its tributary valleys, causing several flash floods. 50 cm of rain fell in a 40-hour period in an area that normally receives a total of 7.5 cm annually. As a result, 3,000 to 5,000 buildings in the region were destroyed along with a human cost of approximately 200 lives.

In addition, the World Heritage Site of the Walled City of Shibam, which sits on a tell at a natural bottleneck in the wadi, was nearly lost due to the arrival of two floods within a few hours of each other. Fortunately, the floodwaters mostly damaged the perimeter wall. However, it acts as a retaining wall and the tallest buildings in the city are located at the edge of this wall; therefore, subsidence in the perimeter wall and its fill put these buildings at risk.

3. POST-FLOOD REMEDIATION

SFD retained the author to review damage resulting from the flood. From December 2008 through January 2009, the author assessed damage in the coastal city of Mukalla, and inland in Wadi Hadhramaut, Wadi Do'an and Wadi Sa. The author also prepared an assessment of the condition of the perimeter defensive wall of Shibam, which doubles as a retaining wall, at the request of UNESCO's World Heritage Centre (WHC). Reviewing damage throughout the wadis, some interesting patterns emerged from the evaluation that provided a deeper understanding of the effects of the commercialization of mud-brick construction practices (Jerome, 2010, pp. 54-55).



Fig.2 Al-Riyadh following restoration of the exterior (credits: Pamela Jerome, 2010)

Fig.3 Work in progress on the north elevation of the main building of al-'Ishshah Palace (credits: Mohammad al-Junied, 2011)

Although the plight of the Tarimi mansions was in the spotlight for over a decade, including research, publications, and presentations at local and international venues, the results were still disappointing in terms of physical repairs. With the exception of the reconstruction of the four collapsed areas of al-'Ishshah, and minor repairs to two other mansions, Hamtut and Dar al-Salam, very little had been accomplished in terms of physical interventions. Problems related to securing funds for their stabilization stemmed from issues of multiple private ownership for each villa, wherein numerous inheritors maintained rights, and the resulting lack of ability to negotiate reuse options for the structures. However, at an even more fundamental level, there is no national law in Yemen that provides for protection of private property as cultural heritage. These management hurdles were discussed in various meetings with local stakeholders, government officials, GTZ (Deutsche Gesellschaft für Technische Zusammenarbeit – now GIZ) colleagues working in the area on the Shibam Urban Development Project, and UNESCO.

Despite these obstacles, along with the designation of Tarim as Islamic Cultural Capital 2010, the flood finally provided the impetus for the stabilization of the mansions. The work performed thus far has succeeded in restoring the exteriors of many mansions, greatly enhancing the aesthetics of the city's historic core, as well as mothballing the abandoned villas until management solutions can be agreed upon and implemented.

3.1 Prince Claus Fund-Sponsored interventions

Soon after the flood, the Prince Claus Fund for Culture and Development approached the author to provide a proposal for the repair of significant cultural properties affected by the flood. A successful proposal was submitted seeking US \$35,000 to stabilize five of the abandoned al-Kaf family mansions, including Hamtut, al-'Ishshah, al-Riyadh, al-Fijr and Qasr Abd al-Rahman Bin Sheikh al-Kaf. Although the buildings had not been affected by flooding per se, the precarious condition of their roofs and foundations had been greatly worsened by the two-day rainstorm.

PCF divided the project into three contracts: a pilot project (Hamtut), second contract (al-'Ishshah and al-Riyadh), and

third contract (al-Fijr and Qasr Abd al-Rahman Bin Sheikh al-Kaf). Work on the Hamtut, involving structural repairs to foundations, replacement of rotted beams and lime-plaster waterproofing of roofs (2), was completed between January and March 2010. Repairs to al-Riyadh were similar in nature, and were accomplished from October 2010 through January 2011. For al-'Ishshah, a large complex of structures constructed over a minimum of four phases, maintenance involved the conservation of the rear elevations of the structures along the north side, including the north façade of the main palace, east gate, Dar Dawil, kitchen wing, and pigeonnaire/well structure, as the south, east and west façades of the main palace had already been restored with funding from the Ministry of Culture. The work commenced in February 2011 and was completed in June of the same year. The repairs to al-Fijr and Qasr Abd al-Rahman Bin Sheikh al-Kaf are scheduled to commence in September 2011. The latter suffered partial collapse of its main façade only two weeks after TMPP completed recording the building. Temporary shoring was installed in February 2007 following a GTZ-sponsored training workshop. The intent in this case is to use PCF money rebuild the corner, thus reinstating its monumental Neo-Classical façade.

Supervision of the work was accomplished by Muhammad al-Junied, responsible for accounting and distribution of the funds, and engineer Abdullaah al-Qadr performing construction administration with architect Yaqub Sa'id Musa'id as his assistant (The latter is a product of TMPP training) Master masons Saleh Ahmed Burayek and Ali Obed Mue-eddil are the contractors. The author also periodically reviews the work, although the current political situation has made travel to Yemen difficult over the past year for Westerners.

3.2 Social Fund For Development-Sponsored interventions

A prerequisite for PCF's grant was the provision of matching funds. The Social Fund for Development stepped in to meet this requirement. A proposal was prepared for SFD to support the repairs to five more mansions, including al-Muntazah, Salmanah, Ba Heta, Ba Hawash, and al-Hawar. With the exception of Ba Hawash, an al-Juneid family mansion, these buildings are also products of the prolific construction activities of the al-Kaf family. In addition, some of these mansions are occupied, either fully or partially. However, they are significant in terms of the 19th-century history of Tarim and are visually important to the overall context of the historic core of the city. Using the same team, work was been completed on al-Muntazah, Salmanah, Ba Hawash and al-Hawar.



Fig.4 Dar Dawil, the oldest building in al-'Ishshah complex, during restoration (credits: Mohammad al-Junied, 2011)

Fig.5 Qasr Abd al-Rahman Bin Sheikh al-Kaf in its current state with the collapsed southwest corner stabilized by a GTZ workshop in February 2007 (credits: Pamela Jerome, 2007)

3.3 Tarim As Islamic Cultural Capital 2010

In addition to grants from PCF and SFD, the Hadhramaut Flood Reconstruction funds provided US \$650,000 to perform repairs to the façades of eleven mansions, including Hamtut, Dar al-Salam, al-Riyadh, al-Munaysurah, al-'Ishshah, al-Fijr, Bait Ahmed Bin Abdallah Bin Aidarus Bil Faqih, Qasr al-Quba, al-Haddad, Attawahi, and al-Ranad. These endeavors were led by local architect, Mohammed Hamid al-Kaf, and his manager, Abdullah Mohammed al-Metafi. Their project was complimentary to the work implemented as a result of PCF and SFD joint funding, and dealt primarily with exterior restorations as part of the aesthetic enhancement of the city for the yearlong event.

PCF also provided funding for structural repairs to al-Muhdhar mosque, as well as for the rehabilitation of the commercial building façades surrounding the old souq at the center of the city, the perimeter walls of the three historic cemeteries, and the area of the camel races, which follow the traditional three-day pilgrimage to Qabr Hud, a site commemorating the pre-Islamic prophet, Hud to the east of the city.

Other work for the Islamic Cultural Capital event involved the demolition of al-Shatry, one of the mansions identified in both feasibility studies; however, the building was in very poor condition, and the resulting public square provided a much needed rehabilitation of the flood bed and a direct visual axial link to al-Muhdhar mosque. In addition, a small park was installed at the adjacent roundabout.

3.4 Tarim Proposed For Yemen's Tentative List

After meeting with Yemen's Minister of Culture, Dr. Mohammed Abu Bakr al-Muhflehi, in addition to the elderly statesman who is the chief advisor to Yemen's president on cultural affairs, Dr. Abd al-Karim al-Eryani, and the head of the cultural unit at SFD, Abdullah al-Dailami, it was agreed that the impetus from Tarim's selection as 2010 Islamic Cultural Capital should be used to propose the city for Yemen's Tentative List (TL). This concept was also reviewed with personnel from the World Heritage Centre in Paris, who agreed that there is potential.

There is, however, the lingering question of whether or not the World Heritage Committee would be willing to list another historic city in Yemen, given the current number of violations in both Sana'a and Zabid. However, unlike Zabid, there appears to be a real recognition and desire on the part of the Tarimis to valorize their city.

Whereas Zabid was listed as a center for Islamic learning, Tarim's Outstanding Universal Value (OUV) lies in its exportation of Islamic learning throughout the Indian Ocean region. Its ensemble of eclectic mansions, historic graveyards, manuscript library and historic mosques are the physical manifestations that represent a remarkable degree of integrity and authenticity. Tarim holds great reverence for Islamic visitors, particularly those from Southeast Asia. They flock to Tarim for religious studies or to seek out their ancestral graves, and many still hold strong ties to local families despite the distance of this diasporic population (Ho, 2006; Boxberger, 2002).

Two experts, Cristina Iamandi of Paris, France, and Sana'ani restoration architect, Abdullaah Hadrami, accompanied the author to the site in March 2010 to perform the initial assessment for WH site potential. The former has been commissioned by SFD to prepare the Tentative List nomination dossier. The latter works as a local independent consultant for SFD.

Concrete structures pose less than a 5% incursion of inappropriate construction to the built environment of the city. Although some of the new buildings can be lime-washed to die-out into the background, those with cantilevered balconies are particularly inappropriate. Predictably, the majority of the concrete structures are found along the city's entrance roads and tend to be commercial in nature.

Proposed legislation for the protection of historic cities was under review by Yemen's Prime Minister, and was heading for debate in parliament in April 2010. The outcome has yet to be finalized, and given the current political strife, it is difficult to imagine that cultural heritage preservation will be given priority. Once the political situation is settled, however, a presidential decree should be issued with soft regulations: an end to permissions for cantilevered concrete façades, a closer review of proposed concrete construction for aesthetic compatibility, and an end to demolition of mud-brick structures. These steps are required to halt the city's loss of integrity and maintain status quo for Tarim's TL Nomination.

4. CONCLUSION

After more than a decade of building community awareness and capacity-raising amongst NGOs, Tarim finds itself on the cusp of a renaissance. Discussions with local stakeholders and the Minister of Culture have concluded that there are many potential adaptive-reuse strategies for the abandoned mansions, including a much-needed larger home for the manuscript library (Qasr Abd al-Rahman Bin Sheikh al-Kaf), a computer-learning center and contemporary lending library (Dar Bin Sahel), an al-

Kaf family museum (Dar Muhdhar), and a traditional crafts center (al-Fijr). Al-Mudarrabah and Bir Yimani, two country estates considered beyond repair, have Neo-Classical garden follies in ruinous condition, but if stabilized, they would make excellent backdrops for traditional cultural events, such as poetry readings and musical performances. Al-Riyadh, Dar al-Salam and Hamtut are in close enough proximity to be operated under a single management as boutique hotels catering to Southeast Asian visitors.

However, the question still remains on how to resolve ownership issues, and this can perhaps be done through BOT (build, operate, transfer) agreements, wherein the government and/or private enterprises could take out

Notes

- (1) This paper is written in the memory of two deceased colleagues who worked with me over the years in Yemen: James Conlon (1972-2009), director of Columbia University's Visual Media Center, and Selma al-Radi (1939-2010), Research Fellow at New York University's Institute of Fine Arts.
- (2) It is interesting to note the use of lime plaster as waterproofing for roofs, parapets and ground-floor façades in the Wadi Hadhramaut. Depending on rains, this treatment can provide 10-20 years of water-repellent surfaces (Jerome, 2000, p. 145 and 2006, p. 148).

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EARTHEN ARCHITECTURE: HELPING THE VICTIMS OF THE 2007 FLOOD IN BANDIAGARA, MALI

Lassana Cissé, Thierry Joffroy

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Abstract

On 4 July 2007, the river crossing the city of Bandiagara overflowed due to unusually heavy rains. Within few minutes, 194 families (nearly 1,500 people), witnessed the devastation of all or part of their homes and means of subsistence. At that time, the Cultural Mission of Bandiagara and CRAterre were collaborating in the framework of the project “Renforcement des capacités locales pour une meilleure contribution du secteur de la construction au développement durable du pays dogon” (Reinforcement of local capacities for a better contribution of the construction sector to the sustainable development of Dogon country) financed by the European Union; they called upon institutions to enable them to include, as part of their activities, a contribution to the reconstruction of basic housing structures. The German organization “Misereor” and the Abbé Pierre Foundation, based in France, responded positively by funding the reconstruction of 20 houses for sheltering the most affected families.

The project was carried out in collaboration with the local Catholic Parish (Caritas), the municipality, the Flood Victims’ Association, district chiefs, and the prefecture. A Committee was established to carefully select the 20 recipient families, which would commit to collecting materials from their affected properties and participate in the construction-training activities implemented. This reconstruction project benefited from the results of an inventory of the building cultures in Dogon country that included the study of land plots, building typologies and construction techniques. On the basis of these principles, 20 basic houses were designed and built, each with a different plan, defined by the types of materials recovered, the priorities identified by the families and the possibilities for future extensions. The reconstruction process was an opportunity to demonstrate and train workers to master innovative flood-proof building techniques and combine them with traditional practices.

1. INTRODUCTION

Due to perceptible climatic change in the Sahel over the past decade, localized torrential rains have generated a sudden and brutal rise of waters never before seen on the Dogon Plateau (Garnier, Moles, Caimi, Gandreau, and Hofmann, 2011). On 4 July 2007, high waves burst the Yamé riverbed, a tributary of the River Niger, that passes through Bandiagara. In the town of Bandiagara, many families living along the Yamé River lost almost everything (homes, food stocks, materials, etc). In light of the seriousness of this catastrophe, volunteers brought emergency aid to ease the suffering of the victims. Within this framework, the Cultural Mission of Bandiagara and CRAterre launched the idea of a reconstruction program for the most affected families, which would complement efforts by the municipality to provide the affected families with land to build on (Cissé, Joffroy, Garnier, Chamodot, Cloquet and Fecher, 2010). After a pilot study (Léon house) that helped define the technical and financial

references, a project proposal was developed and submitted to Misereor through the Catholic parish, and then to the Abbé Pierre Foundation (Cissé, Dembele, Cornet, and Joffroy, 2011). The project became a reality when funds were obtained for the construction of houses for 20 families affected by the floods, which – together with the pilot study family – brought to 21 the number of beneficiary families.

The complementary activity for training workers on the building sites was financed by the European Union within the framework of the project “Reinforcement of local capacities for a better contribution of the construction sector to the sustainable development of Dogon Country”, which had been running since 2007. On the ground, the project brought together the skills of the Catholic parish through Caritas/APH, the Cultural Mission of Bandiagara, CRAterre and the architectural firm Audex. In order to follow-up the implementation of the project, Misereor