URBAN PORTRAITS

Preserving the memory of modern architectural heritage in the United Arab Emirates

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Introduction

The United Arab Emirates (UAE), comparatively to European countries, is a relatively young nation. The country was established in 1971. The period after formation, or *etihad* as it locally known (1971–1991), saw the construction of a nation not just in geographical and political terms but also in physical shifts: cities and infrastructure formed where, once, there were small settlements and sometimes only desert. This period is within what Abu Dhabi Municipality refers to as the second main phase of the growth of Abu Dhabi, between 1969 and 1988. Abu Dhabi is currently undergoing its fifth stage.¹ Architecturally, the country is internationally recognized, defined by older architectural heritage such as the Qasr Al-Hosn, the royal palace in Abu Dhabi (1761), and the very new and extraordinary structures such as Burj Khalifa, Dubai (Skidmore, Owings & Merrill, 2010); Sheikh Zayed Desert Learning Centre, Al-Ain (Chalabi Architekten & Partner, 2013); and Opus Hotel, Dubai (Zaha Hadid Architects, 2020). The buildings from the post-etihad period can be categorized as ‘recent or modern’ architectural heritage. It is important for local communities to understand the value of these buildings in their neighbourhoods, not only from an architectural point of view in that they echo the design and construction practices of the time but also from a historical perspective, considering them as places engraved within the memories of the city dwellers, past and present. These memories intertwine with inhabitants’ personal attributes, traits, space usage, and perception. Over time, they accumulate complexity, creating layers of memory of place. In 2014, the architecture of this period was celebrated and acknowledged at the 1st National Pavilion UAE at the 14th International Exhibition of the Venice Architecture Biennale. The Pavilion responded to the Biennale’s curator, Rem Koolhaas, and charted 100 years of architecture in the UAE. The excitement of culturally and climatically aware architecture of the region, represented at the National Pavilion, provided the perfect platform to integrate architectural modern heritage, appreciation, awareness, and the research developed in the interior design studios by the authors at Zayed University, Abu Dhabi.

How can the design studio, in the learning environment, become a conduit for understanding the value of these buildings within the local community? This chapter answers the question with a series of case studies, varying from the introduction of adaptive reuse as a sustainable solution for modern heritage buildings, reproduction, and reinterpretation of existing façades to surveying these buildings in Abu Dhabi. The narratives provide a glimpse into the creative consciousness of young Emirati female designers, who are yet to play a role as future contributors of the growth and further development of their nation. The chapter describes adopted processes for developing different

methodologies to record the UAE's architectural modern heritage. The devised systems attempt to capture something beyond the metaphysical appearance of the structures by using different media such as photography, reproduction of building façades, and 3D scanning. How to preserve a memory of a city? How do you prolong its architectural identity in the consciousness of its inhabitants?

Context

The UAE is among the few nations to experience fast, pervasive economic growth and social change.² This was instigated by the oil and gas reserve discovery and the subsequent commercial revenues, leading to radical social and economic transformation. Since then, the country has undergone a rapid flow of transformation and has experienced international recognition since 1971. The modernization and globalization experienced across the country have rapidly altered lifestyles as society shifts from dependency on fishing and pearl diving to one with nearly the world's highest GDP per capita and with social benefits such as free health care and education.³ The local population, however, remains the minority in their own country: approximately 11% Emiratis to 88% expatriate as per 2014–2015 statistical data.⁴ It is this fast transformation of the nation and sudden injection of income, coupled with visionary leadership and a large influx of migrant workers, that has contributed to the development of infrastructure and the built environment. In the context of the UAE, the term 'modern architectural heritage' refers to the buildings constructed between the late 1960s and early 1990s. These buildings played an integral role in bringing modernity to the UAE, following the political union of the seven emirates in 1971. The buildings from this period are often overlooked, regarded as 'unimportant', sometimes described as 'old', 'tired', and in need of demolition to make space for new development. Their successors are the high-rise, glass tower buildings following the International Style, seen nowadays in many cities and neighbourhoods worldwide. Due to the rapid development, many modern architectural heritage buildings are undocumented, their memory remaining through oral history, mainly of their past inhabitants.

In the past two decades after the turn of the new millennium, the UAE has experienced various surges of interest in reviving architectural preservation. Some of these initiatives have included restoration projects such as that of the walled historic centre of Sharjah in 1990, followed by the creation of Sharjah Heritage area (an initiative instigated by the ruler of the Emirate of Sharjah)⁵ in addition to the protection and restoration of Al-Fahidi neighbourhood in Dubai (spearheaded by Rashad Mohamed Bukhash).⁶ Other initiatives launched by governmental bodies such as the Abu Dhabi Department of Tourism and Culture, directed by

Amel Chabbi and Hossam Mahdy,⁷ reflect an awareness of modern architectural heritage. Similarly, academic interest has fuelled publications such as the *Abu Dhabi Guide* by Pascal Menoret, documenting some of city's built environment between 1968 and 1992,⁸ work by Yasser Elsheshtawy,⁹ essays by George Katodrytis and Kevin Mitchell¹⁰ focusing on projects from the UAE, and the *Lest We Forget UAE* initiative, by Michele Bambling, documenting Emirati life and culture through a public collection of photographs, later published in a book series and several exhibitions.¹¹ All these initiatives planted seeds in the collective consciousness of the nation to increase awareness and instigate action, recently manifested in the last three UAE national pavilions at the Venice Biennale of Architecture: *Lest we Forget: Structures of Memory in the UAE* (2014), *Transformations: The Emirati National House* (2016), and *Lifescapes beyond Bigness* (2018).¹² Finally in 2019, the Ministry of Culture and Knowledge Development in partnership with Zayed University launched the Zayed Institute for Architecture, Heritage and the Arts.¹³

As active academics and architects who have lived and practiced in the region, the authors use available academic platforms to educate young Emirati designers, thus encouraging their voices and visions on the development and growth of their country. 90% of our students are female Emiratis. Despite their rich cultural backgrounds paired with the country's global and international setting, the majority of our students come from protected, sheltered environments. They join the programme with limited exposure to design and very basic, acquired, design skills yet with an extensive yearning to learn. We recognize an opportunity to merge design education and awareness of local culture and the built environment as a way of learning or gathering meaningful research. The presented case studies were all conducted at the College of Art and Creative Enterprises at Zayed University, Abu Dhabi Campus. Their scopes vary and draw from classroom initiatives, field studies, and research endeavours aiming to understand why buildings from this period are worth studying, recording, and possibly preserving. Design studios, in the learning environment, can become a conduit to discover the meaning of these buildings. This is demonstrated in two approaches: first, by illustrating a series of case studies of adaptive-reuse design proposals for buildings in Abu Dhabi and, second, by developing different methodologies for recording the UAE's architectural modern heritage.

Preservation through adaptive reuse

The concept of adaptive reuse in architecture in Europe and North America is not new; rather, allowing a building to adapt to its new context is common practice. Brooker and Stone define the term 'adaptive reuse' as follows:

The function is the most obvious change, but other alterations may be made to the building itself such as the circulation route, the orientation, the relationships between spaces; additions may be built and other areas may be demolished.¹⁴

There are plenty of examples throughout history of re-appropriating the use of a building. For example, Musée d'Orsay in Paris, originally designed as a railway station, transformed into a museum – likewise, Tate Modern in London, from a coal power station to a contemporary art museum. According to Bie Plevoets and Koenraad Van Cleempoel, the theoretical approach to adaptive reuse was established in the nineteenth century when Eugène Emmanuel Viollet-le-Duc “recognized adaptive reuse as a way to preserve historic monuments”.¹⁵ The approach in the modern context celebrates the architectural or historical merits of a building and repackages it to become a part of the life of the community. Peter A. Bullen even argues that the approach also has financial and sustainability merits.¹⁶

The concept of adaptive reuse in UAE architecture and its built environment is still a new ‘ideology’. Until very recently, buildings tended to have a lifespan of 30 to 40 years before being demolished and replaced by newer, more ‘trendy’ structures. One example of this phenomenon is the ADNOC (a national oil company) residences and headquarters complex. The building was a landmark designed by Constantine D. Kapsambelis & Associates. A concrete prefabricated structure often compared to the Watergate complex in Washington, DC – designed by Luigi Moretti with Corning, Moore, Elmore & Fischer (1962–1971) – for its use of semicircular form and its volumes of concrete verging on brutalism. The building marks the western start of the corniche in the city of Abu Dhabi, and construction was completed in 1977. By 2009, one of the semicircular structures was already demolished, and the complete flattening of the complex culminated in summer 2018 when it was replaced by the current tallest tower in Abu Dhabi, measuring 342 metres and featuring 76 floors. In complete contrast, the Watergate complex, completed just six years before in 1971, is still standing, remains extensively used, and has become part of American architectural history.

This timeframe of development, between 1971–1990, is relatively short when compared to many European and even North American cities yet nevertheless important to document and preserve as it constitutes part the young’s nation history. The projects implemented in class were sought as mediums to inform the young generation on the importance and relevance of adaptive reuse, introduce them to concepts of adapting and retrofitting, and engage them in more sustainable approaches to designing their built environments. As educators, we work towards increasing awareness and emphasizing the historical importance of these

structures by engaging students in a series of afterlife, design-activity scenarios. The adopted exercise produced a series of case studies of adaptive reuse design proposals for prominent buildings in Abu Dhabi. The buildings included the following: the Abu Dhabi Bus Terminal by Bulgarproject, 1989 (Case Study 1), aforementioned ADNOC residential buildings by Constantine D. Kapsambelis & Associates, 1977 (Case Study 2), and a few abandoned modern 'ruins' (Case Study 3). Through the students' projects, the design investigations explore a series of 'afterlife' possibilities for these buildings, showcasing the pragmatic and the bizarre, the incredible and the poetic.

Case study 1: The Abu Dhabi bus terminal

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The main bus terminal of Abu Dhabi was built in 1986. It was the first major work by the Bulgarian architecture firm Bulgarproject. ▲ Located in the heart of Abu Dhabi, it serves the bus networks within the emirate of Abu Dhabi and routes to the other emirates. In an article published by *The National* newspaper in 2012, "In a Growing City Like Abu Dhabi, What Makes a Building Worth Keeping?", the building has been described by architect Deborah Bentley as "the big green giant of Abu Dhabi [which] is either loved or hated but could be revitalised for the 21st century without losing its heritage value".¹⁷

Located at the intersection of Hazza Bin Zayed Road and Muroor Road, the terminal consists of two floors; the ground floor comprises a huge waiting hall with seats, small derelict shops, a cafeteria, ticket machines, reception, male prayer room, and toilets. On the first floor, there is a row of offices no longer occupied. The offices lead to an empty dark hall and dead or underused spaces, a restaurant, and a former wedding hall. The internal space of the building is vast and dramatic. At the moment, the main purpose for entering the bus station hall is for customers to purchase bus tickets, use the public washrooms, and take a shortcut from the main boulevard running parallel to the station and the adjacent shopping mall. Ironically, the outside areas – including the bus platforms, taxi stands, minibus stops, and public gardens – are more popular with visitors than the interior space. This is an interesting phenomenon that exists despite the extreme temperature in the summer months. In spring 2018, students surveyed the building to track the visitors' trajectories, monitoring directions, speed, and movement through the space. Their findings revealed physical occupation of the hall of some forgotten spaces, such as the wedding hall located on the first floor, and niches providing sanctuary to visitors. The students concluded that the main users are low-income workers travelling between emirates and drivers for the buses and taxis using the station's facilities. Student design proposals explored the spaces on the upper floor as these were the most under-used. Their design proposals included instigators of new activities such as coffee

areas, libraries, screening areas, and gallery spaces making the station a 'destination', a place to visit, and not just a space to walk through. The longitudinal nature of the building inspired long sections from the students showing the horizontality of the spaces and the interconnected verticality between levels. This typology of drawing allowed students to devise 'narratives' that occurred within and that interacted with the activities outside and in neighbouring buildings: the idea was to create new 'places' within the city. Proposals included reading facilities, public exhibition spaces, sculpture parks, and indoor gardens reminiscent of Rafael Moneo's Madrid Atocha railway station (1992).

Case study 2: The ADNOC residential building, Abu Dhabi

Built in 1977, the Abu Dhabi National Oil Company (ADNOC) residential complex ● was designed by Constantine D. Kapsambelis & Associates.¹⁸ The 16-floor structure had a unique circular building typology that enveloped a private courtyard setting and took advantage of adjacent coastline views. The three semicircles had balconies, with both façades providing access to apartments and forming horizontal public circulation. The elevator towers located on the inner façade shaped the vertical circulation. A typical floor plan followed a modular system and was composed of 29 bays. The width of each apartment spanned from one façade to the other inhabitation, four-to-five bays of every floor. For many years, it was considered as one of Abu Dhabi's landmarks. In 2004, a new master plan proposed the construction of a 342-metre, 76-floor ADNOC tower building.¹⁹ One of the semicircles was demolished in 2009 to make room for the new headquarters tower, completed in 2015. The other sections were demolished in summer 2018. The students' projects took place as part of the intermediate interior design studio in fall 2015. The students proposed alternate programmatic scenarios that expanded vertically as well as horizontally. This approach challenged expected programmes that follow horizontal proposals by designing vertical expansions across floors, thus creating programmatic solutions and new spatial opportunities. The students explored the different architectural possibilities using and photographing large-scale physical models. As well as breaking through the physical boundaries, the programmatic proposals included traditional Emirati homes expanded across multi-storey residences, urban roof parks, fitness gyms with running tracks expressed and hanging outside the building, galleries, and shops – all responding to the form and structure of the existing buildings.

fig.1

Case study 3: Abu Dhabi 'ruins'

According to the Baroque imagination as interpreted by Caitlin DeSilvey and Tim Edensor, ruins are defined as "dwelling

fig.1 ADNOC residential complex in 2015, demolished in 2019, Abu Dhabi
(Photos: Deborah Bentley, 2015. Reuse not permitted).

on the melancholic power of transience and decay”.²⁰ The term ‘ruins’ is often used to describe the architectural remnants of past civilizations. For a country as young as the UAE, it is very difficult to contextualize the term as some would argue it is not old enough to have ruins. This is in context of UAE’s urban cities established after the unification of the emirates in 1971. The country has traces of ancient structures and archaeological sites that testify to the presence of various ancient civilizations, such as the Iron Age building and burial grounds at Jebel Buhais as well as the Hafit period beehive tomb at Jebel Hafit.²¹ Edensor provides a great description of ruins as “exemplary alternative sites of memory”.²² This definition fits perfectly to describe the site for our next case study. The term ‘ruins’ was used to describe the remains of an abandoned modernist structure strategically located on the eastern bank of the waterway in close proximity between Al-Maqta and Sheikh Zayed Bridges in Abu Dhabi, two of the three bridges that connect Abu Dhabi island to the mainland. There is hardly any documentation of the structure’s origin and use. It occupied an area of approximately 4,900 square metres. The majority of the bounded areas are exposed to the elements, and only one quarter is enclosed with wall structures. The student’s assignment was conducted as an independent research and design study as part of a senior interior design graduation project under the direct supervision of the authors. In the example represented, ● the student engaged in a photo documentation exercise, closely observing and recording activities occurring in and around the site. She also conducted a series of interviews with the older Emirati generation, people who remember using the place, before reconstructing

fig.2

Photos of 'ruins' by Raysa AlKetbi (Source: Zayed University. Reuse not permitted).

fig.2

a series of visuals, depicting the building's past functional and spatial use. The interviews unearthed how it was once one of the few wedding halls available in the capital. Weddings, like in most cultures, became vessels of memory and emotion. The structure was demolished in September 2016. The design proposal portrayed scenarios of alternate public use. Using scaffolding systems, a series of injected platforms – carefully offset from the main structure and ground surface – formed avenues for public use. Proposed functions were derived from the existing, mapped ones while proposed design charted scenarios for possible alternate uses such as study area, coffee shop, exhibition space, and contemplation zone. The project manifested itself by proposing an ephemeral structure which acts as a conduit to connect memories of the past, the present, and with an eye to the future. The interventions transcended the friction between the new spatial proposals and the old decaying structure. Even the existing rubble and old trash were respected and treated as urban 'relics' available for contemplation. The project impact extended beyond the studio and garnered more than the appreciation of peers when the student was selected to conduct a talk as part of a TED Talks satellite conference on technology, entertainment, and design at Zayed University's Dubai campus.²³ This approach prolongs the life of 'forgotten' and neglected pieces of history that are part of the rich tapestry of urban fabric.

Preservation through awareness, recording, and response

This section of the chapter presents the authors' adopted methodologies for recording the UAE's modern architectural heritage. The systems devised include not just a quantitative survey or photographic recollection of the buildings but an attempt to capture something beyond the physical appearance of the structures using different media. This allows for a deeper understanding of the buildings, whether pragmatic or poetic. The three methods represent approaches implemented at Zayed University by faculty and students to document and collect material about modern architectural heritage in the UAE.

Method 1: Image Stitching. The aim of the proposed technique is to produce seamless panoramic photographs showing the façade of a building. The photograph is composed of many photographs blended together to form a single image. This method is often referred to as digital 'image stitching':

Two images I^1 , I^2 capture different portions of the same scene, with an overlap region viewed in both images. The images should be stitched to generate a mosaic image I . A simple pasting of a left region from I^1 and a right region from I^2 produces visible artificial edges in the seam between the images, due to differences in camera gain, scene illumination or geometrical misalignments.²⁴

The process adopted by the authors involved digitally photographing a building's whole longitudinal façade by positioning the camera directly in front of the building at approximately 10–15 metres and at a 90-degree angle. After taking a photograph, the authors changed the position of the camera at various points along an imaginary line parallel to the building's façades. The images are then 'stitched' together in post-production using a digital manipulation software. During this stage, the software minimizes or completely eliminates the perspective distortion at the edge of images, an undesirable effect resulting from the camera's lens. The final image represents the building's façade as flat as possible, just like a photographic version of an architectural elevation. The photography of the façades will conjure a portrait record of the building. The method will not just systematically 'record' the existing structures but will also reveal a meaningful image of the site. The image captures an essence of the recent architectural past and its impact in the context of today's built environment. This is found through the materiality of the structures, their urban presence, the neighbouring buildings in the surroundings, and the people that use the structures. Each photographic composition is a representation of the subject within the site. Similar techniques, digital and non-digital, were used by artist Ed Ruscha in his 1973

and 2002 documentation of Hollywood Boulevard, *Then and Now*,²⁵ by photographers Bernd and Hilla Becher for their publication *Typologies of Industrial Buildings*²⁶ and in the main bulk of photography work by artist Andreas Gursky.

The research project strategy adopted by the authors was to photograph as many buildings as possible from the period between 1970 and 1992. The images reproduced were part of the exhibition at the National Pavilion UAE at the 14th Venice Architecture Biennale. The elevation photograph becomes a representation of reality; though, it does not look real as we are used to seeing the world with our eyes and through a lens distorted in perspective. The architectural drawings are meant to reproduce spatial concepts as intended or built. These elevational photographs, and in turn the orthogonal drawings generated from them, are the representation of reality as built. ● Richard Whitlock describes the elevational photographs as “if everything in it has come to attention and has also started to pay attention to us”.²⁷

fig.3

Method 2: Making. The second working method follows the aforementioned technique by photographing buildings' façades, but not necessarily of a longitudinal structure. The final

fig.3 Mzeer'ah shopping building, Liwa, Abu Dhabi (Photo: Marco Sosa, 2014.
Reuse not permitted).

product of this method is not just the visual representation of the façade but also its physical reproduction in the form of a relief model. The model showcases the modular system that composes the façade of the building.

Similar to Method 1, the camera is positioned directly at 90 degrees in front of the building, at approximately 10–15 metres, depending on the width of the street. Using digital manipulation software, the photograph is then ‘flattened’ by ridding it of the camera’s lens distortion. The newly flattened image of the building is then divided in an imaginary grid, and a scale is calculated using an architectural feature within the photograph and measured on site for exact dimensioning. This method is commonly referred to as photogrammetry,²⁸ wherein you take measurements from photographs. The resulting ‘gridded’ photograph is then imported into a Computer Aided Design (CAD) software. A scaled elevation of the building is then generated by working out the modular system composing the façade. The drawing is then used to reproduce a significant area of the elevation, using digital maker technology. In this instance, a laser cutting machine accurately shapes the chosen material (exhibition white matt board), producing all the necessary parts to assemble the façade. The point of the exercise

fig.4

Upper left: Obeid Al-Mazrui Building (Photo: Marco Sosa and Lina Ahmad, 2014).
Upper right: class activity. Below: model of the Obeid Al-Mazrui Building's façade
by Raysa AlKetbi (Source: Zayed University. Reuse not permitted)

is not to reproduce a physical representation of the façade but to educate by making the model. The participant learns about modular architecture and assembling by using digital fabrication technology and the advantage of modularity in construction. The observer of the piece gains an insight into the variety of architectural features and aesthetics used for construction at the time. These systems were not just following a logic around the construction of the structure, but they also afford a glimpse into how these buildings were designed in layers to adapt to the climate and culture of the region. The efficiency of construction and economy of materials coupled with a modernist aesthetic perfectly symbolizes the spirit of the age. The buildings have a physicality that is at once predominant in the contemporaneous Middle East and Gulf region and representative of a modernist 'tradition'. The outcome of this method is to produce a collection of material featuring an orthographic elevation drawing and a physical model of each façade. ●

fig.4

Method 3: Scanning. Over the past three decades, 3D digital reconstruction and 3D model augmentation have become commonly used methodologies to create accurate, as-built recordings of architectural structures and heritage sites.²⁹ This provides an understanding to the object physicality and its transfer into digital media and serves as a means to record and archive for future studies. The primary application of the above technology remains to date in the manufacturing industries; it has also been used in areas such as civil engineering, film special effects, forensic sciences, archaeology, and most recently within academic endeavours. Laser scanner technology varies in its type. While airborne platforms exist and are mainly used for landscape topography surveys,³⁰ the authors refer here to ground-based systems. The study involved the use of a FARO Focus 3D Laser Scanner device, which allows outdoor and indoor scanning operations. It enables high-speed, three-dimensional laser scanning for collating detailed measurement and qualitative documentation. The 3D scanner is able to generate accurate digital representations of interior and exterior spaces by assembling millions of 3D measurement points into a so-called 'point cloud'. The latter is a collection of XYZ coordinates that record the configuration of a space and which is stored and visualized by specific computer software. The accuracy stems from the recorded point density, known as scanning resolution.

Case study 4: Bait 15

Bait 15 is an artist-run studio and exhibition space, co-founded by three Emirati artists in 2017. It is located in a residential neighbourhood in downtown Abu Dhabi. The two-level residential villa was constructed in concrete in the 1980s and can be described as an 'ordinary' or 'typical' example of development in the family neighbourhoods. The house was previously owned by

Left: view of the exterior spaces. Right: 3D point-cloud render (Photo and render by Lina Ahmad and Marco Sosa. Reuse not permitted).

fig.5

Mohammed Al-Janahi, an Emirati actor famous from a popular UAE TV show in the 1970s and 1980s.³¹ Currently, it is occupied by three local artists who adapted the bedrooms and living spaces into art studios. Each bedroom acts as a private studio while the living room on the ground floor is a multifunctional space that constantly changes from exhibition to performance space to social gathering site. The house was selected as a case study for its importance in modern, local cultural history; it is rapidly becoming a successful working example of adaptive reuse in the UAE and of being a non-institutional, bottom-up cultural initiative. The latter is less common in the UAE context. The site was first surveyed and studied in the fall of 2018 with a group of intermediate interior design students from Zayed University over the span of three-and-a-half months. The students surveyed the spaces using traditional manual techniques and laser measuring devices as well as a basic form of analogue photogrammetry analysis, where measurement and distances between objects were extracted from photographs on the base of known dimensions of identifiable elements. The results recorded the main spatial characteristics of the house: width, depth, length, and height of various spaces in addition to the locations of doors, openings, and windows. These approaches, however, failed to capture the features' complex surfaces, various textures, and numerous scattered irregular objects – all constituting parts of the overall spatial aesthetic. The digital outcomes were visions of white, pristine, concrete structures which accurately described the basic building geometry, but they failed to portray the effects of ageing and material decay. The dense, complex information was simplified into generic, accurate-enough structures that sufficed for surveying and studio-design exercise purposes. It however neglected the influence of time, specificity of use, and particularity of function, all of which are vital traits that make up the present space. ●

fig.5

Conclusion

The approaches described in this chapter have produced a body of documentation of built modern heritage in the UAE through participatory actions and academic research, simultaneously resulting in a shared learning experience for students and participants. The role of the authors, as educators, is trying to emphasize a way of understanding how the buildings from this era can be recorded, archived, and sometimes rejuvenated by repurposing methods implemented in design studio classes. This is particularly important when trying to re-engage with the contemporary city in the Gulf region. Spatial exploration, in the form of human occupation, is at the heart of the interior design pedagogy at Zayed University: the process entails the realization that the spaces which users occupy and objects which they utilize are merely a response to humans' lavish or primitive needs. City dwellers often familiarize themselves with their own urban environments; it is sometimes difficult to step back and reimagine the city with what is already there rather than what is not. At the beginning of the twenty-first century, the development of contemporary cities and the highlighting of their buildings have often featured in academic publications, such as Salma Samar Damluji's *The Architecture of the United Arab Emirates*, Yasser Elsheshtawy's *The Evolving Arab City: Tradition, Modernity and Urban Development*, and OMA's *Al-Manakh*. However, since the 1st National Pavilion UAE for the 14th Venice Biennale, there has been a huge public interest in architectural modern heritage within the country. This interest has been manifested in numerous creative responses as methods for creating lasting memories of these buildings. Many responses to this interest have involved various methods: from post-production manipulation to vector drawings as those produced by the Emirati urban planner Sultan Al-Ramahi to traditional and digital façade photography by local photographers Hussain Al-Moosawi and Ruben Garcia Rubio, and to robotic drafting and plotting by media artist Patrick Lichty as well as conceptual art based on architecture of the modern period by Emirati artist Afra Al-Dhaheiri. Furthermore, the students' investigative projects presented above explored a series of 'afterlife' possibilities for these structures. The design proposals showcased pragmatic solutions to existing environments, endangered of being demolished. The academic and pedagogical purpose of these activities aims to educate this generation of young Emiratis to recognize the historical importance of their recent built environment. Hopefully, as young designers working in the construction industry, they as well will become instigators for preservation and conservation practices, adopting repurposing practices and proposing alternative solutions for redevelopment and keeping the memory and conscience of the Gulf modernist city alive.

Notes

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