YEMEN'S ARCHITECTURAL HERITAGE UNDER THREAT

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This article is linked to the photographic exhibition at the SOAS Brunei Gallery, London, from 12 July until 23 September 2017. The exhibition was curated by the author and generously sponsored by the MBI Al Jaber Foundation with additional support from Gingko Library and the British-Yemeni Society.

It is accompanied by Professor Marchand's edited book, Architectural Heritage of Yemen: Buildings that Fill My Eye. Illustrated throughout with maps and colour photographs, the book's 21 chapters explore the astonishing variety of building styles and traditions that have evolved over millennia in this country of diverse and extraordinary terrains. For every copy sold, £5 is being donated directly to the UNHCR Yemen Emergency Appeal.

Readers need no reminder that Yemen possesses one of the world's finest treasure-troves of architecture. An extraordinary variety of building styles and traditions have evolved over millennia in this region of dramatic terrains, extreme climates and complex local histories. Generations of skilled craftspeople have deftly employed home-grown technologies and the natural materials-to-hand to create buildings, urban assemblages, gardens and landscapes that meld harmoniously with the contours and conditions of southern Arabia. In this way, each location has come to possess a distinct sense of place.

Three of Yemen's ancient cities – Shibam, Sana'a and Zabid – enjoy UNESCO World Heritage status, but each has been demoted in recent years to the 'in danger' list.² A number of other towns and building complexes around the country are on UNESCO's tentative list, including the archaeological site of Marib, the historic towns of Thula and Sa'ada, the Tahirid Amiriyya complex in Rada', and the town of Jibla with its fine Sulayhid structures and sturdy stone tower houses. Any progression of their applications for World Heritage status depends first and foremost on

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² Zabid was put on the UNESCO List of World Heritage Sites in Danger in 2009 and the architectural heritage of both Sanaa and Shibam were classified as 'in danger' in 2015.

the return of political stability and security to the country. Prospects for peace appear to be a long way off.³

Like architecture everywhere, Yemen's unique settlements and historic structures are subject to neglect, erosion, natural disaster and dismantling. For centuries, perhaps millennia, dressed stone blocks and the carved architectural elements of ancient structures have been recycled in the erection of new ones. This is exemplified by the reuse of pre-Islamic pillars in the prayer halls of early Islamic mosque or of carved or inscribed stones set in walls and lintels of later houses (see Figure 1). The pillaging of archaeological sites accelerated sharply, however, with the introduction of pick-up trucks and the ever-expanding network of roadways that link once-remote sites to illegal markets for southern Arabian antiquities.

Architecture has always been

³ For detailed reports on the political and economic situation in Yemen, see Brehony, N. 2016. 'The Year in Yemen', in The British-Yemeni Society Journal, Vol. 24, pp. 7–11; and see Yemen at the UN, February and March 2017 Reviews, published by the Sana'a Centre for Strategic Studies: http://sanaacenter.org/publications/item/78-yemen-at-the-un.html and http://sanaacenter.org/publications/item/90-yemen-at-the-un-march-2017-review.html

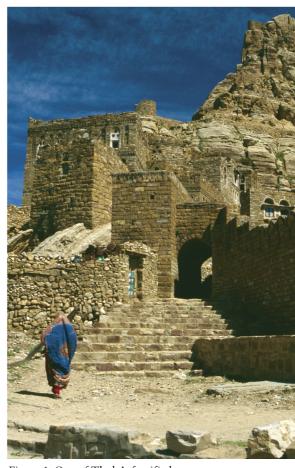


Figure 1. One of Thula's fortified gateways. An application for the town's inclusion on the UNESCO World Heritage List was submitted by the General Organisation for the Preservation of Historic Cities in 2002. (Photograph by T. H. J. Marchand.)



Figure 2. Fragments of a Himyarite carved stone incorporated in the wall of a contemporary dwelling in Dhafar. (Photograph by T. H. J. Marchand.)

prey, too, to the natural elements and tectonic forces. Yemen lies in a seismically active zone, and as recently as 1982 an earthquake measuring 6 on the Richter scale destroyed ancient adobe and stone buildings in the city of Dhamar and surrounding villages, causing considerable loss of life and injury. Less dramatically, wind and rain continually erode and gradually destabilize buildings, having their greatest impact on the various styles of earthen architecture that have evolved in Yemen. Mud construction is also affected by intense sunshine, which deteriorates the chopped straw and other organic matter that act as binders and reinforcing elements in mudbrick and puddled mud structures.

With the substitution of hand-drawn wells for motorised pumps that access far deeper reserves, water has come to play an especially destructive role in ancient cityscapes. Poorly installed supply and evacuation pipes and drainage and sewerage systems, for example, contribute significantly to damp rise in foundations and masonry walls and to the formation of rot and unhealthy fungi in mud structures and timber components. By contrast, a lack of water in a growing number of places throughout Yemen is having equally, if not more devastating impact on the sustainability of historic settlements. The trend of diminishing rainfall is exacerbated by the

inattention to irrigation channels, water tanks and cisterns and by the exhaustion of existing ground-water sources through over-extraction through mechanised means. This has resulted in the desertion of towns and villages, and water experts have long been warning that Yemen's major cities face imminent threat of desiccation, including Sana'a.⁴

From the early 1970s onward, the historic cores of towns and cities witnessed considerable outmigration of their wealthy and middle-class families to new modern suburbs.⁵ Ancestral homes were abandoned or, as in the case of Old Sana'a, houses were partitioned and rented to newcomers who lacked the means (and incentive) to carry out necessary repairs and maintenance. In parallel with the departure of established families was a lasting wave of mass urban migration across country. Population explosion in cities was accompanied often unregulated rampant, construction, and within a short period many of Yemen's small towns and cities were transformed



Figure 3. A village in the Western Highlands with terraced agricultural fields and a step-cistern below. (Photograph by T. H. J. Marchand.)

⁴ Zeitoun, M., T. Allan, N. Al Aulaqi, A. Jabarin and H. Laamrani 2012. 'Water Demand Management in Yemen and Jordan: addressing power and interests', in *The Geographical Journal*, Vol. 178, No. 1, March 2012, pp. 54–66.

⁵ The exodus of established families from the Old City of Sana'a to the surrounding suburbs (and of village populations moving into to urban centres) commenced after North Yemen Civil War (1962–1970) and accelerated during the following decades.

into urban sprawl. This phenomenon has exerted enormous pressure on frail, typically antiquated infrastructures. As a result, modern neighbourhoods and business districts have engulfed historic cores or obliterated them altogether. Automobile traffic congests and pollutes the narrow streets of old quarters and rumbling trucks and heavy vehicles emit ground-borne vibrations that destabilise ancient structures.

For the most part, new homes, apartment blocks, office buildings, government ministries, schools, shops and mosques are constructed with steel, reinforced concrete and breezeblock. In a facile gesture to tradition, exteriors may be faced with a patterned veneer of stone or brick and punctuated with monotonous rows of garish-coloured *takhrim* fanlights set above uniform casement windows. The handcrafting of timber doors, window screens, fine *takhrim* and *qamariya* windows, architectural joinery and decorative features has been largely supplanted by mass-produced (often imported) fittings. Within the building sector, schooled architects and engineers have encroached upon the once-uncontested authority of traditional, site-trained master masons;⁶ and declining numbers of youth (especially in cities) take up apprenticeships in the trades, aspiring instead to become commercial traders or white-collar workers.⁷

Following the worldwide trend that began in Western nations during the nineteenth century, Yemen's workforce of skilled craftspeople is shrinking, and with them their hard-earned, hands-on knowledge of the properties and performance of traditional building materials also disappears. This poses a formidable threat to Yemen's long-term capacity for preserving and correctly conserving its historic structures and traditional ways of building and making. The situation is further aggravated by a severe shortage of available funding to carry out conservation work. The escalation in militarised conflict during the past two years has put a halt to most

⁶ See Marchand, T. H. J. 2001, Minaret Building and Apprenticeship in Yemen, Richmond, Surrey: Routledge-Curzon, pp. 237–8. When I worked as a labourer for the brothers Muhammad and Ahmad al-Maswari (Sana'a's renowned traditional minaret builders) in the late 1990s, they were confident of winning the commission to erect the minaret(s) for Sana'a's new great mosque, rumoured to be built in the near future. Instead, the Saleh Mosque, inaugurated in 2008, was built entirely of cast-in-place reinforced concrete, including its six 100-metre high minarets (see Qaed, S., 'Yemeni Landmarks: The Saleh Mosque', in The Yemen Times, published on 6 February 2014, http://www.yementimes.com/en/1753/report/3450/Yemeni-Landmarks-The-Saleh-Mosque.html

⁷ Marchand, T. H. J. 2001, p. 84.

externally financed projects; and because of Yemen's economic collapse, the majority of civil servants (roughly 25% of the country's workforce), including those employed in the heritage sector, have not received pay since August 2016.⁸

Indeed, the violent, hydra-headed conflict gripping the country menaces the very existence of Yemen's architectural heritage – as well as the lives, livelihoods and cultural traditions of its people. Since its start in March 2015, the Civil War has left many thousands of civilians dead and millions more displaced and on the brink of starvation, effectively turning Yemen into a failed nation state. The scale of destruction and human suffering has been exacerbated by the intervention of regional and international powers, most notably Saudi Arabia, the UAE, the US and the United Kingdom. Alongside the increase in the number of human casualties, the list of damaged and destroyed heritage sites grows.

While conflict and defence have contributed significantly to the history of design, town planning, and civil engineering throughout the region, 12 contemporary forms of warfare using high-powered weaponry have the capacity to reduce Yemen's precious architectural heritage to piles of rubble. Yemen's northern province of Sa'ada has been one of the worst hit regions, including its ancient provincial capital and surrounding villages of

⁸ Yemen at the UN, March 2017 Review, p. 10.

⁹ In February 2017, the Food and Agriculture Organization of the United Nations declared that 'Yemen is facing the largest food security emergency in the world'. See *Yemen at the UN* – February 2017 Review.

¹⁰ Since the start of the war in 2015, Britain has 'sold millions of pounds in defense equipment including planes to the Saudi military' and has been training Saudi forces. Mason, R. 'UK cluster bombs used in Yemen by Saudi Arabia, finds research', in *The Guardian*, 19 December 2016, https://www.theguardian.com/uk-news/2016/dec/18/uk-cluster-bombs-used-in-yemen-by-saudi-arabia-finds-research

¹¹ See Khalidi, L. 'Yemeni Heritage, Saudi Vandalism', in *The New York Times* on-line, 26 June 2015, https://www.nytimes.com/2015/06/27/opinion/yemeni-heritage-saudi-vandalism.html?_r=0; Craig, I. 'The Agony of Saada: U.S and Saudi bombs target Yemen's ancient heritage', in *The Intercept*, posted 16 November 2015, https://theintercept.com/2015/11/16/u-s-and-saudi-bombs-target-yemens-ancient-heritage; Simpson, St J., 2015. 'Destructions Now and Then: causes and effects', in *Mesopotamia: revista di archeologia, epigrafia e storia orientale antica*, L 2015, pp. 1–21, p. 2; Simpson, St J. 'The War In Yemen: World Heritage Under Assault', Special Report for *Unite4Heritage*; Alwly, A. 'How Much More Can Yemen's Heritage Sites Take', in *Al-Monitor: the pulse of the Middle East*, posted 6 March 2016, http://www.almonitor.com/pulse/en/originals/2016/03/yemen-civil-war-saudi-strikes-destroy-historical-buildings.html.

¹² Warburton, D. 1993. 'Defensive Architecture in Yemen', in Yemen Update, 33 (1993): 20-21.



Figure 4. Kawkaban city gates, destroyed by aerial bombardment carried out by the Saudi-led coalition. (Photograph by Sarah Rijziger, 2017.)

multi-storied *zabur*-style houses of rammed earth. Airstrikes on Sana'a have destroyed numerous buildings, including a terrace of medieval tower houses in the old city's al-Qasimi neighbourhood, killing residents. Highland mountain villages, including the fortified stone town of Kawkaban, were bombed, as were the Dhamar Regional Museum and the National Museum and pre-Islamic citadel in Ta'izz. Archaeological sites, including Marib, Sirwah and Baraqish have been damaged by airstrikes and gunfire.

Southern cities and villages, too, have been scarred by intense conflict. The battle of Aden in 2015 embroiled that city in fierce fighting between Huthi troops and those loyal to the incumbent President, leaving large parts of Aden in ruins. In the Hadhramaut, Islamic State claimed responsibility for a blast targeting government military troops stationed near the



Figure 5. The aftermath of aerial bombardments in the city of Sa'ada carried out by the Saudi-led coalition forces. In the background are the green and white domes of the twelfth-century al-Hadi Mosque, which suffered structural damage. (Photograph by Iona Craig, 2015.)

World Heritage City of Shibam, and al-Qaeda in the Arabian Peninsula (AQAP) demolished Sufi shrines in the coastal city of Mukalla, which they held hostage for more than a year. ¹³ Along the Red Sea, Mokha was the scene of intense fighting earlier this year between forces fighting on behalf of the internationally recognised government and the allied Huthi and pro-Saleh forces.

The above is a short list of sites and settlements afflicted by the conflict. Distressingly, news of the humanitarian disaster and of the tragic loss of material culture is failing to reach Western ears. For this reason I staged an exhibition aimed to raise awareness of Yemen's truly remarkable architectural heritage. The health and safety of Yemeni people needs to be the

priority of aid and development efforts,¹⁴ but protection of the country's built environment from the ravages of war is also essential for the eventual rebuilding of the economy and, more essentially, for preserving the spiritual and cultural identity of Yemenis. The identity of a people is inextricably entwined with their history and place.¹⁵

For further details about the exhibition, visit http://www.mbifoundation.com/events.asp



¹⁴ According to the UN Office for the Coordination of Humanitarian Affairs in February 2017, 'the conflict has left 18.8 million people – more than two thirds of the population – in need of humanitarian assistance. See Yemen at the UN – February 2017 Review.

¹⁵ See Al-Makaleh, N. and F. Al-Quraishi, 2017. 'Preservation of Cultural Heritage is the Preservation of Cultural Identity and Belonging', in T. Marchand (ed.) *Architectural Heritage of Yemen: Buildings that Fill My Eye*, London: Gingko Library, 2017, pp. 215–221.