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MISSION STATEMENT

This journal is the second installment of a three-part series entitled Red Envelope, and is themed ‘In Between’. It was published by LWK + PARTNERS in September 2020 and aims to encourage debate and challenge on a global stage what this most unique set of conditions offers for readers interested in architecture, design, development, theory and the built environment.
BETWEEN

Sapiens
Foundation
Growth (22)
North
Technology (28)

AND

Islamic Heritage
Soviet Secularism (18)
Art Installation (14)
South (10)
‘In between’: Situated somewhere between two extremes or categories; intermediate.

I am delighted that the substance of this edition is the exploration of the notion of ‘in between’: a conceptual paradigm that has always interested me. In the craft of animation, ‘inbetweening’ refers to the addition of frames between two images allowing movement to appear smoother, more fluid. These ‘in between’ are key in creating the sense of motion; they are the blending of one state and another.

The gaps that exist between things are to me curious places or ideas. There’s something about the tension, friction or duality of being neither here nor there.

This could mean a bi-cultural existence, as my whole life has been, but generally I mean it to be in that space, or state of mind, where things blend and coalesce together and cease to be individually distinct, at once ‘neither’ and ‘both’. Perhaps it can also be a way of describing how architects appear to be able to adapt seamlessly between cinema and architecture, graphic design, filmmaking, art, animation or theatre. ‘In between’ is a place many of us know well, find familiar and even comfortable.

In Invisible Cities, Italo Calvino’s historical travelogue to places that do not exist, he brushes aside traditional conventions of form and narrative to contemplate ideas of memory and place, touching on everything from the rise and fall of civilisations to the limits around communication.

Calvino’s story loosely revolves around discussions between the old Mongol emperor Kublai Khan and a young Marco Polo. Polo tells the great Khan about cities of delight and desire, cities tinged with regrets, vibrant cities, falling cities, seemingly improbable cities that defy logic and time.

Eventually, the young merchant reveals through delightfully whimsical and intensely melancholic narratives, that each of his fantastical descriptions may really be reflections of his home, the city of Venice... Polo’s own ‘in between’, or perhaps Calvino’s.

In many ways, ‘in between’ talks of the dichotomy of how we can know the existence and nature of the world external to our minds. It remains one of the oldest and most difficult of notions in philosophy, and for architects and designers, offers a complex and rich canvas upon which we weaver our design narratives, be they philosophically, linguistically or ideologically framed.

An Essay Concerning Human Understanding, English philosopher John Locke adopts a representative theory of perception. According to Locke, the only things we perceive, at least immediately, are ideas not spaces.

Locke did however emphasise that knowledge of the external world is neither based on inference or reasoning, nor is it based on reflecting on ideas already in the mind; instead, it is achieved through our sensory experiences.

In Japan, the concept of ‘Ma’ can help us understand the significance of the space in between. Ma can be described as ‘empty’ space, or a gap between one thing and another, or as a simple pause within movement or flow.

And yet it’s much more than just empty space, a gap or a pause. The concept of Ma does not actually describe a physical space created by objects, boundaries or structures; instead, Ma describes the essence of the pulse or intention that is felt or experienced in that space.

Ma is empty space that can be filled with any possibility. What you decide to place into that space, be it an object, an awareness, an intention or an understanding, sculpts the experience of anyone who enters into or engages with that space. As a contributor, this resonates with me and frames my interpretation of in between.

This latest edition of the journal series seeks to explore the possibilities of interpretation of the diversity that ‘in between’ represents globally. It strives to challenge the conventions around this often disregarded and neglected space, and it invites us all to re-evaluate our own perceptions. The essays laid out ahead operate within a multifarious subject matter spanning across contrasting horizons, disciplines, environments, ideologies, technologies and cultures.

LWK + PARTNERS's Hong Kong-based director, Andrew Reid, addresses very present challenges around the possible evolution of making the built environment. In his essay Between Sapiens & Technology, Reid explores the paradigm shift that might be possible through the use of technology in the establishment of an inclusive and empathetic design and delivery platform aligned with the needs of our biosphere.

While the Tirana-based author Ernal Bega, founder of the Centre for Albanian Orientalism, examines the dichotomy between Albania’s Soviet-era secularism and its Islamic heritage. In his piece, Bega explores how a country’s people have responded to the tension of being between different types of states since Albania’s independence.

Dongsei Kim, architect, urbanist and educator at the New York Institute of Technology, questions how the propaganda villages of the Demilitarised Zone between North and South Korea respond to being between the extremes of two diametrically opposed political ideologies.

Our editor, Rima Alsammarae, explores the dynamic between reality and fantasy embodied in Istanbul’s Museum of Innocence, a manifestation of the eponymous literary masterpiece by acclaimed Turkish author Orhan Pamuk. Set in a renovated apartment building in one of the city’s quiet ‘neighbourhoods, the museum is a portal to old Istanbul, complete with semi-fictional tokens that date back to the city’s historically diverse periods.

Lastly with Jumana Abdeelrassaq, we discover the dynamism of the architectural scene in the Saudi capital of Riyadh, and the changing face of its contextual architecture. Somewhere between the soaring glass towers and traditional Najdi palaces, contextual architecture by regional and international architects is evolving into a new contemporary architecture of the sprawling metropolis.

We hope our evocative take on the notion of ‘in between’ will strike a chord with readers looking for fresh glimpses and inspirations for their own view of these much misunderstood and undervalued concepts and spaces. In a world where change, disruption and transformation is almost constantly establishing new paradigms of being, and challenging perceptions of traditional thinking about space, urbanism and architecture, it may indeed be able to carry unique value, conveying meaning through narrative metaphor and embodying cultural understandings by creating dreams, ideas, objects and places for all to cherish.

Kerem Cengiz
Managing Director - MENA
LWK + PARTNERS
EDITOR'S MESSAGE

When we first launched the Red Envelope series, our priorities were (and still are) sparking discourse related to the built environment and providing new information to the discerning reader. The first journal, which was themed ‘Urban Planning & Regeneration’, initiated this endeavour, and explored the urban design of cities, streets and areas throughout history and in modern-day. Topics were intriguing, and ranged from the oldest planned street that is still inhabited, to a city’s emergency regeneration plan following a disastrous earthquake. As a follow up, the second journal in the series, themed ‘In Between’, takes a more specific look at our built environment, and examines buildings, regions and industries that are in flux – pulling and pushing between different states of being.

This journal was interesting to create for a multitude of reasons: the topic is infinitely nuanced, and there is no one angle to approach it. As we delved in, we found that when reviewing elements of the built environment through the lens of ‘in between’, it seemed as though all things were, and are. And that is the beauty of the theme – it reveals the livingness of our cities, urban fabrics and exterior environments, depicting them as growing, changing and adapting.

The theme lends itself to a certain kind of poetic analysis. When we developed our essay topics, each one required, in their own way, a sensitive critique that was not only well-rounded, but incorporative of historical references, political contexts and sociocultural understandings. And our contributors – experts in their relative topics – reflect our consideration of this.

The theme of this journal also lends itself to an array of the type of topics that can be discussed, as illustrated in the range of essays included. From Albania’s wrestle between its Islamic heritage and more recent Soviet secularism to Riyadh’s architectural identity attempting to move forward from its 1970s development boom, as well as the construction industry’s need to move from manual to technological, the articles here take our readers into different dimensions, and invite them to think about the world we live in as it stands today, with all of its harmonious chaos and friction.

I hope you enjoy the pages that lay ahead, and that they add something to your understanding of your immediate context, as they have mine, because if there is one big take-away from this journal, it is that all things are essentially in between. We just need to accept their state of livingness.

Rima Alsammarae
Editor
"It is notoriously known for its uninhabited surreal landscapes and peacefully migrating birds in the sky, which are juxtaposed with the extremely politicised propaganda balloons in the air."

The DMZ is a buffer zone between North Korea (DPRK) and South Korea (ROK). It bisects the Korean Peninsula near the 38th parallel north. The buffer was established after the Korean War (1950 to 1953) when North Koreans, Chinese and the United Nations Command signed the Korean Armistice Agreement on 27 July, 1953. The agreement established a 250-kilometre-long and four-kilometre-wide ‘demilitarised’ buffer zone (approximately 992 square kilometres) between the two Koreas. Although the entire area lacks any permanent inhabitants, and its rather narrow and long geometry is vastly different from dense cities such as New York City (784 square kilometres), Berlin (892 square kilometres) and Singapore (726 square kilometres), the land area of the DMZ is comparable to the mentioned global cities.

Contrary to its name, the demilitarised zone is one of the world’s most heavily militarised areas. It is notoriously known for its uninhabited surreal landscapes and peacefully migrating birds in the sky, which are juxtaposed with the extremely politicised propaganda balloons in the air, millions of recklessly scattered landmines and the concentration of soldiers stationed nearby.

Nevertheless – as reflected by the stated July 2020 incident – transgressions, breaches, contraventions and exceptions are always present at seemingly impenetrable borders. The DMZ is no exception. One of the many things that make the notorious DMZ a unique space to study is the three interstitial villages located within it. These villages and their spatial arrangements within the DMZ can be considered as ‘exceptional’ spaces. What happens in these exceptional spaces and their operational logic draws affinity to Carl Schmitt and Giorgio Agamben’s concept of State of Exception, where the sovereign North or South Korea’s rule of laws are suspended, making them exceptional spaces, places of ambivalences.

In July 2020, South Koreans were shocked to find out that a North Korean who defected to South Korea a couple of years ago fled back to North Korea through the impermeable Demilitarized Zone (DMZ) after supposedly committing a horrendous crime. This crossing was one of the very few known unauthorised crossings over the past 70-odd years, where a civilian transgressed the impenetrable DMZ.

Words by Dongseo Kim

ENVELOPE 02
“Many believe that the North Koreans built this ghost town to promote the regime’s superiority using buildings as props to win over the South Koreans.”

The Military Demarcation Line (MDL) indicated on the centre of the meeting table within the UNMAC building. Image by Dongsei Kim, 2011.

On the other side, some 200 South Koreans, mainly farmers and their families, occupy the Freedom Village. Current inhabitants are either original inhabitants of Daesung-dong or their descendants. Ironically, outsiders cannot relocate to the village. The only way to move into Freedom Village is by marrying a male Daesung-dong resident. If a female marries an outsider male, she must leave the village as she becomes an outsider. Exceptions are made only if a male outsider is legally accepted to become part of the resident female’s family, but this is only possible if the female’s family does not have a son. Only two males have moved into the village through such rules since 1953.

As an exceptional space located close to the ‘enemy’, and situated within the in-between zone, the village operates under the United Nations Command (Armistice Agreement Article I-10) with high security measures such as midnight curfews, tightly regulated entry-exit checkpoints, and restrictive residency requirements. Simultaneously, the South Korean residents living in Daesung-dong do not pay taxes and are exempt from the mandatory military service because of the area’s exceptional status.

Both propaganda villages are interstitial spaces that are peripheral to the dominant identities of North and South Korea. They are neither typical villages of both Koreas. In particular, these propaganda villages are mutant exceptions that both Korean states have propped as their front facades, projecting their state legacies and idealised Korean identities.

All of these mentioned spaces are rather symbolic and amplify the vastly different state ideologies and the dynamic inter-Korean relationships. Furthermore, because of this eccentric ‘exceptional’ arrangement, these propaganda villages reveal the extent and limit of the state’s spatial instruments and their impact on the everyday inhabitants of these places and wider implications beyond.
"I love museums," starts Orhan Pamuk’s A Modest Manifesto For Museums, “and I am not alone in finding that they make me happier with each passing day.”

An award-winning Turkish novelist, Pamuk has written nearly a dozen novels, as well as produced several non-fiction books and collections of essays. The Nobel Laureate’s work often addresses the history, politics, and cultural and social complexities that mark cities and regions across Turkey, from the border city of Kars in Snow (2002) to the fictional town of Öngören in The Red-Haired Woman (2016). And while he is largely regarded as one of Turkey’s leading living authors, his cultural and intellectual contributions do not stop at turned pages and recorded lectures. Having published The Museum of Innocence in 2008, which was followed by the opening of an actual museum of the same name in Istanbul in spring 2012, Pamuk’s work transcends the conventional boundaries long adhered to by others in his profession.

Pamuk conceived the novel and museum together more than 15 years before either were created, and they complement the experience of each other. The novel, which Pamuk describes as a love story set in the melancholic back streets of the elite Nişantaşı district of Istanbul between 1974 and the early 2000s, tells the story of Kemal Basmaci, a self-centred man born to a wealthy Istanbul family who has his life turned upside down by an obsessive love for a distant relative from a lower class, Füsun Keskin. Kemal begins collecting things Füsun has touched, as well as reminders of her and their relationship, which eventually amasses to a broad-ranging collection of tokens stored away over many years. Throughout the book, which is told through flashbacks and also details the growing Westernisation of upper-class society at the time, Kemal visits Füsun’s family and sits with them in their home. Once he loses her forever, the protagonist buys the Keskin family home and turns it into a museum devoted to his lost beloved.

Between Museum & Art Installation

Between reality and fantasy, a building in Istanbul tells the real story of fictitious characters.

Words by Rima Alsammarae
“As he found pieces he liked, he would work them into the story and find their place in the museum’s cabinets. Gradually, he formed the narrative that would become The Museum of Innocence.”

The book includes a ticket to the real-life museum, offering readers one free admission. And though the opening day of the museum came years after the book, the date was a calculated decision. 28 April, the day in 1975 when Kemal meets Füsun for the first time as an adult. Located in Cükürçuma, an area of Istanbul where its Jewish, Greek and Armenian citizens lived until the collapse of the Ottoman Empire, the museum is set in a tenement house that would have once been home to four families, each occupying a different floor. Standing on the corner of its street and painted a deep ochre-red by Pamuk, the Museum of Innocence features 83 vitrines of varying sizes, each linked to a chapter in the book and arranged in the same order. Evoking cabinets of curiosities, the glass-fronted display cases hold countless objects collected (and stolen from the Keskin household) by Kemal. The objects include personal effects, such as photos, documents and newspaper clippings, as well as wristwatches, cologne bottles, alarm clocks, jewellery, hair clips, airplane boarding passes, and, most memorably, the 4,213 cigarette stubs smoked by Füsun, which are stained with her lipstick and mounted on the wall to the right of the entrance, righty positioned in the background of a large Twilight Zone-esque spiral covering the floor.

The museum is not based on the novel, just as the novel was not written for the museum — Pamuk developed both in parallel, and had been collecting objects since the early 1990s from junk dealers’ shops and friends’ homes. As he found pieces he liked, he would work them into the story and find their place in the museum’s cabinets. Gradually, he formed the narrative that would become The Museum of Innocence, which has been explained in the museum’s catalogue The Innocence of Objects.

Visiting the Museum of Innocence is a surreal experience, and one fights the idea that the story is fiction. The pieces inside tell the story of a group of individuals and the small corner of the world where they lived with such detail and nuance that it is hard to accept the novel as a work of literature rather than a real-life journal of a love-obsessed man. Compounding this state of welcomed confusion is Pamuk’s insertion of himself into the storyline (and museum). On the fourth floor, it is said, Pamuk (perhaps not the real Pamuk but the one from the book) would meet with Kemal to discuss his life’s story, and where Kemal slept while he arranged the museum’s objects. It is also where the novel’s manuscript lays behind glass frames. “Kemal has a little theory of collectors, he is close to me,” Pamuk said in an interview with Disegno. “I think that getting attached to objects happens in traumatic times, and love is a trauma. Perhaps when they are in trouble, people hoard things. People get attracted to objects. Hoarding reaches the level of collecting when there is a story that unites them.”

Pamuk goes on to discuss some of the objects: “The first story is of a cabinet of curiosities, of tobacco specimens and, crocodile feet... It shows that the collector is powerful and strong. Then, collections become more rational. I was not hoarding, I was building a monument for love, a dignified thing to do.”

An opening line of the novel tells of how an earring of Füsun fell off while the two characters made love, and in one of the first display cases of the museum, lies the earring. And while most of the objects are linked to Füsun, many others highlight the period of Istanbul entering the modern era: electric shavers, can openers and carving knives, reflecting the city’s bourgeoisie’s eagerness to be the first to own such western inventions, are dotted throughout the museum’s premises.

According to Pamuk, there are four architects responsible for the building that houses the museum. The original architect is from 1897 and is either of Greek or Armenian origins, then 102 years later, Pamuk began rebuilding.

Pamuk worked with Turkish architect and academic İhsan Bilgin, and later, the German architect Gregor Sunder-Plassmann. The fourth and final architect of the museum is Pamuk himself, who studied architecture in university before switching to journalism. Once he assembled the elements of the collection at his own home, Pamuk was involved in every detail of the display, and from spring to autumn of 2011, Pamuk stopped writing for the first time in more than 30 years.

Pamuk also worked with a skilful graphic design team to create some of the museum’s items, including the Turkish-made fizzy drink that features frequently throughout the book, as well as advertising that displays a German model. As fictitious as the wall of cigarettes ‘smoked by Füsun’, the items appear authentic, despite ultimately being contrived as the brand never existed.

Pamuk’s museum is not simply a tool to retell the story of the novel, nor is the novel simply a love story. Both, upon closer inspection, offer an original experience. While the story oscillates between telling the tale of a man lost in love and life and a city caught between historical movements, the building alternates between museum and art installation, between the telling of real memories and the construction of an imaginary world, both weighed down by social and urban history. Regardless of where the novel and museum place you, between reality and fantasy, both successfully do what they set out to do: tell, with brilliance and depth, the stories of individuals who may have lived in this country through objects as familiar as pens and pencils. As Pamuk ends his manifesto: “The future of museums is inside our own homes.”

“It shows that the collector is powerful and strong. Then, collections become more rational. I was not hoarding, I was building a monument for love, a dignified thing to do.”
Between Islamic Heritage & Soviet Secularism

A country caught between its Islamic past and secular present, Albania finds itself struggling to reestablish its roots. Across the capital city of Tirana, this battle finds itself waged across architectural spaces that date back to the country’s Islamic period.

Words by Ermal Bega

It is perhaps not widely known that the arrival of Islam to Albania (today’s largest Muslim-majority country in Europe) predates the arrival of the Ottomans, and finds its origins dating back to the time when Muslims ruled Andalusia (811 to 1492), as well as Italy’s then-named Emirate of Sicily (831 to 1091). However, when the Ottoman Sultanate began conquering the Albanian territories (Albania, Montenegro and Greece), from the 14th century until 1912, the majority of Albanians accepted Islam as their religion and a cooperation between the Turks and Albanian Muslims led to the construction of many Islamic buildings and spaces across much of the mentioned lands.

Consequently, waqf (estate land or property from which the state revenues are assured to pious foundations) eventually accounted for more than two-thirds of the region, and Tirana, the country’s capital, began attracting many travelers who often described their visits. For example, the 17th-century Ottoman traveller and explorer, Evliya Celebi provided in great detail what he saw during his journey to the city in his travelogue Seyahatname. “The town is situated on a broad plain and has mosques, hans, bathhouses, bazaars, vineyards and gardens,” Celebi wrote. “All the public buildings have fully tiled roofs and are splendid structures.” One of the most interesting finds exists in City of Tirana by Gazemend Bakiu, which states that until the beginning of the 20th century, Tirana had 28,000 inhabitants and 28 mosques – one mosque per 1,000 inhabitants.

Tirana’s history is tied to its Islamic past (although Christianity has also had a long and continuous presence in Albania): around 1614, Sulaiman Pasha Bargjini, who hailed from the village of Mullat, decided to establish an urban city marked with ‘Oriental-Islamic’ architecture. He built the Old Mosque, considered the first building of Tirana, as well as a house for its imam, a hamman and a bakery for the needy. During the battle of Tirana in the winter of 1944, the mosque was greatly damaged but remained standing until its final demise, which came later with the arrival of the communists who valued secularism and flattened any religious symbols and spaces.

“The Oriental-style architecture, defined by the use of brick and stone, arches, domes and vaults, as well as colourful tiling, geometric designs, floral motifs and murals, also distinguished the bazaars, cobbled streets, bazists and bridges.”

Following Bargjini’s development of the small city centre, Tirana began to organically expand thanks to the arrival of inhabitants from surrounding villages, and mosques, tekkes and madrasas proliferated across the landscape. The Oriental-style architecture, defined by the use of brick and stone, arches, domes and vaults, as well as colourful tiling, geometric designs, floral motifs and murals, also distinguished the bazaars, cobbled streets, bazists and bridges. The main bazaar existed for nearly 300 years until its destruction in 1947. It should be noted that across the former Albanian territories, Islamic architecture was mostly built by local Albanians.

Albania’s separation from Ottoman rule came in 1912, and its creation as an independent state triggered various dilemmas for Albanian identity, particularly for the Muslims.
The creation of the state and the subsequent establishment of the Albanian kingdom led the country towards a Westernisation of national politics. King Zog, who ruled first as prime minister in 1922 and later as king until 1939, directed the change of Tirana’s appearance, and Albania’s in general. Heavily influenced by his marriage to the Austra-Hungarian queen Geraldina, King Zog commissioned European-style architecture to replace the Ottoman-era buildings, and dramatically changed the face of the Islamic heritage that had coloured the country for centuries.

After Zog’s reign, communism and Bolshevism swept across Albania, and the political movement was supported by important public figures such as the priest Fan Stilian Noli (a member of the International Communist League in the early 20th century), as well as the dictator of dubious origins, Enver Hoxha and his cabinet. The transformation of Albania’s political environment was reflected in the gradual destruction of most Oriental-Islamic buildings in Tirana, as well as in many other parts of Albania. At least 25 mosques, several tekkes and many houses were demolished. Muslim figures and personalities were also imprisoned, tortured and killed.

According to various sources, only a number of buildings and constructions dating back to the Ottoman period remain today: six castles, 15 mosques, four public baths, five bridges, one tekke, four shops and shopping malls, one water supplies facility and one clock tower. Among the most notable is the mosque of Et’hem Bey (completed in 1821), which sits in the centre of Tirana, and attracts Albanians from all over the country, as well as foreigners, who are often left with a lasting taste of the building’s beautiful Islamic construction. Reopened in 1991 after 10,000 people stormed the mosque and forced its reopening without permission from authorities, the Et’hem Bey Mosque consists of a prayer hall, a portico that surrounds its north and a minaret. The prayer hall features a square plan and a unique volume covered by a semi-spherical dome with no windows. The still-life frescoes provide divine images of the beauty of the afterlife, depicting trees, waterfalls and bridges – a rarity in Islamic art. Beside the mosque, and built at the same time, is the Tower of Tirana, another object of the city’s little preserved Oriental-Islamic heritage. Other spaces that have been preserved include the Tanners’ Bridge, several houses and a few cobbled streets.

“Among the most notable is the mosque of Et’hem Bey (completed in 1821), which sits in the centre of Tirana, and attracts Albanians from all over the country, as well as foreigners, who are often left with a lasting taste of the building’s beautiful Islamic construction.”

Unfortunately, today, the Albanian government does not support the maintenance of this heritage or its spaces, but rather the complete destruction of Tirana and Albania’s Oriental-Islamic connection. This has been compounded by the withdrawal of the presence of Arab countries and Turkey, who removed their foreign organizations and embassies in the 1990s, as Albania emerged from its communist dictatorship. While they have contributed to the construction of a few mosques and small religious centres, these buildings leave much to be desired aesthetically and architecturally, as they were not designed and built in cooperation with Tirana’s specialists of Albanian Orientalism. The resulting cultural gap is being filled by buildings of European and Western-style architecture, which cast a shadow on the few remaining examples of Tirana’s Islamic architecture.

“While they have contributed to the construction of a few mosques and small religious centres, these buildings leave much to be desired aesthetically and architecturally, as they were not designed and built in cooperation with Tirana’s specialists of Albanian Orientalism.”
Between Foundation & Growth

In Riyadh, context-driven architecture marks the 1970s, 80s and 90s periods of development, but where does the architectural identity of the Saudi capital stand today as it tries to navigate between its contemporary foundation and its future?

Words by Rima Al-Sammarae and Jumana Abdel-Razzaq

One of the Middle East's great historical cities, and the capital of Saudi Arabia, Riyadh has long intrigued Islamic and Arab historians, economists and planners. Following the rise of oil prices in the 1970s, Riyadh witnessed an extraordinary boom in development with an average of 11,500 building permits issued each year between 1977 and 1986. The city's relentless development was studied worldwide, and the American publication, Newsweek, went so far as to label it "the biggest construction site in human history". Sparking a rise of Saudi architecture firms and authorities, as well as attracting well-known architects from all over the world, Riyadh quickly became a breeding ground for experimentation in the built environment, and a stage for the blending of modern architecture with vernacular building traditions.

During the late 1970s and early 80s, a number of buildings were built that greatly influenced the evolution of architecture in Riyadh, such as the buildings of the General Organization for Social Insurance by Saudi firm Omrania & Associates (phase 1, 1973; phase 2, 1982), the Saudi Arabian Monetary Agency Head Offices by American architect Minoru Yamasaki (1978), the building of the Saudi Fund for Development by Urbahn and Colle International (1980), and many others. These examples proved to be pioneering, as they applied a mix of international architectural approaches with local building techniques, such as glass facades, sun shading devices, atriums and slit-type windows sometimes crowned with small square openings, a common feature in traditional Riyadh buildings.

According to Dr Saleh Al-Hathloul, a Saudi educator and architecture critic who has lectured on this topic, the designers of these buildings initiated an approach to façade articulation that was later adopted by a number of architects working in Riyadh. Other notable buildings from this time period include the Institute of Public Administration by Walter Gropius' The Architects Collaborative, as well as the 1984 campus for the King Saud University, which was carried out by HOK and the 4 Consortium for Design, Engineering and Construction Administration.
“Most of its projects were modernist-inspired, contemporary buildings, while Beeah was more focused on context-driven, Najdi-esque architecture that was trying to preserve a look of the past, while also looking at identity.”

The mid-1980s marked the formation of a new awareness regarding architecture and construction in Riyadh. As Al-Hathloul has noted, a number of Arab and Saudi architects began playing a bigger role in the development of the city, and they were inspired by the city’s local architectural heritage. Some of the most notable Saudi architects and firms of this time include Basem al-Shihabi, principal of Omrania & Associates (although he had been designing buildings prior to the mid-1980s); the Saudi Beeah Group Consultants; and Abdul Rahman al-Junaidi.

During this time, al-Shihabi designed the buildings for the Gulf Cooperation Council Headquarters in Riyadh, which intended to evoke the region’s traditional architecture, as well as the conceptual design of the Tuwaiq Palace, which was later completed in collaboration with Atelier Frei Otto of Germany and Buro Happold of the UK. The Tuwaiq Palace was built in 1985 in the Diplomatic Quarter, and was applauded for drawing a connection between the past and present, with its structure consisting of reinforced concrete, limestone clad external walls and tensile-structure tents.

It should also be noted that Ar-Riyadh Development Authority (RDA) had (and continues to have) a significant role in the architectural development of Riyadh, as it undertook many projects, such as multiple ministries, the Redevelopment of Riyadh’s Old Center and the King Abdul Aziz Historical Center. Established in 1974, the authority is responsible for overseeing the development of the Saudi capital, and is in charge of its strategic development.

According to Saudi Architecture, an independent initiative that researches and archives architecture in the kingdom, the architects of the 1970s and 80s aimed to develop their own approaches as well as how that approach could relate to its local context. “In my opinion, Omrania was really trying to set the toneality for what modernism looks like in a city like Riyadh,” said Najoud Alshudairi, one of the co-founders. “Most of its projects were modernist-inspired, contemporary buildings, while Beeah was more focused on context-driven, Najdi-esque architecture that was trying to preserve a look of the past, while also looking at identity.” Fellow Saudi Architecture co-founder, Sara Alissa, added, “Yes, and for Abdul Rahman al-Junaidi, we can see buildings that are very brutalist – Islamic brutalist.”

The 1980s and early 1990s further witnessed an increase in the development of contextual architecture in Riyadh, which drew from traditional Najdi vocabulary through a contemporary lens. Examples here are abundant, and include Palestinian-Jordanian architect Rasem Badran’s design for the buildings of the Great Mosque of Riyadh and Qasr al-Hukm (1992). Here, Badran and his firm Dar al-Omaran successfully recreated the character and spirit of the old Islamic city, not only by incorporating traditional Najdi forms, such as flat roofs, courtyards, arcades, limestone cladding and slit-type windows, but also through the mosque’s integration into the urban fabric of the old city centre.

Along similar lines, Egyptian architect Abdelhalim Ibrahim Abdelhalim was commissioned by the RDA to design the Al-Ta’ameer Center (1997), which features several components including a central market, commercial market, residential units and offices. The design of the project further implies a link between the urban development of the city with the social and cultural identity of Riyadh by integrating urban invariables such as heritage, environment and movement patterns.

“With the revitalisation of Riyadh, these projects gave the city the personal identity we see today,” said Badran. “Some of the projects we did in the city centre, or Hayy al Deera, like the Grand Mosque and the ruling palace, gave the city thakerrat makan, meaning to reflect the memories of the area through the understanding of its architectural heritage and by incorporating the values and morals of society. This produced an architectural product, which is also connected to the local environment, climate and geology.

“The most significant aspect of these projects was that they created an architecture that engaged the community and brought a social aspect to the city for its betterment,” Badran added.

With an incredible foundation for architectural identity developed between the 1970s and 90s, one must question how architects can move forward today with new projects that impact the city’s urban fabric. With mega-projects taking place across the kingdom, drawing the attention of large, international firms, how can local identity be preserved and further developed to meet the growing needs of a changing world?

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“In my opinion, there are three facets to the way architects design buildings in Riyadh today,” said Palestinian-Jordanian architect and founder of Badran Design Studio, Jamal Badran. “The first includes those who try to incorporate the heritage in a more literal way, the second is when they try to take the concept of heritage and incorporate the values of the community, such as privacy and familiar values, into the design, and the third sees those who incorporate a more contemporary approach, most often in their use of modern technological features.”

One driving force protecting the architectural identity of Riyadh as it moves forward from its foundation to its future, is the vision of Salmani Architecture, an approach to development that derives from King Salman, who was governor of Riyadh for more than 40 years. All of the major projects since the 1980s under the Riyadh Municipality are connected through the ideals of his thinking. King Salman’s great pride in the historical, political, social and architectural heritage of the kingdom drove his own personal insight into how the city should develop. Opposing the adoption or transplant of modern Western or Eastern styles that are irrelevant to the local environment, Salmani Architecture pushes for an approach that is at once modern and futuristic, while embodying the authentic local architectural heritage.

“The term ‘Salmani Architecture’ is in all project briefings,” said the Saudi Architecture team, which, in addition to Alissa and Alsudairi, also includes Mansor Alsafi and Fowia Albriik. “It was originally coined in the 1990s and it’s now resurfacing, as new projects are coming along under the king’s wing.”

While Riyadh stands atop an incredible, contemporary foundation, moving toward its future is all but unavoidable. While it hangs between the two, many are confident that positive contributions to the city’s built environment are a growing priority of architects today, particularly as they are encouraged by overseeing powers. As Raseem Badran put it, “The Saudi government is finding a balance between the past and present. As it continues to modernise, it also celebrates and appreciates the heritage of the city, avoiding the loss of historic structures and villages.”

“The general architectural identity of Riyadh can vary in extremes,” added Jamal. “It is like the identity is always being questioned...Identity is fluid and changes over time, and what changes this identity relates back to social, economic and geopolitical influences. So, buildings always reflect this evolution, and having a connection or creating a hybrid between the future and the past is the way forward.”
Between Sapiens & Technology

The current methodology adopted for the design and delivery of the built environment not only negatively impacts the earth, it also threatens our continued existence on it. While there has been little advancement in the procurement of buildings since the earliest forms of shelter, as argued in this essay, Andrew Reid, LWK + PARTNERS project director and author of the research platform GlobalNet, explores how the construction industry is on the cusp of creating a design and delivery ‘system’ that prevents humans from causing anymore unnecessary harm to the planet.

Words by Andrew Reid

At the time of writing, the global construction industry continues to fall short of creating ‘sustainable’ built environments for the lasting existence of our species, and there have been several reports recently published that outline the specific shortcomings. For example, Turner & Townsend’s 2019 International Construction Market Survey cites inefficient and outdated working practices, and low workplace productivity as the top three challenges facing the current global construction industry. And the McKinsey Global Institute identifies construction as one of the least digitised industries, with 98 percent of mega-construction projects experiencing cost overruns at 80 percent of original value. The latter also notes delays of an average 20 months per project, with projects often delivered inadequately ‘fit-for-purpose’.

The primary cause of this is the failure to adopt design and delivery methodologies (and the use of better performing materials), which have been proven in nature and other industries to bring significant increases in process enhancement and value. One could argue from a wider perspective that the methodology used to procure buildings has not evolved in a significant way in the last 7000 years, which can be demonstrated by drawing comparisons with the recent gains in efficiency achieved in other industries, such as medicine, manufacturing, aerospace and Information Technology infrastructure.

“The UN’s estimates show the planet’s human population to be 7.8 billion, so providing basic shelter is one of the largest current challenges to the evolution of our species.”

Key areas in which improvements in efficiency must be made include design: architects rarely empirically validate the performance of their design solutions with accurate measurements in the same way that, for example, industrial designers do. During my time at Foster + Partners, I saw the measurement of performance as a vital part of enabling the industry to design and deliver buildings that are more effective and more fit-for-purpose. In terms of materials, there has been only limited innovation and evolution, with concrete being a prime example. Its structural efficiency and cost, when compared to naturally occurring materials, is poor – concrete boasts a tensile strength of 600 lb/in² versus spider silk’s 33,000 lb/in².

The effects of the lack of innovation in the design and delivery methodology are wide-ranging, but the key impacts include excessive costs, as exhibited by the cost of world construction in 2018 reaching $11.4 trillion (and a predicted rise to $17.5 trillion by 2030); excessive consumption, with global construction consuming 40 percent of the world’s raw materials, 38 percent of its final energy and creating 39 percent of energy and process-related CO2 emissions. And lastly, current construction practices produce 40 percent of the world’s waste.

The UN’s estimates show the planet’s human population to be 7.8 billion, so providing basic shelter is one of the largest current challenges to the evolution of our species. With a predicted population rise to 9.74 billion by 2050, humanity is consuming the planet’s finite resources progressively faster and creating enough CO2 to cause a climate shift that could threaten our very existence.
POTENTIAL SOLUTIONS

An immediate paradigm shift is required to address this problem. Thankfully, through the adoption of emerging information management technologies and working practices, combined with a change to renewable energy sources and building materials, measurable improvements in efficiency can be realised. GlobalNet (GN) is an idea and a platform I conceived that aims to link world thought leaders and like-minded people across the planet to solve this problem, with the vision for a world where the provision of our shelters creates no harm to our planet and has a positive relationship with our species.

And while theorists and management firms are highlighting the necessary areas for improvement, tech companies around the world are racing to meet the demands of the future – albeit, late. GN adopts existing initiatives to create a hybrid, ‘self-aware’ design and delivery system that evolves from Eugene Pleasants Odum’s 1960s ‘Ecosystems Ecology’ thinking. This essentially means employing lifecycle management technologies and working practices that optimise the management of the construction ecosystem. GN also leverages recent advancements in digital technologies to augment its capabilities with the objective of creating homoeostasis in the construction ecosystem by managing lifecycle information in a way that is more in keeping with that witnessed in the biosphere.

The capital cost of the built environment is 25 percent, but the overall lifecycle cost after completion is 75 percent. The built environment should be designed to optimise the entire project lifecycle. GN is composed of three sub-systems: a design system called HARVEST; and a delivery system called JEEVES. JEEVES is conceived as an advanced form of BIM augmented by AI, with chat bot capabilities that enable it to perform three primary functions: capture ideas from project teams, convert the ideas into virtual models, and optimise them using generative design algorithms, creating measurable, performance-based solutions. JARVIS will contain an object data base with performance data on all building types, which enables it to benchmark against Current World Best (CWB) solutions, and to then iterate New World Best (NWB) solutions.

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The key criteria that are measured and optimised to determine CWB and NWB are Common Data Environment (CDE) which radically reduces value loss due to errors in information management, materials and energy usage; CO2 emissions; cost; delivery time and lifecycle operating costs. JARVIS will evolve the NWB to suit the specific needs of both the stakeholder and the ultimate building occupants. JARVIS evaluates the outcomes (incorporating, amongst other things, variables affecting empathy) and runs simulations to verify that the solution meets operational and aspirational objectives, prior to sending the project delivery information to JEEVES.

JEEVES also incorporates AI, with full automation capabilities comprising ‘GPS to zero’, multiple head 3D printers, drones and robots. Via 3D printers, it proposes to “grow buildings,” using the adaptive evolutionary approach witnessed in the biosphere. It will perform four functions, such as materials re-harvesting, site assembly using autonomous machines, growth of building system components and testing/adjustment, which operates similarly to the way Tesla monitors and adjusts its automobiles. JEEVES will communicate with HARVEST to source high-performance rapid prototyping inks, which have a ‘DNA’ that matches materials seen in the biosphere. One example of this is Nanocrete, which replaces concrete, and has similar scaffold arrangements to bone and shell, yielding performance improvements orders of magnitude better than traditional concrete.

One might ask why we should care about the impact that the devolved design and delivery methodologies are having on our planet. The answer is simple – the current approach is using materials and energy at a level that cannot be sustained relative to the increasing population and is creating waste and CO2 emissions that may well threaten our existence. We have been aware of this problem since 1798 when English cleric and scholar Thomas Malthus published An Essay on the Principle of Population, which described the tendency of our species to outstrip our given resources. GN is one possible solution to the problem, among many others. It’s an idea, but more so, it’s a platform that aims to create a ‘tribe’ of likeminded individuals that will leverage the power of collective thinking to ensure our continued existence.

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Andrew Reid first visited Hong Kong in 1986 as part of a British sailing team, and returned in 1992 to join the Hong Kong airport terminal design team. This was followed by a 10-year period during which he worked as a contractor to understand more deeply how buildings are made. He returned to Hong Kong once again in 2004 to lead and design many projects, notably a large stadium in Qatar, which was selected for a World Architecture Festival Award. Andrew works with LWK + PARTNERS and has published Design, The Practice of Making and a second book, GlobalNet, A possible evolution of making, describing his research project.

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