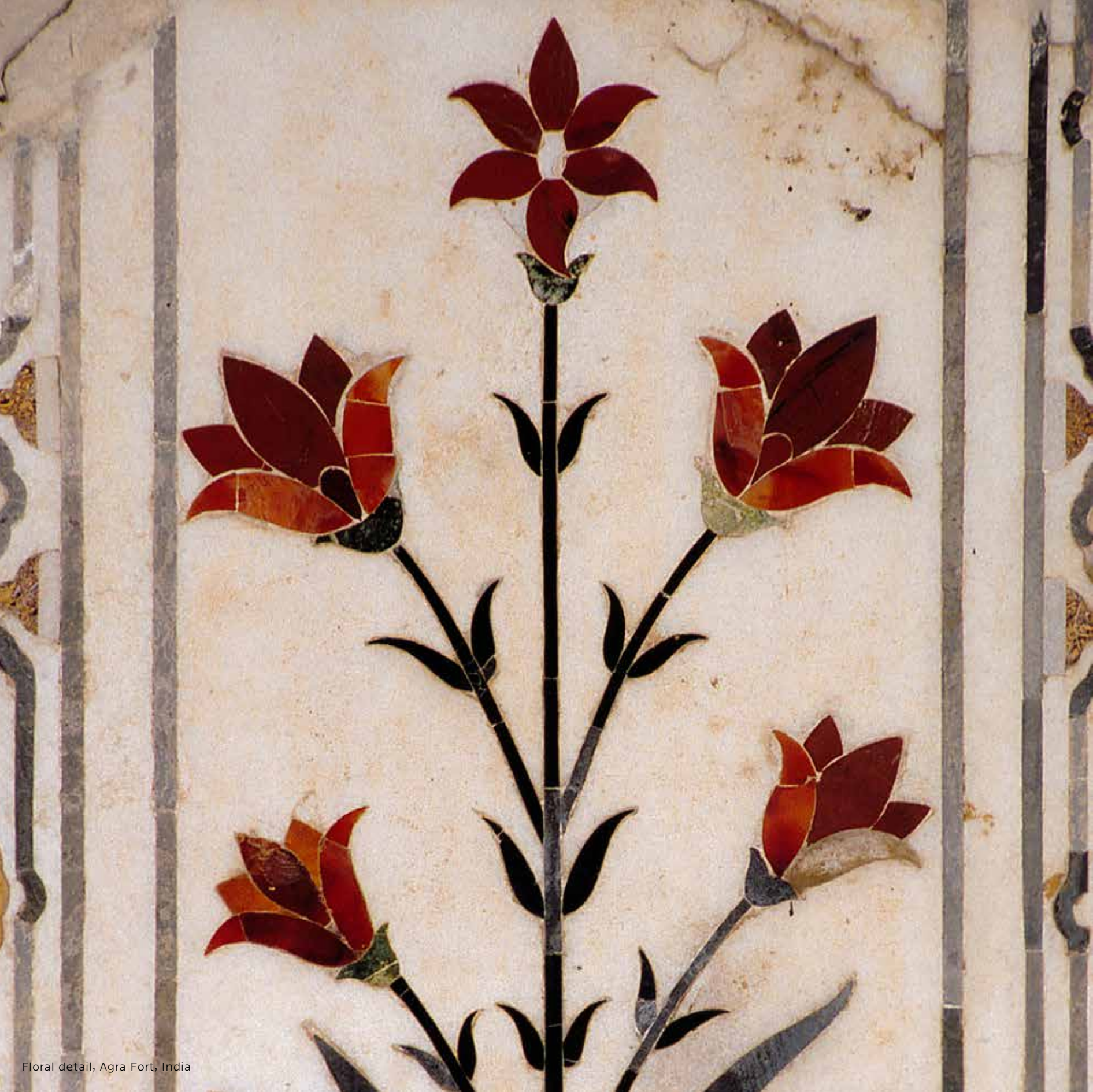
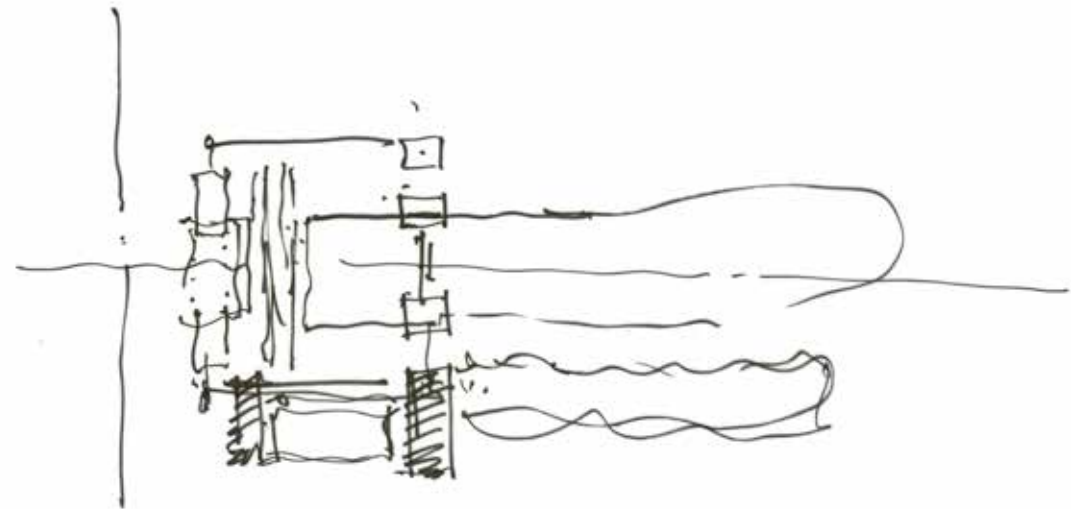


Nahr, Chadar, Chinikhana and Talar, Aga Khan Garden



AGA KHAN GARDEN



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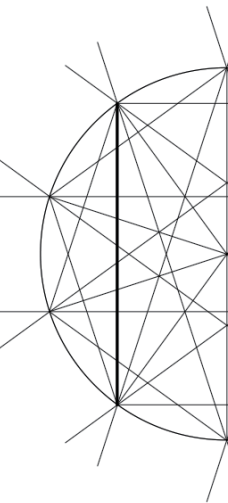
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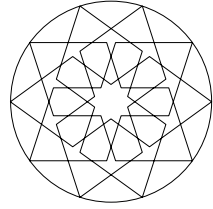




“It is society that is changing every day around the world. Our attempt, our aspiration, our prayer is to try to have the humility, but also the competence, to understand what is happening and to seek to influence it so that future generations can live in a better environment.”

His Highness the Aga Khan

*In a speech at the Winner's Seminar, Aga Khan Award for Architecture,
Aleppo, 7 November 2001*



PREFACE

HIS HIGHNESS THE AGA KHAN

In June 2008, I had the privilege to visit Edmonton and the University of Alberta, which was then celebrating its 100th anniversary. At that time, I was marking my own Golden Jubilee year as the Imam of the Shia Imami Ismaili Muslims, and in order to express my profound gratitude and to celebrate growing partnerships, I presented a gift that reflects both my Islamic heritage and the traditions of the University of Alberta. It was decided that a parcel of land within the University of Alberta Botanic Garden would become a garden inspired by traditional Islamic gardens, as well as a setting for learning about Muslim culture and civilisations, and a place for relaxation, contemplation and reflection. After nearly a decade of planning and 18 months of construction, the Aga Khan Garden in Edmonton opened to the public on June 29, 2018.

The garden has for many centuries served as a central element in Muslim culture. The Holy Qur'an portrays the garden as a central symbol of a spiritual ideal – a place where human creativity and Divine majesty are fused, where the ingenuity of humanity and the beauty of nature are productively connected. Gardens are a place where the ephemeral meets the eternal, and where the eternal meets the hand of man. Too often in recent years, urban architecture – under pressure from urbanising rural populations, greater human longevity and shrinking budgets – has neglected the importance of open spaces in a healthy city landscape. We keep crowding more buildings into dense concentrations while short-changing the enormous impact that well designed open spaces – green spaces – can have on the quality of urban life. This is why the creation and restoration of beautiful green spaces has become a primary goal of the Aga Khan Trust for Culture, with notable projects in Cairo, Zanzibar, Delhi, Kabul, Dushanbe and Bamako, and now with the Aga Khan Garden in Edmonton.

Opposite: His Highness
Prince Karim Aga Khan IV



It is a happy conjuncture that allowed us, with the opening of the Aga Khan Garden, to celebrate both the 150th anniversary of Canada and my Diamond Jubilee, which marks 60 years since I became the 49th Hereditary Imam of the Shia Imami Ismaili Muslims. Our connections with Canada have been both numerous and fruitful: One of our earliest collaborations was to establish the first private nursing school in Pakistan, in cooperation with McMaster University and the Canadian International Development Agency of that time. It was the first component of what was to become the Aga Khan University – the establishment of the first private university in that country. Canada was also one of the first donors to the Aga Khan Rural Support Programme in northern Pakistan, which has tripled incomes in this remote, marginalised region. We have also maintained close ties with Canadian universities, such as McMaster, McGill, Waterloo, the University of Toronto, and the University of Alberta. In the case of the University of Alberta, these relations began in 2006 with an agreement on academic and scientific cooperation together with Alberta Health Services. In 2009, the University of Alberta and the Aga Khan University signed a memorandum of understanding to move forward with their respective goals, to increase global engagement and to promote equitable human advancement and social justice throughout the world. At the same time, former Prime Minister Stephen Harper granted me honorary Canadian citizenship, a gesture for which I am humbled and grateful. Further agreements between the University of Alberta and the Aga Khan University, building on earlier collaboration, were signed on April 7, 2017.

Our collaboration and institutional presence in Canada has not been limited to Edmonton. The Ismaili Centre Burnaby (BC) opened in 1984. The Delegation of the Ismaili Imamat in Ottawa was established in 2008, while the Ismaili Centre Toronto was opened in 2014, together with the Aga Khan Museum, on the same Wynford Drive site – and connected by the Aga Khan Park. I happily recall the establishment of the Delegation of the Ismaili Imamat and the Prime Minister’s description that day of our collaborative efforts to make Canada “the headquarters of the global effort to foster peace, prosperity, and equality through pluralism.” Our collaboration extended to the Global Centre for Pluralism in Ottawa, which officially opened in 2017.

These partnerships in Canada have been immensely strengthened, of course, by the presence for more than four decades of a significant Ismaili community, many of whom, with other Asian communities, were given a home in Canada when they were expelled arbitrarily from Uganda. These immigrants have become proud Canadian citizens, contributing their

hard work, their time, and their expertise to building this country. Our experience in Canada has therefore been a particularly positive chapter in the history of the Asian Ismaili community.

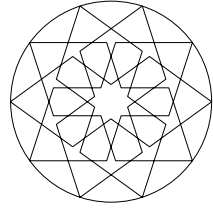
I wish to thank the Government of Alberta, the Chancellors, Presidents and the Senior Executives of the University of Alberta who have supported this project, as well as the faculty of Agricultural, Life and Environmental Sciences, which administers the Garden. And, of course, I add my thanks to the very able and committed staff of the University of Alberta Botanic Garden for their support, expertise and guidance throughout the design and construction of this project.

I also would like to thank Nelson Byrd Woltz Landscape Architects who invested the time to research the great Islamic gardens of the past to create this wonderful space. Thomas Woltz of Nelson Byrd Woltz visited historic Mughal gardens, including the Taj Mahal, and found ways to evoke the deep traditions of the Islamic garden for an international audience.

On the 150th anniversary of Canada, it is appropriate that we are celebrating a Mughal-style garden which echoes the great contributions that Muslims have made to world heritage. The Mughals built the Taj Mahal and Humayun’s Tomb and the gardens around them, so the university’s embrace of this project is an inherently pluralistic act.

Indeed, the tradition of Islamic gardens places an emphasis on human stewardship, on our responsibility to nature and the protection of the natural world. We see that principle expressed in the disciplined use of geometric form – framing the power and mystery of nature. But, today, the real requirement – the sine qua non – is building a constituency for sustainability, including an engaged local community.

Our responsibility to be good stewards of the earth extends to cultural heritage, whether in the form of parks or monuments. I believe this stewardship is even more critical today than ever before. In the developing and the developed parts of the world alike, societies are plunging into an increasingly bewildering future at an ever-accelerating pace. At such a time – and on occasions such as this – it is important that we commit ourselves ever more ardently to the essential work of sustaining cultural heritage so that it can remain a powerful contributor to improving the quality of life for the entirety of the human community.



FOREWORD

LEE FOOTE, DIRECTOR, UNIVERSITY OF ALBERTA BOTANIC GARDEN

Maybe it is the flutter of an aspen leaf above the elevated walkway or a chickadee song in the bowing trees that catches your attention first. These gentle forest sounds along the entryways – walks of peaceful quietude – supplant the bustling noise of cars and crowds as you walk into the Aga Khan Garden. Along these paths, we subconsciously lower our voices and let the trickle of water both calm us and fill our senses. The Garden brings us to tranquility and simplicity first.

The early vision for the Aga Khan Garden's placement – nestled into the woodlands – began with a simple stroll with His Highness the Aga Khan in October 2013. As we walked through natural bowls, His Highness remarked about the solitude and intimacy these spaces created. As we crested a forested dune and gazed across the length of the Calla Wetland, His Highness saw the potential for long views. He asked, "Might this area of the property be available for garden development?" The answer was a resounding "yes". The journey toward the Aga Khan Garden began.

Today, a corner is turned and the *Chowk's* glassy stones rise upward behind a curtain of water. The welcoming access ramps and stairs beckon us to ascend across solid granite fitted to geometric forms. Along the way we pass massive green granite benches that encourage us to sit and contemplate the architecture of this place. Consider the thick pavers and stair treads sufficient to handle foot wear traffic for the next 600 years or the geometric stone screens providing exquisite shadow patterns. The change we feel presses into the imagination. As we take a privileged topside view into the performance space of the natural bowl below, we look forward to the music that will swell forth from this forest-bowl amphitheater.



Opposite: View over the chahar bagh and central axis of the Aga Khan Garden

The burnt-orange fabric-topped columns of the *Talar* add a sense of drama to this majestic space. From here, most people slow to reflect and encounter a list of sensory treats, including the upwelling and chattering cascades of water, mysteriously generated fog, and precision-cut stones that lead onward past geometric designs and paving patterns. The path carries on, punctuated by invisible curls of rose scents, the tangy snap of ripened fruit, and the colorful swirls of sunken beds brimming with a colorful calligraphy of flowers. A strong sense of order leaning toward perfection settles in. The Garden immersion yields smiles, sighs and awe. Visitors spontaneously take selfies and yield to the need for sharing details with companions as well as loved ones thousands of kilometers away.

We are all changed by the experience. People are brought together in this place of gathering. Strangers exchange cameras and phones to get into family photographs. New acquaintances point out the hidden brass frogs, salamanders, and stone fish in the Nahr. The mood is such that we politely ask others about the fog machine's timing, or the water fountains and washroom locations. Inevitably, we share an experience of awe, wonder and loveliness. We are at our best in conversation about this Garden over tea or ice cream, whether we are wearing hijab, ball cap, turban or a cowboy hat.

And so, conversational snippets float on the air.

“What was your favorite part?”

“Your daughter's dress matched the lilies!”

“Can I help push your mother's wheel chair up this ramp?”

“When I get married I want the ceremony to be on the *Mahtabi*.”

“Mommy, can we go back to the *Chinikhana*, please!”

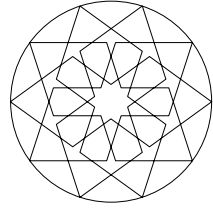
“Let's come back for a picnic and bring your father.”

For a short while, we are back to the garden of perfection and harmonious spirit. We humbly walk the line between human precision and the boisterous chaos of nature. The fundamental press of nine hundred tons of stonework is juxtaposed with the feathery lifting of our cultural differences during our time in the Aga Khan Garden. We share an experience that awes all that enter and confirms our common commitment to humanity, the stewardship of beauty and our responsibility for each other.

The University of Alberta Botanic Garden is indeed achieving our plan for the Garden, which is to expand our mandate to engage visitors in outreach-education, research and conservation. However, the arrival of a significant cultural space has produced a diversity of visitors – something we had hoped for – into a garden of peacefulness, harmony, sharing and acceptance. This constitutes a most profound dimension of this precious gift.

The Aga Khan Garden, Alberta, is unique in interesting ways: northernmost Islamic-themed garden in the world; largest in Canada; second one built in North America. We are honored to accept this gift in the spirit of a long and complimentary relationship between the Aga Khan Development Network and the University of Alberta. Botanic Garden staff delight in the role of garden host, largely because of the steady stream of smiles, twinkling eyes and effusive reactions, from visitors and students alike – all of which indicates an uplifting of the spirit. Can there be any higher goal?





AGA KHAN DEVELOPMENT NETWORK

The *Aga Khan Development Network* (AKDN) is a group of private, international, non-denominational agencies working to improve living conditions and opportunities in over 30 countries around the world, employing approximately 80,000 people. Each agency works within individual but complementary mandates covering: education, healthcare and the environment; agriculture, social development, disaster relief, infrastructure provisions; micro-finance, banking and the promotion of private-sector enterprise; architecture, culture, urban regeneration, media and communications.

CULTURE

The Aga Khan Garden in Edmonton was built by the Aga Khan Trust for Culture. The Trust operates a number of other parks, including ones in Kabul (Afghanistan), Bamako (Mali), Cairo (Egypt) and Delhi (India). It focuses on culture as a means of enhancing the physical, social and economic revitalisation of communities, particularly in the Islamic world. The Aga Khan Museum, which has stimulated cultural and economic development in the Don Mills section of Toronto, aims to foster a greater understanding and appreciation of the contribution that Muslim civilisations have made to world heritage.

The Trust's broader programmes include: the Aga Khan Award for Architecture, which is presented every three years for exemplary contemporary work and projects that propose innovative and replicable solutions to problems of social development; the Aga Khan Historic Cities Programme, which implements conservation and urban revitalisation projects in culturally significant sites of the Islamic world; and, the Aga Khan Music Initiative, which works to ensure the preservation and development of traditional musical heritage and the music's transmission to new artists and audiences. Other cultural initiatives include the Aga Khan Program for Islamic Architecture at Harvard University and the Massachusetts Institute of Technology and Archnet.org, an online resource on architecture, urban design and development.



Opposite: Abdullah Ansari Shrine Complex, Herat, Afghanistan



SOCIAL DEVELOPMENT

The AKDN's social and cultural development activities are undertaken by several non-profit agencies. The Network's annual budget for non-profit development activities is approximately US\$ 1 billion. The *Aga Khan Foundation (AKF)* seeks sustainable solutions to the long-term problems of poverty, hunger, illiteracy and poor health, with special emphasis on the needs of communities in mountainous, coastal and other resource-poor areas. The *Aga Khan Health Services (AKHS)*, with over 200 health centres, dispensaries, hospitals, diagnostic centres and community health outlets, is one of the largest and most comprehensive private, non-profit health networks in the developing world. The *Aga Khan Education Services (AKES)* operates more than 200 schools and advanced educational programmes at the pre-school, primary, secondary and higher secondary levels in Pakistan, India, Bangladesh, Kenya, the Kyrgyz Republic, Uganda, Tanzania and Tajikistan. The *Aga Khan Agency for Microfinance (AKAM)* operates in both urban and rural settings and offers a range of microfinance services. The 18 planned or operating *Aga Khan Academies*, which are dedicated to expanding access to education of an international standard of excellence in Asia and Africa, feature a curriculum based on the International Baccalaureate. The *Aga Khan Agency for Habitat (AKAH)* works to improve the built environment through design and construction, village planning, natural hazard mitigation, environmental sanitation and improved water supply systems.

Above: Food Security Programme, Aga Khan Foundation, Mozambique

Opposite: University of Central Asia, Khorog, Tajikistan



Two universities are part of the Network. *Aga Khan University (AKU)* – which is collaborating with the University of Alberta on a number of fronts – is Pakistan's first private, autonomous university. Headquartered in Karachi, it is a major centre for education, training and research in the health sciences and teacher education. Chartered as Pakistan's first private international university in 1983, it has since established branches and institutes in East Africa and the U.K. The *University of Central Asia (UCA)* is the world's first university dedicated exclusively to education and research in mountain regions and societies. To be located on three campuses, in Khorog, Tajikistan; Tekeli, Kazakhstan; and Naryn, Kyrgyz Republic (the first phase of Naryn and Khorog are complete; Tekeli is to be built), UCA includes a School of Professional and Continuing Education (SPCE), which has engaged over 100,000 course participants since 2006. SPCE is Central Asia's first provider of formal, university-based, non-degree educational programmes.

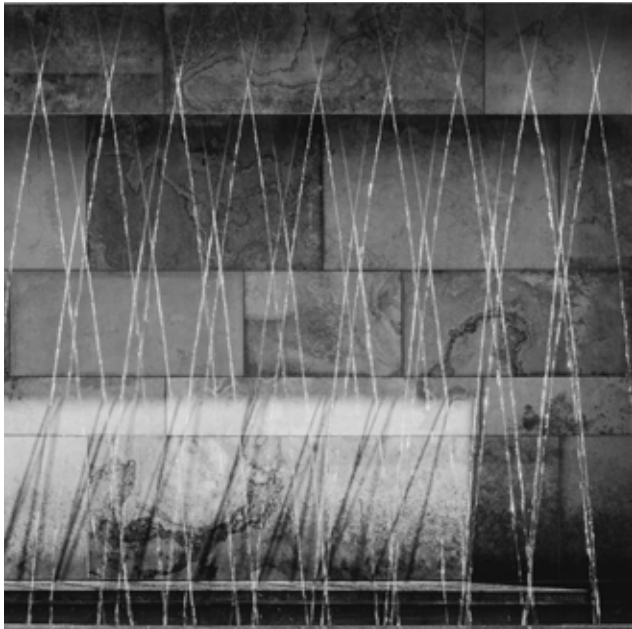


ECONOMIC DEVELOPMENT

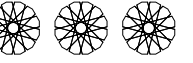
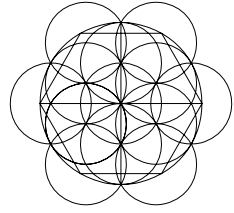
The Aga Khan Fund for Economic Development (AKFED) works to strengthen the role of the private sector in developing countries by making bold but calculated investments in environments that are fragile and complex, often playing a catalytic role in mobilising investment. It invests in industrial production, infrastructure, tourism development, financial services, aviation and media. Its investments range from a hydroelectric plant in Uganda that supplied nearly 50% of the country's electricity when it was inaugurated to a mobile phone network in Afghanistan that now covers every province in the country. Because of its institutional background and ethical framework, investment decisions are based on prospects for improving the lives of people rather than on bottom-line profitability. It does seek to generate profits to assure sustainability, but all profits are reinvested in further development. AKFED has assisted in the rehabilitation of economies after civil conflict or internal turmoil in environments as varied as Afghanistan, Bangladesh, Mozambique, Tajikistan and Uganda. AKFED operates as a network of affiliates with more than 60 separate project companies employing over 47,000 people. The Fund is active in a number of countries in the developing world, including Afghanistan, Bangladesh, Burkina Faso, the Democratic Republic of the Congo, India, Cote d'Ivoire, Kenya, Kyrgyz Republic, Mali, Mozambique, Pakistan, Rwanda, Senegal, Syria, Tajikistan, Tanzania and Uganda.



Opposite: Hydro Power Plant, Khorog, Tajikistan



PARKS AND GARDENS



ISLAMIC GARDENS IN HISTORY

LAURIE OLIN

WHAT IS THE NATURE OF AN ISLAMIC GARDEN?

There is no single type of “Islamic Garden” any more than there is one style of Chinese, Italian, or English garden. Islamic gardens have assumed many different types and styles of all sizes and shapes through time and across the globe. These include tomb gardens, pleasure gardens, residential and palace gardens, courtyards, gardens for private reception, or public display, medicinal or botanical gardens, mosque and oasis gardens, hillside gardens, and hunting parks. Certain features such as water and geometry, symmetry and architectural elements, especially hard surfaces are dominant, but one must be wary of sweeping generalities and understand the full plurality and diversity of Islamic gardens. At the same time, there is a sense that something is special and characteristic about many historic Islamic gardens. The ancient image of four rivers and four quarters of the classic *chahar bagh* runs like a heartbeat through the collection of gardens designed over the centuries around the world.



Opposite: Bagh-e Shahzadeh, Mahan, Iran

Allah has promised to the believing men and the believing women gardens, beneath which rivers flow, to abide in them, and goodly dwellings in gardens of perpetual abode; and best of all is Allah’s goodly pleasure; that is the grand achievement. (Qur’an 9.72)

WATER IS GOD'S GIFT TO MAN

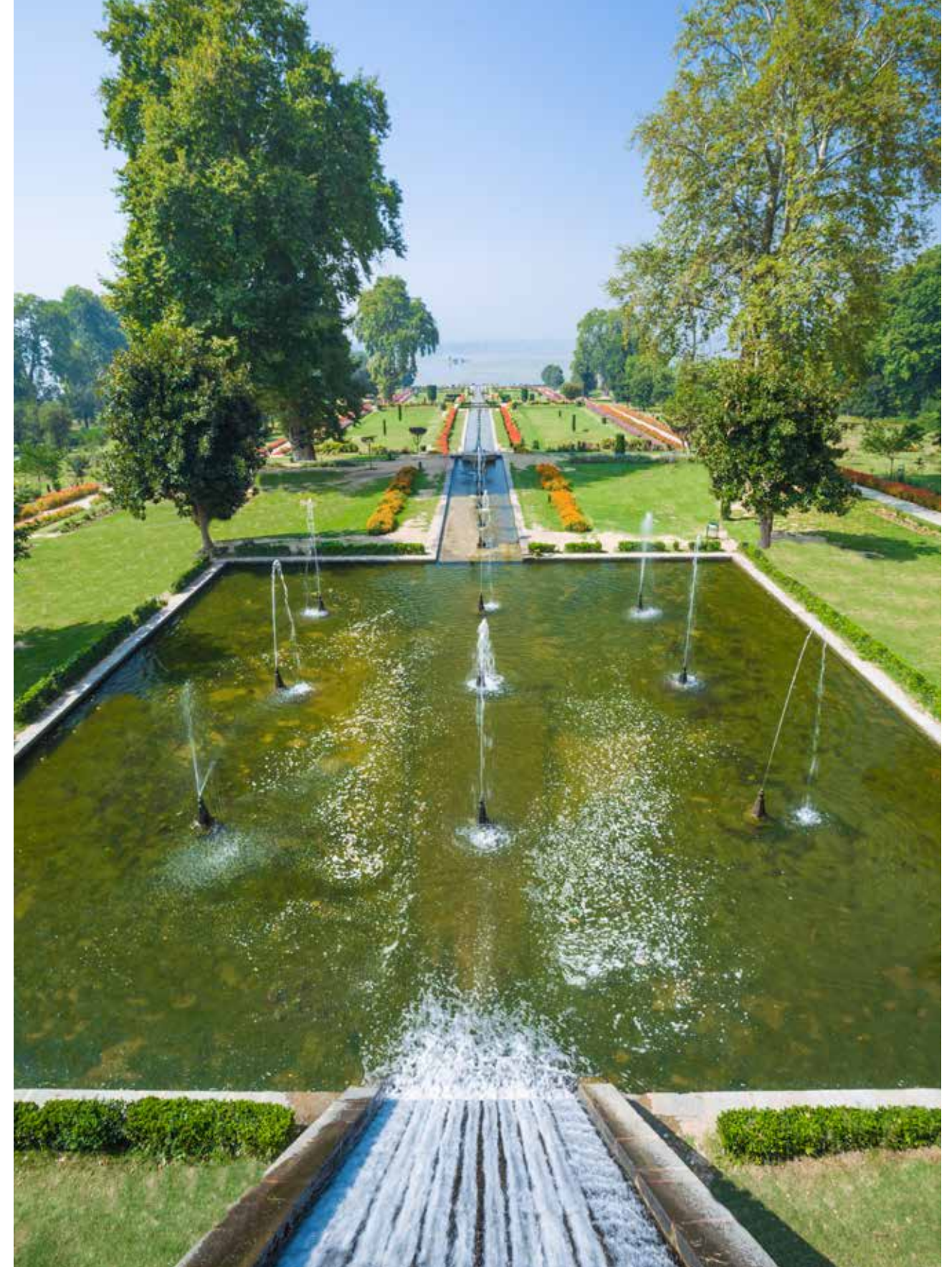
Water is an essential ingredient found in virtually all of the gardens of the Islamic world, but in varying degrees, often depending on climate – generous, even extensive in Kashmir, or scarce and carefully measured in small amounts in others, such as the oasis gardens of the Maghreb or Levant. The statement that “water is the gift of God to man and the earth” can be found in the Qur’an and numerous other texts. For Islamic culture, often based originally in agricultural societies, a significant amount of technology and law was devoted to water. Artistic devices were invented to exploit the many changeable characteristics of water – movement, sound, reflection, and refraction through channels, runnels, falls, cascades, riffles, bubblers, sheets, sprays, basins, tanks, pools, ponds and lakes for example.

GARDENS SHOW THE POWER OF GOD AND THE HAND OF MAN

Ancient writers tell us that King Solomon wrote a book, now lost, about plants, including Cedars of Lebanon, which we believe discussed at length the use of herbs in medicine. The oldest surviving botanical work is Aristotle's *History of Plants*, which must be considered the earliest scientific treatise on the subject. His pupil Theophrastus described more than five hundred species used in the treatment of disease. By the end of the second century CE, locally evolved agriculture flourished throughout the lands administered by Rome. The horticultural and architectural practices of some of the lands the Romans conquered influenced gardens and parks throughout the Empire. In particular peristyle and atrium style houses, cisterns, water elements and the planting of Roman gardens were in large part derived from earlier prototypes in Greece, Bithynia, Mesopotamia, and Egypt.

The early architecture and gardens of the followers of the Prophet Muhammad, like the science and mathematics of early Islamic scholars and builders, was a development from earlier Greek, Persian, and Roman thought. Often they were built with materials from, within, and atop Roman structures and settings. Many plants associated with gardens of the Muslim communities of the Mediterranean basin had come from the East in classical times, especially from India and China. Throughout the evolution of succeeding caliphates as Islam pushed east along trade routes, seeds and plants from Persia and Asia continued to come west.

Opposite: Nishat Bagh, Srinigar, Kashmir





SOCIETIES OF AGRICULTURE

Every culture in the ancient world was an agricultural society. Land, fertile territory, and crops underpinned everything else. Throughout the warm and arid regions of the Middle East, Mediterranean Basin, and Eurasian Steppe, the collection, management and use of water became a necessary attribute for success. Mathematics, science (especially astronomy), medicine, mining, metallurgy, ceramics, architecture, and horticulture flourished under the protection of many of the caliphs and imams. As a result, in every community and especially at the seat of governance and religion in every region of the Islamic world, one found intensive agriculture and gardens.

Likewise, in every region, agriculture and gardens were modified in form or content to suit the local climate and terrain. This in turn led to a diversity of form and appearance that has not been well understood by Europeans or western scholars until recently. The characteristics of a few particular gardens and societies were taken as universal. In recent decades this has changed considerably, and as with other aspects of late 20th century globalism, study and scholarship regarding the history of the material and intellectual culture of the Islamic world has expanded and intensified. Major museums on several continents have created departments and exhibitions highlighting the art and design of the Islamic world, even as the literature devoted to it has expanded exponentially.

Above: Painting (16th century) from the Baburnama, showing the Emperor Babur laying out a garden

GEOMETRY & SPIRITUALITY

The predominant emphasis on geometric organization and spiritual meaning attributed to “Islamic gardens” by western (and eastern) writers found in nearly any article or book prior to 1980 may be in part a caricature, but like many clichés it was based on some elements of truth. There was, as an accompaniment to the continuity of ancient science and mathematics, a considerable interest in numerology and geometry that was carried to an extremely evolved and refined level that frequently informed architectural devices and ornamentation.

Many gardens of the Islamic world originated or have been located within an agricultural setting, and agriculture for thousands of years has employed simple grid patterns – square, rectangular, and triangular – to space plants at different intervals for successful growth. So too, grids of different dimension and proportion in combination with a variety of geometric systems and repetitive elements, have been used to organize Islamic architecture, particularly large industrial, military, and religious structures. Superb examples of this are the great Mosques of the 7th and 8th centuries in Iraq, North Africa and Spain. Complex symmetries and patterns were developed for structures, masonry, and tiling of surfaces, particularly curved ones that remain among the great artistic achievements of civilization.

Agronomists and architects from the classical era onward also have advised on the orientation of architecture and fields for solar benefit, which in turn have contributed to common starting points for the layout of orchards, palaces, and gardens. Slightly southwest facing designs are preferred, with axial relationships generally oriented in a north-south direction. This is as true of indigenous people of North America as it was of China and Egypt. Gardens of all sorts, including those of the Islamic world, as descendants of agriculture have inherently had celestial relationships.

SYMBOLISM

It is commonly asserted that “Islamic gardens” symbolize aspects of paradise as described in the Qur’an. In many cases this is true. In others it is not necessarily so. Gardens do reflect on the bounty of God and the blessings of life. Through the long history of Islam there has been an outpouring of poetry and art that engages spiritual topics, among which are those of an earthly paradise, heavenly paradise, and gardens as the embodiment and representation of both. So too, there is extensive poetry, art and literature that presents gardens as secular realms of social intercourse, pleasure, romance, diplomacy, and retreat from the hardships of work, conflict and harsh environments.

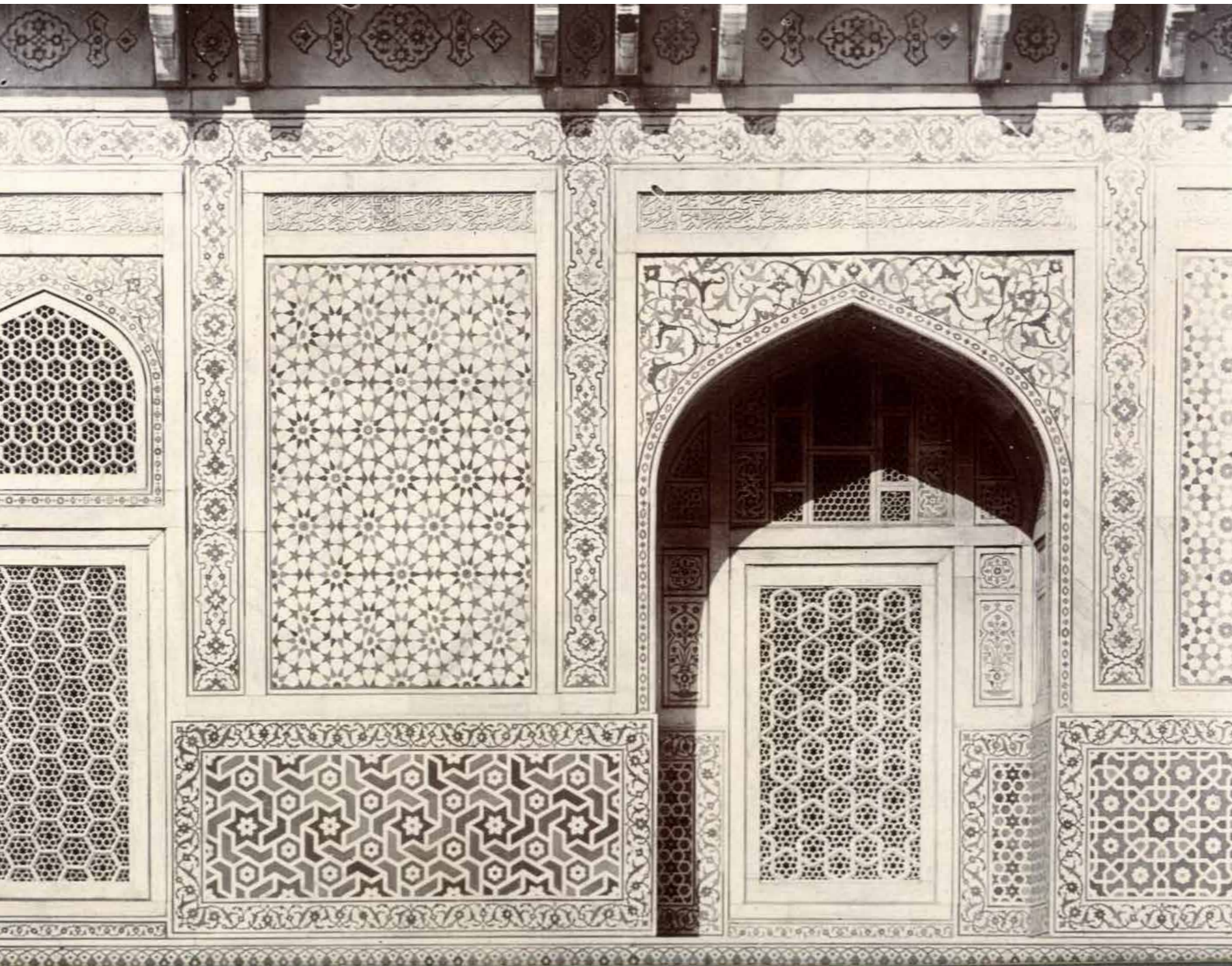
Many well-known gardens do indeed contain overt symbolism and inscriptions regarding religious instruction or praise for the builder, owner, ruler and their family, or poetry in celebration of various moods and literary reference. In keeping with Islamic teaching and restrictions against graven images originally directed to religious contexts, most gardens do not have sculpture, although exceptions such as the Lion Court of the Alhambra do exist.

Depictions of vegetation, however, as part of the decorative apparatus of gardens and architecture, became one of the features that developed with extraordinary variety throughout the Islamic world. It can be seen in multi-colored tiles and carving at many scales, depicted literally or in highly stylized manner, or in remarkably abstract forms across the Ummah. Again, the manner in which such activity is given expression can be quite different from one place to another. Native carvers and artisans in Mughal India for example produced vegetal ornament quite different from that executed in Iznik under the Ottomans.

Renowned gardens often have deep and powerful metaphysical and spiritual intentions. Familiar discussions regarding the symbolism of central basins as a source of water that flows in four directions to water the earth and as metaphors for Paradise are appropriate in particular cases, but not in others.

Opposite Firdausi and the Three Court Poets of Ghazna, Folio from Shahnameh (Book Of Kings) of Shah Tahmasp I, 1532, Iran





Opposite: Tomb of Timad-ud-daulah, Agra, India

ARCHITECTURAL QUALITY

Another aspect of the gardens of the Islamic world that differentiates them to a significant degree from European gardens after the Renaissance is their relative hard architectural quality. Italian, English, French, and Dutch gardens are replete with vegetation. Despite considerable variation, a common and noticeable attribute of many of the gardens of the Islamic world is a pronounced amount of paved surfaces, architectural elements, and, in many cases, relatively few plants. In some instances, the only plants are in pots, or the garden is an architectural setting with only a fountain, tile-work, paving, an arcade or portico and no plants but with a view to surrounding vegetation, orchards or distant landscape. One way of characterizing this tendency is to see the garden as man's addition to nature, not an imitation or extension of it. Many of the gardens of Islam are indeed created in contrast to the natural world and explore man-made order and ingenuity.

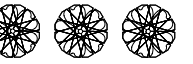
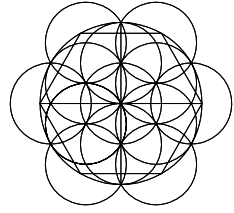
However, the surviving hardscape in historic gardens is partly the function of lost plantings, limited archaeo-botanical study, and heavy-handed conservation practices. So for contemporary gardens inspired by Islamic gardens of the past, designers will need to understand the historic relationship between the use of soft and hard elements to make the various regional gardens or landscapes of the Ummah or how to interpret these anew.

REGIONS & DIVERSITY

One could attempt to categorize these gardens historically through narrative, chronology, or style based upon artistic composition. They could be catalogued biogeographically by physiographic region and cultural group, or thematically, in terms of topics such as colour, sound, pattern, horticulture, water, etc. In any categorisation, however, issues such as meaning and symbolism, aesthetic refinement, craftsmanship, and materials should be incorporated to play a unifying role. To poets, all gardens can be seen metaphysically, and many gardens of Islam have indeed been seen and conceived in spiritual terms. Others, purely secular, are rich and rewarding, offering respite and amenity.

SUSTAINABILITY

The Aga Khan Garden is an expression of contemporary thinking regarding man's role as a steward of the land. Its design, like the gardens of previous eras, reflects the latest technologies and sustainable systems that allow it perform well, to be resilient, and memorable.



MUGHAL GARDENS OF SOUTH ASIA

LAURIE OLIN

The Indian Subcontinent is an old and long contested landscape of civilization. When Alexander the Great arrived with his army at the Indus River in the third century BCE, he encountered established societies. Subsequent forces and dynasties have come and gone; great religions originated and became established here.

Muslim conquerors reached the Indian subcontinent as early as the first decades of the eighth century, and the Province of Sind, at the mouth of the Indus river, has remained Muslim ever since. Muslim traders, immigrants, and scholars had also moved through and into this region for centuries. In 1193 the Ghoriid Sultan Muhammad, the builder of Jam in Afghanistan, conquered Delhi and made it the centre of Muslim India. For the next seven centuries, the encounter between the Muslim Sultanates and other cultures of the subcontinent, in addition to exposure to Persia and China, led to a continuing development of a unique culture expressed through art, literature, architecture and gardens.

The Mughals (1526–1857) were far more powerful than the Ottomans or Safavids in Persia/ Iran. The arrival of Timur (Central Asia) and the Timurids, descendants of Tamarlane, set in motion what became the Mughal Empire, which created many remarkable gardens, a number of which survive in various states today. The Mughals had a long history of contact with Persia. When Timur captured Samarkand he carried to the city artists from Baghdad and Shiraz, who brought with them the finest art traditions of Persia. Timur brought stone-cutters from Hindustan to work on the Friday mosque. He also planted a great avenue of white poplars.



Opposite: Diwan-i Amm, Agra Fort, India

Right: Khas Mahal, Red Fort, Delhi, India



Above: Shalimar Bagh, Srinigar, Kashmir

In Samarkand, Timur created a great garden, in which there were many shade trees and many types of fruit tree, with channels of water flowing amongst them. The garden was so vast, that large numbers of people might enjoy themselves there in the summer near the fountains and under the shade of the trees set with tents, some of red cloth, others of embroidered silk.

After some difficulty, Timur's descendants established a lineage that controlled all of northern India, including present-day Pakistan, India, and Bangladesh. They were without question among the richest of the Islamic powers of the period.

Babur (1483 -1530), a descendant of Genghis Khan, founded the Mughal Empire in India. Babur was a poet, naturalist and author of one of the first Islamic autobiographies, as well as a political force. A lover of hunting and wild scenery, he also gardened with energy. In his memoirs, he describes a garden in the foothills of Kabul in which he counted 32 unique varieties of tulips. Babur's descendants came to appreciate the hot plains of north India and the foothills of the Himalayas. The court journeyed to Kashmir in summer and created a series of gardens utilizing the ample water flowing from the melting snow in the mountains above.

This empire lasted from 1526 to 1858. At its peak in the 17th century, it extended from Afghanistan in the west to Arakan in the east, and from Kashmir in the north to Hyderabad in the south. Significant architectural achievements of the empire include Emperor Akbar's planned city of Fatehpur Sikri, and the tombs of the Taj Mahal and Humayun. The best-known of their gardens are near tombs in Lahore, Agra and Delhi and the *chahar bagh* gardens of Kashmir.

The culture they developed was able to call on the skills of the best Central Asian authors, artists and architects. The arts, especially architecture and illustrated miniatures, prospered under the Mughal empire until the mid-seventeenth century. The fusing of Persian lyricism and Hindu naturalism surpassed even the splendid results of the early Islamic period, producing works of outstanding value that rank among the best of Islamic art.



Their architecture and design, although employing Muslim forms and traditions from Eastern Iran, took advantage of local traditions and techniques of construction and decoration, modifying these to their own purposes. Some traditional forms, such as figurative sculpture, ceased as the craftsmen directed their efforts to the decorative schemes of the Muslim conquerors of the twelfth century. However, they were strongly affected by Indian modes of construction and created an art which, within Islamic thought, always remained original.

From the time of Jahangir who ruled from 1605-1627 there was a tradition of wives and queens sponsoring gardens and monuments for both personal and civic use. This emergence of women as patrons of garden design is a significant development of Mughal rule.

Mughal gardens were designed to enhance the quality of the environment, to enrich the landscape, to provide recreation and repose, to symbolize authority, as well as to promote cultural and religious values and aspirations. Gardens and landscape architecture in Islamic societies, as in others, have been an important expression regarding ethical notions of stewardship, ecology, and the presence of beauty in the built environment.

Above: Shalimar Garden, Lahore, Pakistan
Opposite: Shalimar Bagh, Srinigar, Kashmir





The Mughals laid out two types of gardens – pleasure gardens for leisure at palaces such as at Fatehpur Sikri and Shalimar Baghs in Kashmir, Lahore, and Delhi, and funerary gardens for the internment of the deceased as in the tomb complex of Mumtaz Mahal (popularly referred to as the Taj Mahal) in Agra. The pleasure garden was central to the Mughal notion of a languorous and sensual partaking of the bounties of nature within walled seclusion.

Two kinds of palace gardens emerged in Mughal India. One, as in Persia, referred to as a *chahar bagh*, consisted of a large walled garden adjacent to or removed from a palace or city and was divided into four quadrants with a pavilion in the middle. The other, a *kanah bagh*, was a private garden enclosed by buildings, an internal courtyard garden. Gardens were included within a number of fortresses and palaces both inside and outside walled cities. These were commonly established along riverbanks (for the consistent and plentiful supply of water) and major routes of travel (for control of territory and the movement of goods and

Left: Musamman Burj,
Agra Fort, India
Right: Shalimar Garden,
Lahore, Pakistan

the populace). Mughal gardens were built for pleasure, ceremony, and events, as well as the demonstration of power and control, as well as scientific experiment and horticultural research. Key features seen in a number of gardens of Shahjahanabad (Old Delhi) are the methodical and geometric planting of flower gardens with pools, rows of fountains, tanks, an array of herbs and trees resulting in an abundance of scent, shade, and spray in the air for cooling.

The image of the gardens became pervasive in the Mughal world. Their role as Quranic symbols of Paradise is well known and studied, generating a large and somewhat repetitive if appreciative literature. Floral forms and imagery came to dominate architectural decoration as well as textiles, painting (especially in miniatures), and manuscripts.

The gardens of the Mughals built between 1526 and 1657 were developed in a variety of locations, from the mountainous valleys of Kashmir to the plains of Punjab. Ram Bagh, on the east bank of the Jamuna river at Agra is believed to be the first Mughal garden laid out by Babur in 1526. Today it is a rectangular garden, oriented east-west, measuring approximately 335.28 meters by 259 meters. It is subdivided into forty-two rectangles (seven along its east-west axis, six on its north-south axis), a variation on the classical Persian *chahar bagh*. The design of the classical *chahar bagh* takes its inspiration from the four rivers described in the Quran: one of wine, one of honey, one of milk, and one of water. A traditional *chahar bagh* features a central water source, which streams outward in four directions over a symmetrical ground plane; the garden is ultimately divided into four equal areas by these four streams.

The garden of Hasht Behesht Bagh built by Babur in Agra no longer exists, but historical records of it survive. It had a *pishtaq*, or decorative portal, on each of four sides, connecting galleries, and four small interior chambers. Babur brought artisans from Afghanistan to help design and construct this garden. The most well-known was Mir Mirak Ghiyas, who is later reputed to have designed Humayun's Tomb.

Other key Mughal sites include Humayan's Tomb Complex in Delhi and the Taj Mahal Tomb precinct in Agra.

HUMAYUN'S TOMB AND GARDENS

The Mausoleum of Humayun in Delhi (restored by the Aga Khan Trust for Culture), may be considered the first masterpiece of Muslim architecture in India. It is surrounded by an immense square garden measuring 365 meters along each side, with three monumental entrances opening into it. The space is divided into thirty-six squares by a network of paths with channels and fountains at the junctions of the larger areas, defining the classic garden of the Persian tradition (*chahar bagh*). The scheme could also be divided into nine major squares, each formed of four smaller ones, with the square of the mausoleum at the centre.

TAJ MAHAL

The Taj Mahal, a mausoleum and garden, was built between 1632 and 1654. The plan of the gardens is a four-fold paradise garden with a tomb on its edge overlooking the river Jumna. Planting of the gardens has changed considerably several times since the original layout of Ustad Ahmad, which was probably based upon several grids with a variety of trees, shrubs and flowers inspired by well-known cosmological diagrams depicting the garden of paradise. Views in the 19th century show it overgrown with mature trees. Today it appears rather empty from a horticultural point of view.

The garden is accessed via a doorway that conceals the treasure within until the last minute. The building stands at the back and not in the centre of the *chahar bagh*, enhancing its outline and multiplying the space in front. Shah Jahan had it constructed entirely of white marble to emphasize its mirage-like appearance, which he dejectedly contemplated from the loggia of the Anghuri Bagh in his palace on the opposite bank of the river.

WATER

Precipitation varies considerably by season and location. The areas noted for gardens are all in well-watered regions that take advantage of the rivers flowing from the mountains in the north and northwest, where snow melt guarantees water through the periods with little rain. The deserts to the west and north in Rajasthan and in Pakistan receive less than 20 cm per year of rain, while parts of Kashmir and the Punjab have between 150 and 250 cm annually.

Opposite: Taj Mahal, Agra, India

One result of the difficulties relating to water in dry seasons was the development of stepwells. First used by the Hindus, these were later developed by Muslim architects and hydraulic engineers into elaborate works that reached deep to the level of the fluctuating groundwater, which falls dramatically for months at a time.

As in other aspects of design and architecture, both Emperors Babur and Akbar commissioned important stepwells at Fatehpur Sikri and Agra. Later Rajasthan became a region with a remarkable number and variety of these unique creations, which were as essential for gardening success as for life in general.



MATERIALS

Red and yellow sandstone with white marble inserts were typically used for domes, trim and copings. White marble constitutes the Indian equivalent of the Iranian solution of glazed bricks, which were very rare in India. There are also pierced red sandstone railings with geometric patterns and the deep brackets and corbels of sandstone that recall Hindu wooden models, from which they are certainly derived.

At the Mausoleum of Itimad ud-Dawla, in Agra, the brilliantly composed decorative panels represent a notable range of subjects with a very limited palette of colors – black, grey, and various tones of ochre and red. They contain vases of various shapes with flowers, or containers perhaps full of wine and honey that await believers in paradise. Abstract patterns vary with geometric and floral motifs with panels depicting cypress and flowering fruit trees with flowers inlaid in marbles.

Inside, the mausoleum is plastered and painted, whereas the exterior is completely covered in *pietra dura*, composed in panels with geometric and floral designs on a background of dazzling marble whiteness. As with so many of these monuments, only the structures remain, the plants and water that filled the site are gone.

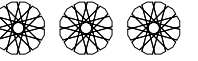
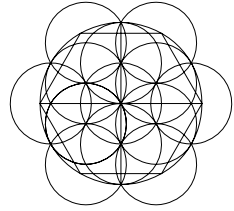
Shah Jahan had the Taj Mahal built entirely in white marble, so that the grain of the stone could assume constantly changing hues with variations in the light. The tall handsome *Iwan* (arch and recess of entryway to the tomb) is surrounded by an elegant intarsia of colored marbles of script and floral motifs. Other marble panels depicting plants are carved in realistic low relief.

PLANTS

The relationship to the natural world in India can be described as an approach where nature was perceived as an intrinsic part of the human community. The local philosophical and religious tradition framed the world as a realm of divine ordinances including natural science, physics, and mathematics. Many plants took on religious symbolism and were used in healing and religious ceremonies. The range of plants found in Islamic gardens was quite large due to the fact that India experiences climates of four major climatic groups; temperate, tropical, subtropical and arid.

Opposite: Floral relief, Agra Fort, India





THE IMPORTANCE OF PARKS AND GARDENS

“The Aga Khan Trust for Culture insists that each of its conservation and restoration projects should be able to have an important positive impact on that quality of life. We are keen that our investments create a multiplier effect in the local economy. Accordingly, we monitor their impact on the physical environment as well as on disposable income and other indices of better living conditions. We also emphasise self-sustainability. Here, as with the Trust’s other urban (park) projects such as in Cairo, Kabul and Zanzibar – a significant long term outcome will be the enhancing of the quality of leisure for residents and visitors alike. A richer educational encounter at a sensitively restored monument will prompt more tourists to seek out other culturally significant sites in India. These restored gardens can thus become the fulcrum and catalyst for socio-economic development as well as an irreplaceable resource for education.”

His Highness the Aga Khan
*Inauguration Ceremony, Restored Humayun’s Tomb Gardens,
New Delhi, India, 15 April 2003*

Opposite: Baghe Babur, Kabul, Afghanistan





Top: City Park, Khorog, Tajikistan

Bottom: Aga Khan University, Karachi, Pakistan



Roughly 5000 years ago, the concept of the park took form when kings began planting ornamental trees from distant lands. A millennium later, *The Epic of Gilgamesh* described Ancient Sumer as a land of gardens. During Rome's Golden Age, the city saw the construction of a number of parks, including some, like the Villa Borghese, that survive today.

When Cairo was built in the 10th century by the Fatimids, His Highness the Aga Khan's ancestors, 20 percent of the city was devoted to open space, including a royal park and garden. The English began reserving common green space for public use in the 13th century. In New York, Central Park began its life 160 years ago. Each effort reflected a belief in the importance of green space for the quality of life.

By the second half of the 20th century, as people from rural areas moved into cities and open land became more and more valuable, large slices of green space were sold off – or were simply occupied. Cities became denser and denser. Former “garden cities” became agglomerations of brick and concrete. Encroachment, both legal and illegal, has gradually swallowed up forests and grassland, diminishing green space. Overwhelmed by financial demands, municipalities have neglected the problem, assuming that green space was unproductive and therefore of little value – or worse, a financial liability.

As green space shrank and the quality of life deteriorated, alarms began to ring. Enlightened municipal planners began to see parks not just as recreational assets but important parts of a community's health and well-being, as well as important aspects of culture, social cohesion, even economic development. It was discovered that talented people gravitated to cities with green space. Parks also came to be known as climate modifiers, which could mitigate a city's heat and pollution, or as biodiversity clusters that often contained a surprising number of species.

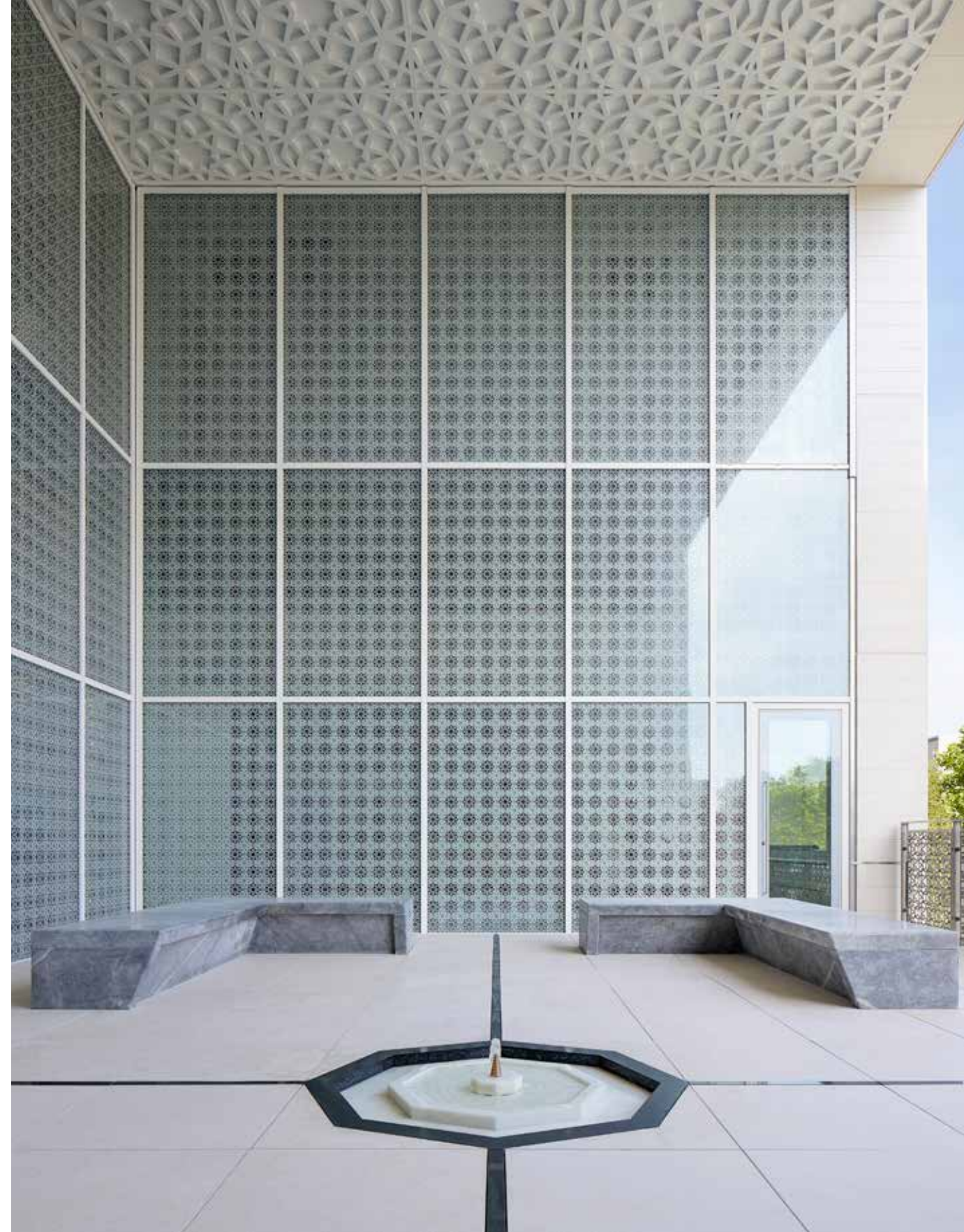
As a result of this new appreciation for their value, parks enjoyed a renaissance in the developed world. Yet in poor areas, the neglect of green space continued, often overwhelmed by inward migration to cities. Municipalities, beset by numerous demands on their finances, pushed green spaces down their list of priorities.

It is in this context that the Aga Khan Trust for Culture (AKTC) began experimenting with the notion that green spaces could be catalysts for positive economic, social and cultural change, rather than being considered as financial liabilities. Implicit in that notion is the idea that green spaces could become self-sustaining rather than being burdens on municipal finances. In Cairo, Bamako, Kabul, Delhi and other sites, AKTC's rehabilitation of existing parks and the creation of new ones have made these parks hugely popular among local populations and international visitors – and they are running surpluses. Some even help subsidise urban regeneration projects in adjacent neighbourhoods, restoring hope for the future in historic districts where many had become resigned to decline.

Twenty years after it began building parks in the developing world, the Aga Khan Trust for Culture has demonstrated that parks not only contribute to the quality of life in cities, but that they can be self-sustaining if conceived and managed properly. In several locations, it has even demonstrated that, under the correct conditions, parks and gardens can be economic generators that drive – directly and indirectly – a broad movement of positive change.

In the same spirit, other Aga Khan Development Network agencies have invested in green space, notably the Aga Khan University in Karachi, which has set aside considerable green areas in the design of its campus, or the Serena Hotels, which pursue sustainable green space in all of their properties. Ismaili Centres in Burnaby, Dubai, Dushanbe, London, Lisbon and, most recently, Toronto; and even in urban buildings, such as the Aga Khan Centre, the new home of the Aga Khan Foundation, the Institute of Ismaili Studies and the Aga Khan University at King's Cross in London, all incorporate spaces for social and cultural gatherings, intellectual engagement and reflection. They are conceived as bridges of friendship and understanding, and serve to enhance relationships among the general public, faith communities, government and civil society.

Opposite: Garden of Tranquility, Aga Khan Centre, London, United Kingdom



AL-AZHAR PARK, CAIRO, EGYPT

Perhaps one of the most significant examples of the work of the Aga Khan Trust for Culture is Azhar Park in Cairo. His Highness the Aga Khan sought, at the conclusion of a seminar on “The Expanding Metropolis: Coping with the Urban Growth of Cairo,” to address the issue of the city's dwindling green space by financing the creation of a park. He settled on the 30-hectare site that had been the city's rubbish dump for 500 years. The adjacent area was replete with monuments of Islamic Cairo that testified to periods of great sophistication – the Fatimid gates, Ayyubid walls, and Mamluk mosques.

However, in many cities across the world people abandon historic centres, opting for new agglomerations of glass and concrete. The old centres are then occupied by new migrants, drawn to the city by jobs. By the early 1980s, this paradox squeezed out much of Cairo's green space even though it had been a city of gardens just a few decades earlier.

In poor areas, conditions were even worse as new migrants squeezed into alleys without water and sanitation and absentee landlords ignored maintenance. Understanding how the process of decline could be reversed by restoring monuments and building a new park was part of a plan to revitalise one of the poorest and most troubled areas in the city.



The only central location that was of suitable scale for a new park was the derelict Darassa site, a 30-hectare (74-acre) mound of rubble adjacent to the historic city. The area, which included a rich array of monuments testifying to a thousand years of history, posed several technical challenges. Adjacent to Cairo's City of the Dead, it had been a debris dump for over 500 years. Trash smouldered in parts of the site.

Construction required excavation, grading and replacement with appropriate fill. A total of 1.5 million cubic metres of rubble and soil, over 80,000 truckloads, was moved. In addition, three 80-meter fresh water tanks for the city had to be incorporated into the Park design. Specialised plant nurseries were created to identify the best plants and trees for the soil, terrain and climate. Over 655,000 young plants from cuttings and seeds were planted in the Park.

Today, the Park draws two million visitors a year. Through gate receipts and revenues from the Park's restaurants, the Park has become self-sustaining. More importantly, the US\$ 30 million project has encouraged positive change in the neighbouring district, moving well beyond the Park to include the restoration of monuments and public spaces in neighbouring Darb al-Ahmar as well as socio-economic initiatives, including housing rehabilitation, microfinance, vocational training, and healthcare spearheaded by the organisations of the Aga Khan Development Network.





NATIONAL PARK OF MALI, BAMAKO, MALI

Some rapidly growing cities are still blessed with large areas of forest or parkland, offering an opportunity to preserve a sufficient amount of green space for future generations. Yet municipalities are faced with an apparent quandary: preserve green space and thereby ensure the liveability of a city or allow green space to be used indiscriminately in the name of growth. Bamako's National Park of Mali provides an example of an enlightened public-private partnership that has created a permanent green space in the service of present and future generations.

The population of Bamako, the capital of the Republic of Mali, has risen rapidly in recent years, now reaching over one million inhabitants. Population growth has driven the demand for housing and public facilities. In this context, the need for far-sighted urban planning was crucial. The Government of Mali responded by outlining the boundaries of the National Park of Mali, a space of 103 hectares within a larger protected forest reserve of 2,100 hectares that forms a significant green belt in the city of Bamako. Under the terms of the public-private partnership, the Government asked AKTC to concentrate on the Park's 103 hectares (254 acres), a large, semi-circular canyon of protected forest that lies beneath the Koulouba plateau, between the National Museum and the Presidential Palace Complex.

In keeping with AKTC's philosophy that a Park without a long-range plan for maintenance and development could simply become a burden on the city, AKTC signed a 25-year agreement with Mali's Minister of Culture and Minister of the Environment and Sanitation for the maintenance and further development of the Park. AKTC's park projects, notably in Delhi, Cairo and Kabul, all have provisions for the long-term sustainability of the parks.

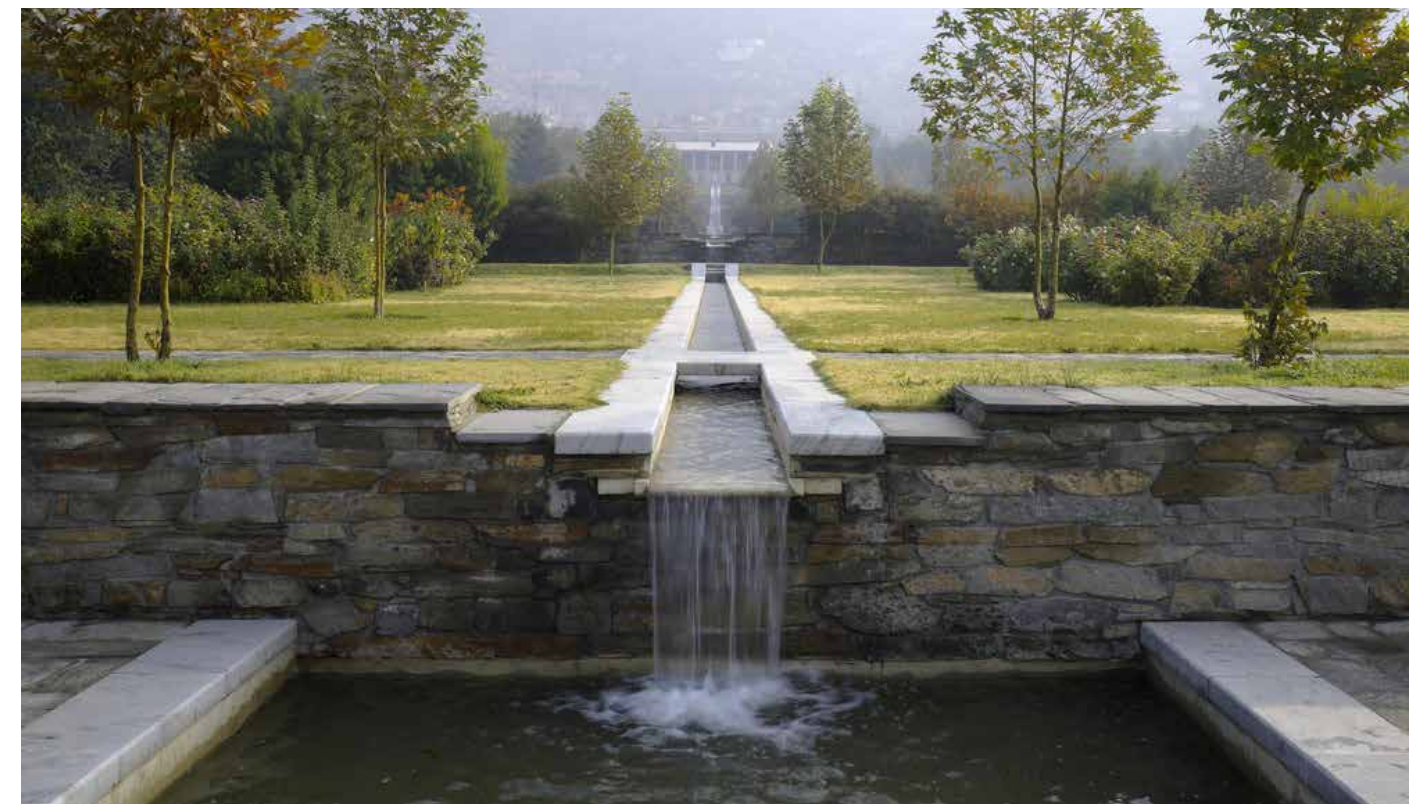
The Park in Mali is designed to offer large open spaces for leisure and educational activities for the general public, school groups and tourists. Bringing together the National Museum and the existing Botanical Garden and Zoo into a single cultural/ecological park, the Park features a comprehensive pedestrian circulation network and formal promenades throughout. It contains fitness, jogging, cycling and mountaineering tracks of varying difficulty and interpretive trails intended to promote awareness of botany, birds and nature. The garden spaces feature indigenous flora in varied settings, from open lawn areas to flower gardens, wooded areas and a medicinal garden. Interpretive educational signs and displays and the development of trained guides are expected to offer new educational experiences for visitors. The restored zoo, which is designed to encourage more humane treatment of animals in the continent's zoos, contains an aviary, serpentarium and aquarium.

BAGHE BABUR, KABUL, AFGHANISTAN

As part of a broad AKDN development effort including an array of economic and social development initiatives that mobilised over US\$ 1 billion for work in Afghanistan, AKTC began work in 2002 on the restoration of a number of landmark buildings, monuments and green spaces, many of which had suffered severe damage during the decades of conflict.

A major garden built in the 16th century around the tomb of the first Mughal emperor, Babur, had suffered serious war damage and was largely neglected. Public spaces had been destroyed by artillery or degraded by bullets. In early 2003, conservation began on the sixteenth-century Baghe Babur, said to be Babur's favourite garden. Now managed by an independent trust, the restored 11-hectare garden not only re-established the historic character of the site with its water channels, planted terraces and pavilions, but also provided the population of Kabul with a space for recreation and cultural events. The bulk of physical works have been in public use since 2007, including a swimming pool, garden pavilion, caravanserai and Queen's Palace complex.

Baghe Babur has seen a steady increase in number of visitors. By 2018, it was drawing over 1 million visitors a year. By generating revenue from entrance fees and appropriate public events in the various facilities, the Park now covers its operating costs and runs a surplus – providing a model for saving other green spaces in Kabul and elsewhere in the country.



HUMAYUN'S TOMB GARDEN AND SUNDER NURSERY, DELHI, INDIA

The city of Delhi is home to some of the most important sites and monuments of the Mughal period, among them Humayun's Tomb and Gardens. The site, originally on the outskirts of the city, is now at the centre of a dense residential district. Yet despite the population density beyond its walls, it was underused, perhaps because the gardens were dilapidated and the structures suffered from a lack of maintenance. The Trust's garden restoration was completed in 2003, in collaboration with the Archaeological Survey of India, as a gift from His Highness the Aga Khan for the country's 50th anniversary of independence.

The initial garden restoration project included the reinstatement of the walkways and conservation of the edging stones; the repair, extension and reactivation of the irrigation system; the establishment of water sources for the water channels and irrigation system, including a pump station for a water-recycling system and the conservation, repair and rebuilding of the water channel system. Planted zones were re-levelled and revitalised with species and arrangements that conform to the customs and patterns known from Mughal sources. The project immediately increased interest in the Tomb complex and soon generated a surplus for the Archaeological Survey of India, which operates the site. It also rekindled interest in the rich history of Mughal rule.

The 70-acre Sunder Nursery project, adjacent to Humayun's Tomb, aims to showcase the ecological and built heritage of the Nursery and create a major new green space for public recreation. As with the Humayun's Tomb conservation, works include ongoing conservation of the unique sixteenth century Sundarwala Mahal and other monuments on the site. But its greater value may be as an educational resource in local ecology for the city's schools. An arboretum exhibiting the flora of the Delhi region recreates various micro-habitat zones of the national capital region, showing the richness and versatility of the native or naturalised flora, which include *kohi* (hill), *khadar* (riverine), *bangar* (alluvial) and *dabar* (marshy) areas, which are all representative of Delhi's fast disappearing biodiversity. Aligned with the large entrance plaza of Humayun's Tomb, Sunder Nursery features a central pedestrian axis conceived in three parts, as a progression of formally arranged gardens around the heritage structures, and merging at its end with a proposed arboretum and water gardens.



AGA KHAN PARK, TORONTO, CANADA

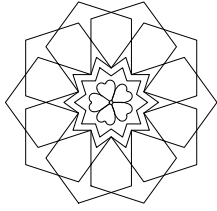
The Aga Khan Park connects the Ismaili Centre Toronto with the Aga Khan Museum and provides a place suited to both tranquil reflection and dynamic programming. The Beirut-based landscape architect Vladimir Djurovic designed the formal gardens of the Park, which are based on a traditional Persian and Mughal *chahar bagh* (four-part garden). The design is an intentional attempt to render contemporary the very spirit of the Islamic garden. Djurovic states “I think that His Highness is happiest when he is working and discussing the gardens. He really wants us to reinterpret the Islamic garden in a contemporary way. We did not copy any garden – it is more about what you feel and smell and hear in an Islamic garden. What it is that I love about Alhambra is the sound of water and the smell of jasmine. I wanted to use a very contemporary language. The architecture of the buildings is very contemporary. The Park must reflect its context as well – a place covered with snow. I like this challenge: how to reinterpret the Islamic garden.”

Organised around five granite-lined pools, the elements of the Park share a simplicity and regularity bordering on minimalism, though there are frequent surprises and changes of mood, progressing from a more formal configuration near the buildings and becoming less apparently ordered further from the heart of the site.





AGA KHAN GARDEN, ALBERTA



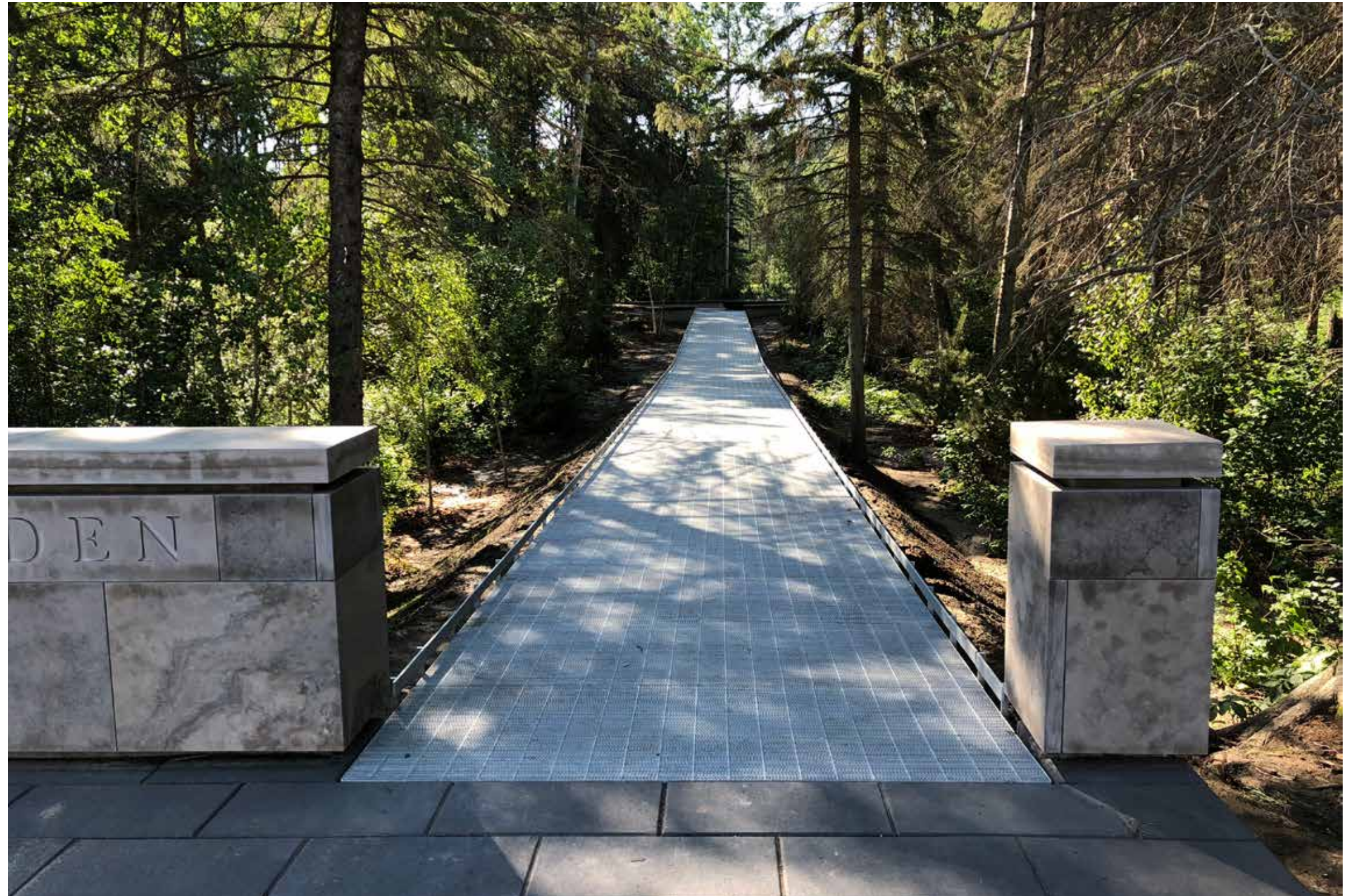
RESEARCH AND DESIGN

THOMAS WOLTZ

At the very heart of the design brief for the Aga Khan Garden at the University of Alberta Botanic Garden was an exciting vision from His Highness the Aga Khan: How could the centuries-old traditions of the Islamic garden form be made newly relevant in the 21st century? With a new relevance established, what positive impact could an Islamic garden have in the contemporary lives of people? To begin exploring his vision, he proposed a list of travel destinations that included ancient and contemporary gardens of the Muslim World. In addition to facilitating these travels, he suggested the space of one year for our design team to engage in deep research to find a path to the answers of these important questions. As a landscape architecture firm deeply committed to both cultural and ecological research, Nelson Byrd Woltz was particularly appreciative of the prescient understanding that the authenticity of the contemporary garden design would only come through a physical immersion in the stones, plants, temperature, water and shade of these ancient places.

During the travels to India and Egypt, I was able to visit many important architectural and landscape masterpieces. One of the most illuminating destinations was not amongst the luxurious palaces, forts, or pleasure gardens, but rather one of the most modest sites we visited: Ram Bagh, near Agra. At the time of our visit, the garden was in fairly poor condition and was reduced to the essential bones of the *chahar bagh* typology without the distraction of lush horticulture or decorative ornament. Here, one could observe a perfectly square sandstone plinth, contemporary in its sensibility, containing cisterns, tanks, canals, and rills elevated like a massive stone table

Opposite: Entrance to Woodland Bagh, Aga Khan Garden





Above: Chand Baori, (stepwell), Abhaneri, India
Right: Ram Bagh, Agra, India

above floodable, sunken squares of grass that once were lush gardens. It was evident in this garden that these essential elements of the Mughal Islamic garden all had their formal roots in structures related to agriculture in arid environments. Life was inextricably tied to the careful storage, conveyance, and distribution of water, and the gardens of paradise were a formalization and ornamentation of these structures firmly rooted in the productive landscape.

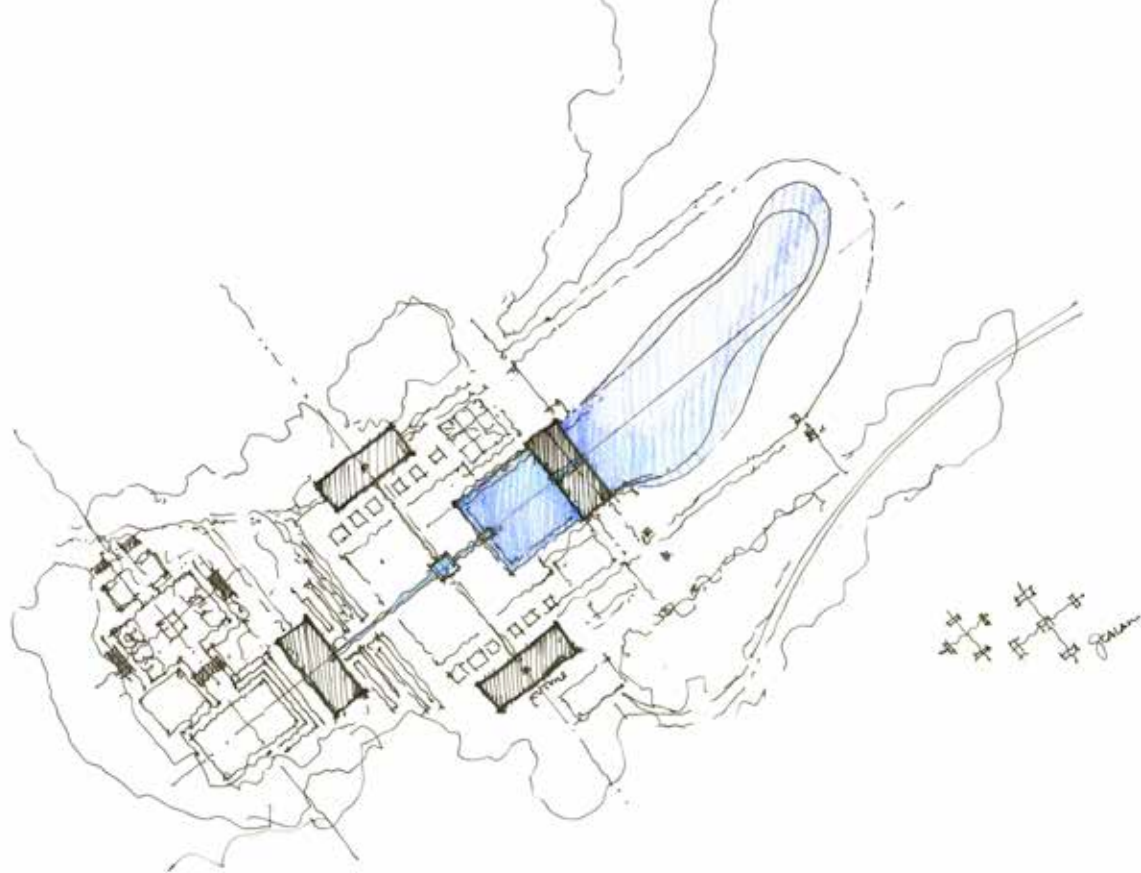
With a team of five landscape architects in our office conducting historical research over the course of a year, we expanded our investigation to address the ecological needs of Alberta and discovered a shortage of native seeds (including forbes, sedges, reeds and grasses) required for ecological restoration of vast post extraction landscapes. Could the garden we were designing at the University of Alberta become at once a pleasure garden, an educational experience, and a productive landscape embodying the vision from His Highness? From the essential agrarian roots of these garden forms comes an opportunity to cultivate seeds that could be distributed in service to the ecological needs of the Province, symbolic of the positive, radiating influence of Islam.



There were many further suggestions from His Highness that were instrumental in the ongoing research for this project and shaping the design. He advised us to look closely at the sensorial experience of the Islamic garden and to look beyond the expected qualities of water, light, and fragrance. He guided us toward the subtleties of Islamic poetry to contribute whimsy and surprise amidst the geometric order of the garden, and he urged us to seek design clues that may lie in the magnificent history of Persian miniatures. Each of these suggestions is manifest today in the Aga Khan Garden.

As the philosophical concepts of the Aga Khan Garden were coming into focus, it was clear to our design team that this garden also needed to resonate with and engage the unique qualities of the Albertan landscape. The Aga Khan Garden, formally inspired by many gardens within the Islamic diaspora, needed to not only somehow feel Canadian, but also survive the extremes of cold at the 53 degrees north latitude.

Through our firm's commitment to ecological research, we knew that an understanding of the dynamics of the soil, horticulture, and water in this very cold climate would be the key to achieving a Canadian sensibility in the garden. The extraordinary staff of the University



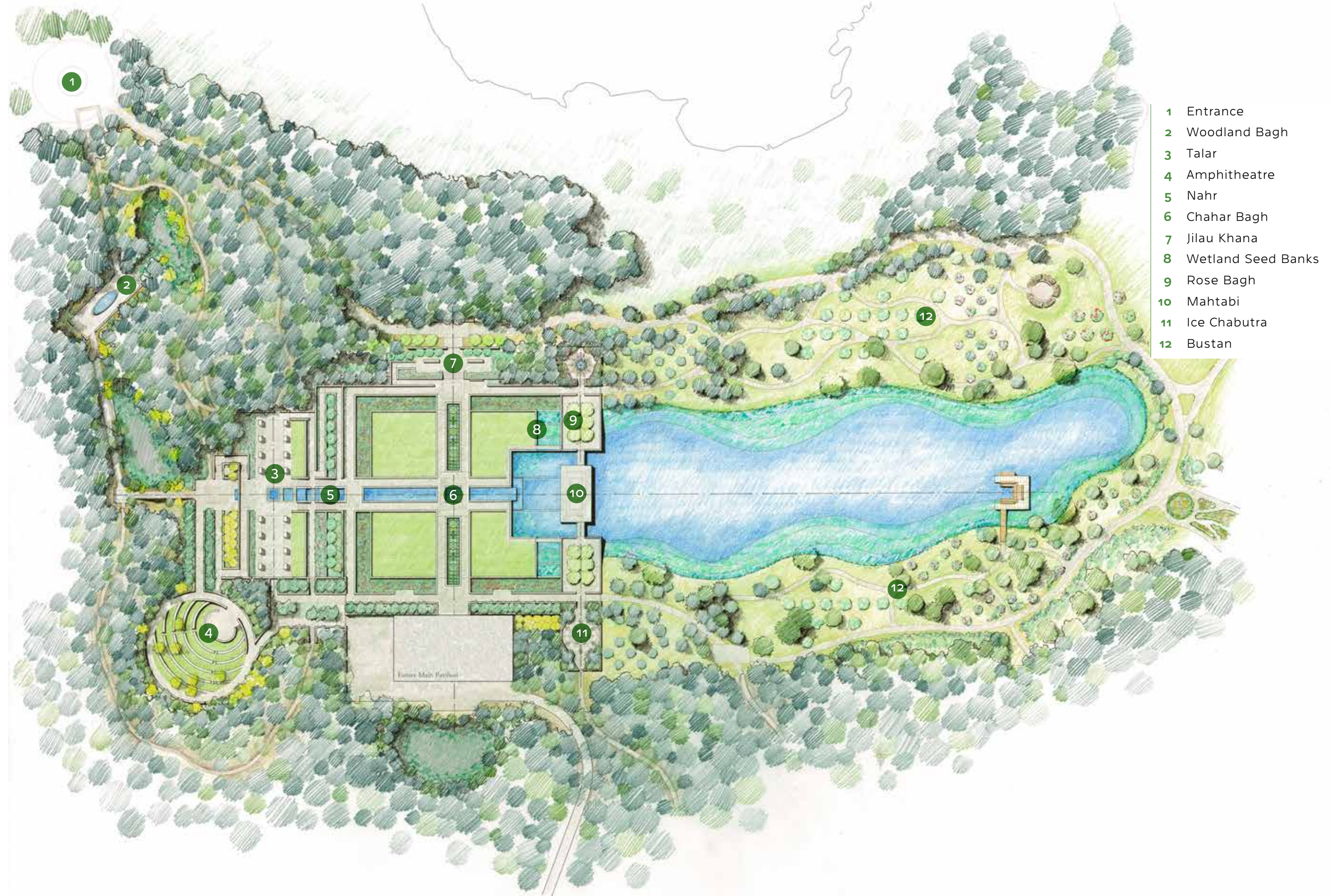
of Alberta Botanic Garden generously shared results of plant hardiness trials for the region and guidance on the hydrology of the site and the expected winter conditions. Our team was able to cross-reference the University's horticultural research with our own readings of Islamic poetry, descriptions of ancient gardens, and review of miniatures. This resulted in a satisfying family of plants including stone fruits, berries, roses, flowering perennials and bulbs that would survive the Albertan winter and have resonance with the history of Islamic gardens.

The *bustan* represents a significant portion of the Aga Khan Garden and is an historic landscape component rarely preserved in modern times. It was upon reading D. Fairchild Ruggles', *Islamic Gardens and Landscapes*, that our team came to realize the importance of cultivated terrains that often surrounded the walled formal gardens and were composed of meadows, orchards, and hunting grounds. These landscapes were the most vulnerable part of the Islamic gardens as they were ephemeral by their very nature and easily developed or urbanized as they contained few, if any, permanent structures. Further readings by James Wescoat and direct guidance from His Highness led to the design of the sinuous paths weaving around the Calla Pond in distinct contrast to the formal geometry of the central garden. The *bustan* in the Aga Khan Garden is planted in drifts of native Canadian perennials and grasses and populated by twenty varieties of fruit including cherry, plum, apricot, pear, apple and crabapple. Here again, shared research from the Department of Agricultural, Life,

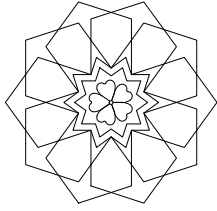


and Environmental Sciences at the University of Alberta was critical to understanding the hardiness of these trees and the dynamic of the surrounding landscape. As our design team began the detailing of the many masonry, steel, and stone structures that shape the garden, it became clear that we needed a deeper understanding of the meaning behind the geometric forms we were developing. Upon learning of a research and design program in Fez, Morocco, we sent one of our team to study Islamic pattern and geometry in design. The information she brought back to the office directly influenced the patterns of screens, pavement and fountains that shape the Aga Khan Garden today. The team's research, and subsequent design of these garden elements, was selected for an Award of Honor from the Virginia Chapter of the Society of Landscape Architects. It was with gratitude and pleasure that our office presented a copy of the award certificate to His Highness directly.

The Aga Khan Garden is the result of a collaborative, research-driven design process that includes a multiplicity of voices including designers, scholars, scientists, and historians. On behalf of Breck Gastinger, Nathan Foley, Jen Trompetter, Sandra Nam Cioffi, and Thomas Woltz, we hope that the garden will meet the vision of His Highness the Aga Khan and be an agent for positive change in the environment of Alberta as an Islamic garden for the 21st century – and beyond.



- 1 Entrance
- 2 Woodland Bagh
- 3 Talar
- 4 Amphitheatre
- 5 Nahr
- 6 Chahar Bagh
- 7 Jilau Khana
- 8 Wetland Seed Banks
- 9 Rose Bagh
- 10 Mahtabi
- 11 Ice Chabutra
- 12 Bustan

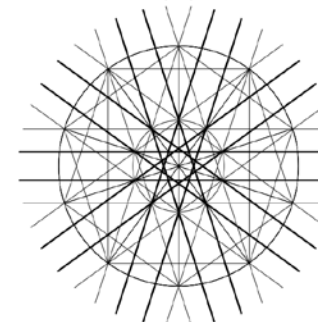
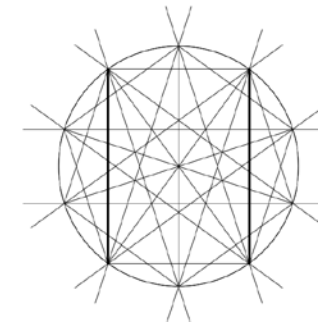
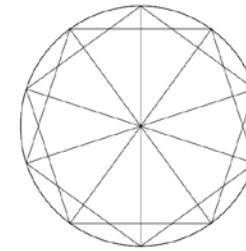
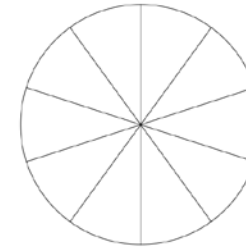


PATTERNS AND GEOMETRY

NELSON BYRD WOLTZ LANDSCAPE ARCHITECTS

Geometric design, based on the spiritual principles of nature, is at the center of Islamic culture. Geometry is regarded as a sacred art form in which craftsmen connected with the eternal; it is a form of prayer or meditation to awaken the soul in the practitioner via the act of recollection. Participating “in” geometry is symbolic of creating order in the material world and a way for the practitioner to bring to consciousness a greater understanding of the woven Universe and the Divine.

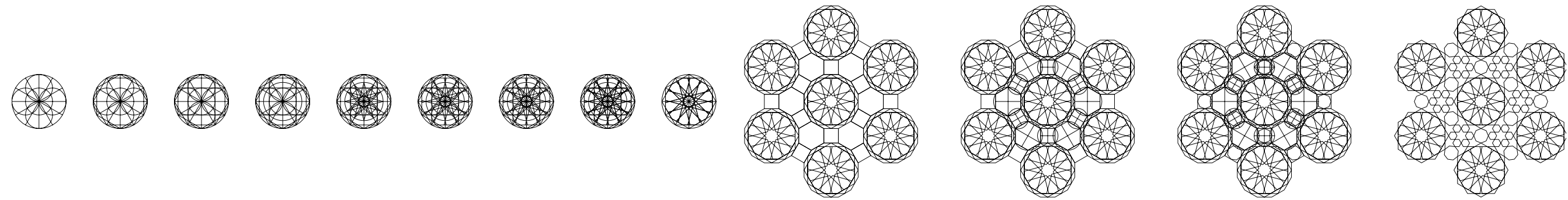
Islamic art has the power to connect us to nature and the cosmos by revealing patterns inherent in the physical world. While the use of geometry and patterns are intrinsic elements in Islamic garden design, graphic arts, and architecture, the rules and rationale to their form and application are not cohesively documented. To undertake the design and construction of the Aga Khan Garden, Nelson Byrd Woltz, the landscape architects, embarked on an immersive process of discovery and exploration. Through travel, research, and study under contemporary practitioners, they came to understand the manifestations of patterns across contexts, scales, and material application: from fabrics to gardens, mosques, forts, and in drawings and paintings. The physical and spiritual act of patternmaking, based on a thorough understanding of its cosmology and logic, was essential in creating a response that informed the design of the site. The design of the Aga Khan Garden will provide visitors a rare entry to understand Islamic art, design, and culture and its adaptability and relevance to contemporary life and place.



QUESTIONS GROUNDING THE RESEARCH

The research process began with a series of fundamental questions that informed the study:

1. How can we respectfully and thoughtfully use this pattern language, which represents hundreds of years of Islamic culture and design, within the context of a contemporary garden?
2. How can we appropriately apply these patterns in the Aga Khan Garden with purpose and meaning?
3. How can we make these gardens a pleasure for users to experience and provide the sensorial delight depicted in extant precedents and historic descriptions, such as Mughal miniature paintings?
4. Can the patterns, as significant elements of the design, respond to the mission of the Garden, and can the Garden present itself as a model for pluralism?



DRAWING AND UNCOVERING THE PROCESS OF PATTERNMAKING

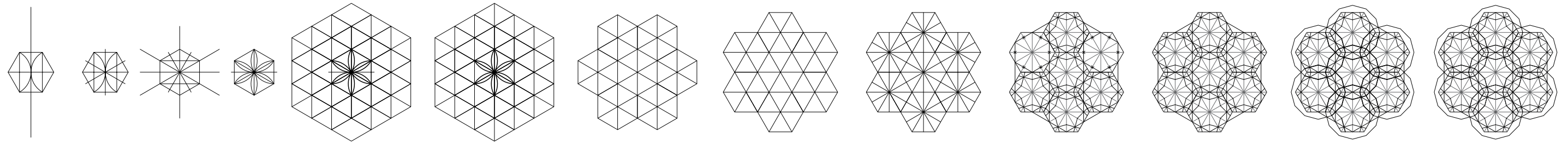
Lacking a singular manual documenting the process of Islamic patternmaking, the designers immersed themselves in the study of the form and the practice of creating. They considered the many historic examples and manifestations of patterns across materials and scales: from fabrics to gardens, mosques, forts, and depictions of patterns in drawings and paintings. This hands-on approach involved traveling to historic sites in the Islamic world and intensive study with contemporary Islamic artists to understand the process of pattern generation and its cultural variants across regions. Drawing based on observation and the practice of making form became imperative to understanding the rigorous numerology which underpins the designs, as well as their placement and hierarchy. It became clear that the physical act of practicing patternmaking, after immersive study, is essential to the research.

LOOKING TO HISTORIC PRECEDENTS FOR METHODS IN DESIGN AND CONSTRUCTION

The design team researched available texts, and, at the specific request of His Highness the Aga Khan, they visited historic Mughal gardens including the Taj Mahal. The team also conducted internal workshops, and participated in coursework with other designers, educators, and artists led by The Art of Islamic Pattern in Fez, Morocco. As students, they observed the traditional processes for the design and construction of these patterns. Artisans in Morocco and India shared their techniques for metalsmithing, *zellij* tile-making, and textile block printing. These techniques provided the researchers with examples of geometry translated into the physical world, and lessons in maintaining the integrity of the pattern in the process of construction. Designers came to understand the importance of practice and repetition as foundational to the creation of these patterns and became connected to this technical craft as taught by highly skilled artisans.



Above: Metal screen, Jilau Khana, Aga Khan Garden



EMERGING PATTERN AND SYMBOLIC PLACEMENT

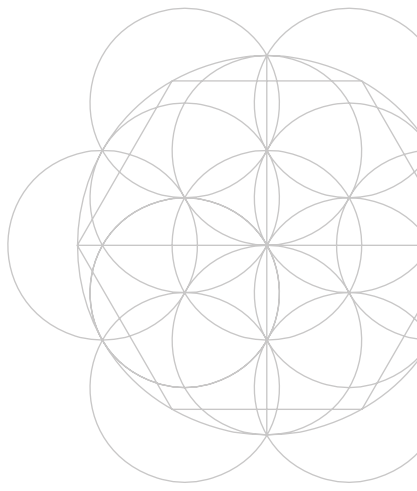
Islamic patternmaking begins with a foundation of geometry, and its use in building and craft is a physical expression of humanity's desire to reach for the Divine. Geometric design based on the principles of nature are at the center of Islamic culture. Geometry is regarded as a sacred art form in which craftsmen can connect with the eternal; it is a form of prayer or meditation used to awaken the soul in the practitioner via the act of repetition and recall. Engaging in geometry is symbolic of creating order in the material world and a way for the practitioner to bring to consciousness a greater understanding of the interwoven Universe and Divine. As such, the application of these patterns in a traditional Islamic Garden have an order of operation: geometric patterns are found at the base floors, the lower half of walls; calligraphic patterns are found at eye level; and the biomorphic floral patterns rise to the heavens.



Right: Source Fountain, Upper Talar, Aga Khan Garden

PATTERN PRACTICE

As the designers began to translate their research into design, they maintained the fundamental basics of Islamic patternmaking to ensure the authenticity of the proposed gardens. The numerology that is foundational to the construction of these geometries informed the types of patterns utilized throughout the contemporary gardens. The Aga Khan Garden has at its center a *chahar bagh*: the four-fold Garden of the Soul, Garden of the Heart, Garden of the Spirit, and Garden of Essences. Horizontal surfaces are covered in geometric patterns that are symbolic of the earth, while vertical surfaces are covered in those that are symbolic of the heavens. Planting plans became an expression of the traditional biomorphic patterns, where the plants themselves reach towards the sky in keeping with patterns on the walls of traditional Islamic architecture. Recalling the artisans in Fez and India, the design team continued the process of research through patterns, creating mockups to ensure that these patterns would successfully translate from two-dimensional geometry into material expression through contemporary fabrication. The designers took their findings and translated them into vibrant and sensorial experiences expressed through the materials that define the gardens: water, plants, concrete, and stone.

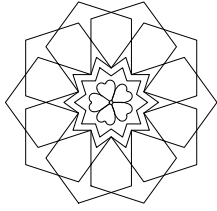


HONOURING THE ISLAMIC GARDEN TRADITION FOR THE BENEFIT OF ALL

The Aga Khan Garden is a gift to the people of Canada from His Highness the Aga Khan. As such, the designers felt an added sense of responsibility to create a contemporary Islamic garden that honored these deep cultural traditions for an international audience. The spirit of generosity and giving infused the process of patternmaking. In a living garden surrounded by horticultural and natural beauty, these elements add visual and emotional delight to the individual's experience of the garden and shed light on the varied Islamic cultures from which they originated. They reveal patterns inherent in the natural world and have the power to connect everyone to nature and the cosmos.

Through patternmaking, the designers now possess the knowledge to drive a process that maintains the integrity of form through the reflection of specific program and site conditions. This research has become a valuable tool for the design and implementation of a contemporary Islamic garden that continues an authentic practice and celebrates the specifics of place to promote learning, cultural exchange, and understanding.

Opposite: Mahtabi, Aga Khan Garden



AN ISLAMIC GARDEN IN EDMONTON

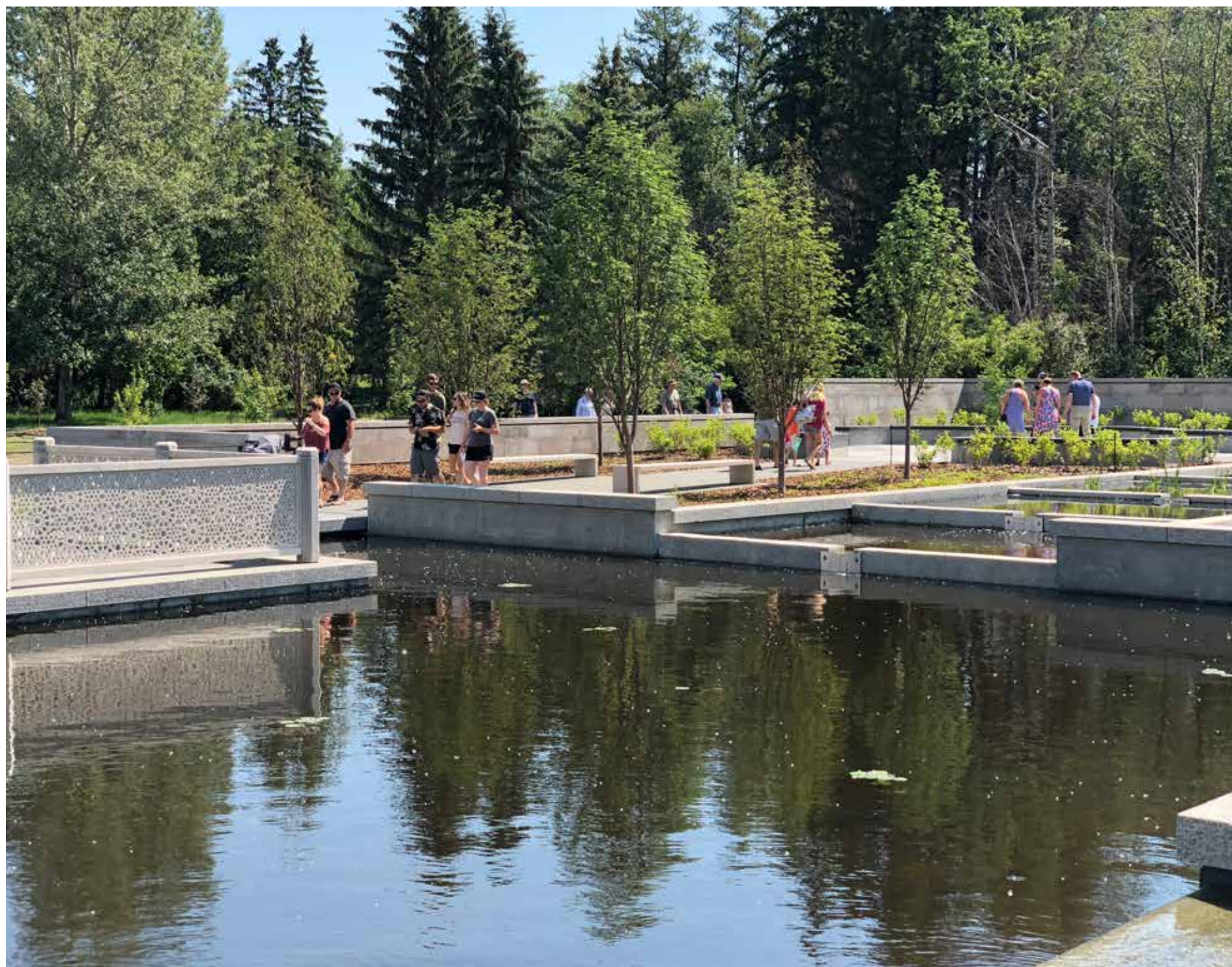
D. FAIRCHILD RUGGLES

When His Highness the Aga Khan gave Nelson Byrd Woltz Landscape Architects (NBW) the commission to design an Islamic garden for the University of Alberta Botanic Garden in Edmonton, he insisted that the firm's principal, Thomas Woltz, go to see the great historic Islamic and especially Mughal gardens. Thus, before beginning to plan the new garden, Woltz went to Cairo to see Azhar Park and to India to see the majestic Taj Mahal and nearby Ram Bagh on the banks of the Yamuna River in Agra. The itinerary included Fatehpur Sikri, Deeg Water Palace, Amber Fort and, in Delhi, the Red Fort, Humayun's Tomb and the adjacent Sunder Nursery – the last two being conservation projects sponsored and undertaken by the Aga Khan Trust for Culture. In this way, the new Edmonton garden – which at that point was nothing more than a hope and a concept – was from the beginning intentionally connected to historical precedents half a world away.

Islamic gardens are renowned for the geometrical precision and clarity of their four-part plans, the taming of uneven terrain through flat stepped terraces and the exuberant water displays that contrast sharply with the arid land that usually surrounds such gardens. Particularly in the Islamic landscape, water is a primary element. It appears as a vertical jet in fountains, a reflective surface in rectangular pools, a complex texture as it flows over scalloped stone slabs called *chadars*, or running in channels that give axial structure to the space.



Opposite: Nahr and Chahar Bagh, Aga Khan Garden



Many of the gardens Woltz saw were of the classic type called a *chahar bagh* (“four gardens”) in which the enclosed garden was divided into quadrants by cross-axially arrayed water channels or pathways. In observing the classic layout and elements of the gardens, Woltz took special note of the forces that generated those forms, specifically the way that the need for irrigation in agriculture produced the axial water channels that divided the land into individual bedded plots, and the way that the need to store water produced the reflecting pools and cisterns. Thus, while he saw the gardens as visually beautiful designs, he also looked at them as representations of transformative landscape processes. This was an important insight because in many ways, the designed garden tells a story about landscape: the story of overcoming aridity in the desert or the story of how melting snow rushes down a mountainside to a valley lake. To tell new stories successfully, the landscape architect has to be able to read the existing landscape and imagine how the narrative of water management, plant cultivation and land shaping can be told. Moreover, the architect cannot simply reiterate the story of another place but must communicate something important about “this” place, whether it be Cairo, Delhi or Edmonton.

With the Aga Khan Garden, the goal was to tell the story of the Edmonton landscape while at the same time forging a connection between contemporary Alberta and the Islamic world of the sixteenth and seventeenth centuries so that the garden would evoke recognizable Islamic forms in modern terms. Woltz explained: “We were asked to look beyond the bounds of the traditional Islamic garden and to develop ideas that could bring a new kind of relevancy in the twenty-first century.” His Highness called for “the most beautiful space which man can create using the best of our earth’s features”. The challenge faced by Woltz and NBW project manager Breck Gastinger was how to enter into such a distinguished tradition of garden-making without resorting to copy or pastiche. Furthermore, since the garden was to be part of a public park, it had to be appealing in all four seasons of the year.

To make a garden in Edmonton with its extreme climate conditions, sandy soil and limited plant palette, and with the mandate that it should offer opportunities for community socialization as well as privacy, required a reconceptualization of the Islamic garden as a public park. The Aga Khan Garden is located within the seventy-six-hectare site of the

University of Alberta Botanic Garden (established by the University of Alberta in 1959). The area, called the Alberta Parkland Region, has broad expanses of prairie with shallow surface depressions in ancient sand dunes that form pothole wetlands. It experiences hot summers and extremely cold winters with temperatures averaging -8 to -12 °C, the chill intensified by strong winds. Winter is not unknown in the Islamic garden: after all, gardens in Kabul and Kashmir flourish in cold climates. But Edmonton is at a latitude 20 degrees north of those and thus, while the winter season itself was not a challenge, the extremity of the cold and the limitations that it places on the available plant palette has required imagining the Islamic garden in different terms. The designers could not simply copy existing historic gardens but had to find new solutions appropriate for Canada.

In designing an Islamic garden for four seasons, Woltz and Gastinger are drawing upon the expertise of the Botanic Garden horticultural staff to identify plants that will flourish despite the extreme cold and sandy soil of the Devonian site. But the bar is set higher than simply the Garden's survival; it has to be a place of pleasure and beauty in all four seasons of the year. Thus they have searched for plants that offer colourful winter berries, evergreen foliage and that are attractive for their shape or bark colouring even during winter's dormancy. The Garden's structure must be bold enough that it will be recognizable under a layer of snow.

The Aga Khan Garden is laid out in three parts: woodland valley, central court and pond framed by an orchard. From a natural rise at its south-west end, it unfolds in rectangular terraces down to Calla Pond, a natural collection basin belonging to the hydraulic system that includes the wetlands area beyond the site to the north. Surrounded on all sides by a lush backdrop of semi-wild forest, the Garden appears as a calm oasis in a sea of green. On the highest point of the rise stands a pavilion that enjoys a sweeping vista of the Garden along its main axis and, from its back face, opens onto an intimate clearing with a path that leads through the woods to the Japanese Garden (added to the University of Alberta Botanic Garden in 1978). Inside the pavilion, water emerges from a fountain and runs in a channel embedded in the floor – a playful illusionistic device found in many Mughal pavilions that inverts expectations by bringing an outdoor “spring” indoors. The stream flows through a stone-lined channel that broadens to a rectangular stream as it drops from one terrace level to the next via dynamic *chadars*. It fills a square basin in



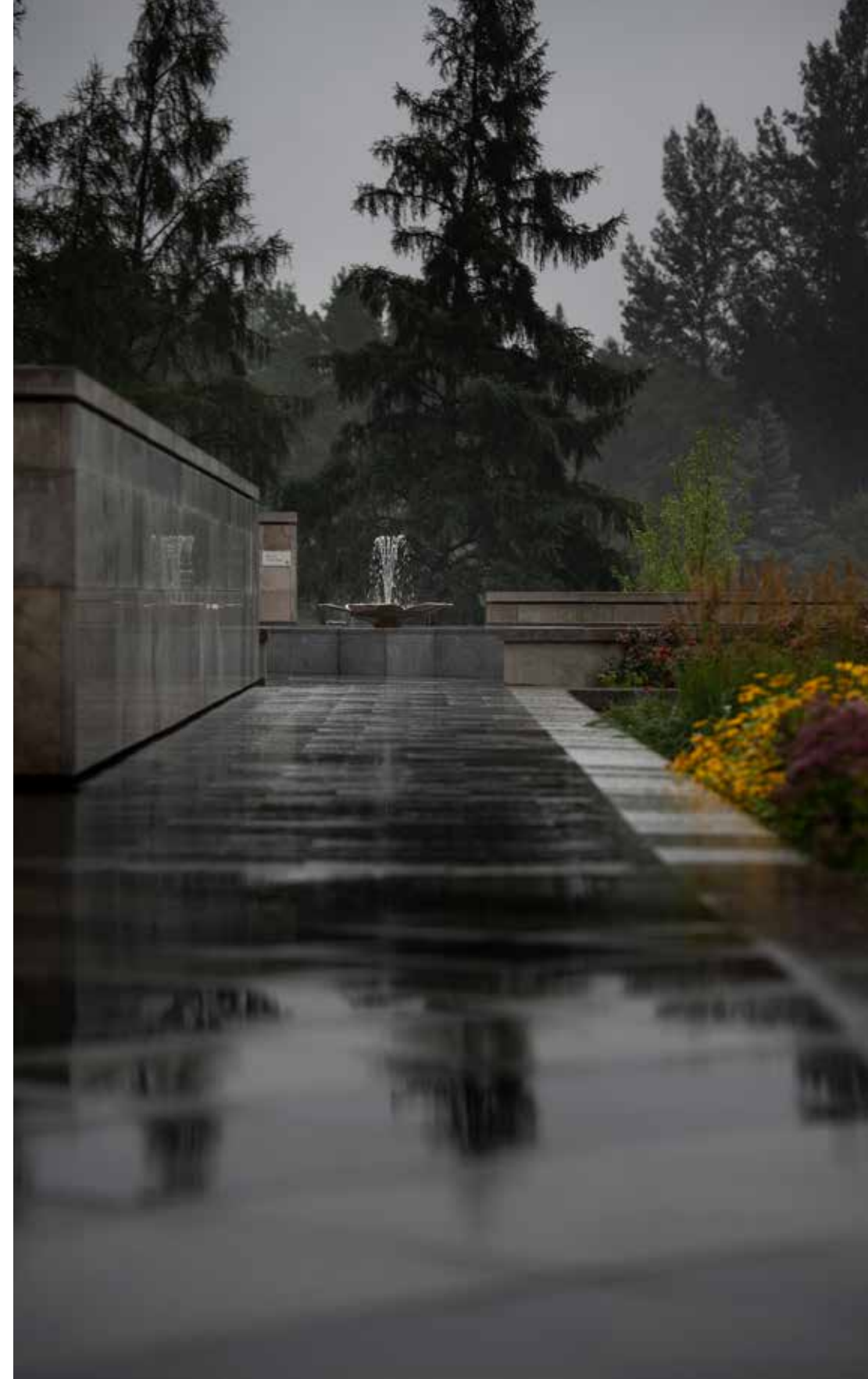
Above: Walkway, Woodland Bagh, Aga Khan Garden

the *chahar bagh* on the lower level, and then falls gently into Calla Pond. At that liminal moment, it transitions from a highly structured rectilinear scheme to a looser, curving, more apparently naturalistic design. Calla Pond's surface will rise and fall depending on the seasonal water levels, retaining its wetland character. A pump circulates the water up to the topmost level to feed the fountain, but the water itself is a natural resource that is stored in the pond below. Thus, as the garden is nestled into an existing context, it actively participates in the environmental process of water catchment. Moreover, it makes that process visible through the stone framing that formalizes and draws attention to the channelized stream, the water's cascade, the pond's rim.

As Woltz studied the great historic Mughal gardens (which included gardens made by other princely families of India during the era of Mughal rule) as well as the twenty-first-century Azhar Park in Cairo, he looked beyond the visual appeal of the forms and began to develop a concept based on process and productivity. He explained the importance of "looking at the roots of those iconic gardens and finding that the constructs of the Islamic garden – the simple conveyance of water, rill, cistern, tank, sunken beds – were about the modulation, stewardship and 'care' for water". The enormous, extravagant gardens of the Taj Mahal and others came from the careful management and display of a singularly precious resource. The tending of plants, the organization of discrete cultivation plots, the introduction of water in channels to irrigate the planted beds were all processes derived from the working agricultural landscape.

However, at the Botanic Garden site, the problem was not the acquisition of water in an arid context but its abundance in a wetland context. The designers observed that the same system that was developed historically to obtain, store and transport water in conditions of scarcity could also be used to drain it and manage it in conditions of plenitude. It was because of this understanding of the garden as a process, rather than a set of interchangeable visual forms, that led Woltz to think critically about not what an ideal Islamic garden should look like, but what an actual garden "does". The design team was thus able to reactivate a key process, inverting a system designed to bring water to an arid landscape, by using the same techniques to drain the land in wetland conditions and control erosion.

Opposite: Rose Bagh, Aga Khan Garden



A significant element in the Aga Khan Garden is the *bustan*, a term meaning "orchard" with associations of productivity and fertility. The *bustan*, which is aligned along the sides of Calla Pond, contains fruit trees – the cherry, apple, plum and pear are cold-climate natives – that begin in formal rows but gradually melt into the forest on the north-western edge. But this modern Islamic garden does more than appeal to the eyes and produce edible fruit: it can make a significant contribution to its regional ecology, as did the gardens of the past through their water management practices that transformed bare desert into beautiful and productive groves of palm and olive trees.

In the province of Alberta, the most pressing conservation issue pertains to the effects of tar sands mining and its impact on wetland infrastructure. The standard method in mineral extraction is to strip the land surface and rebuild the marshes elsewhere, a problematic practice because, as Woltz points out: "Wetlands occur where they 'need' to occur". As a response that encourages remediation and contributes to wetland restoration, the Garden's *bustan* will include diverse native plants in such abundance that the seed can be gathered to provide stock for planting new wetlands. In this way, the model of an Islamic garden that NBW is proposing for the twenty-first century is one that engages actively and beneficially with its environment, whether it be in Edmonton or Agra. Gastingner says: "It's exciting

to think about the Garden as a machine of ecological change and improvement. The flexibility of that structure allows it to adapt to radically different topographies, situations and horticulture.” Whether responding to aridity, flood or ecological adversity, the garden can be a healthful place for its human visitors as well as a means of helping the larger regional landscape recover from environmental stress.

The emphasis on process and productivity offers a slightly different perspective than one that contemplates leisure and repose (an attribute of the garden of paradise). In thinking about the differences between historic and contemporary Islamic gardens, Woltz asked: “What makes us happy in the present? Hearts may be uplifted by leisure, beauty and the sense of well-being that accrues when we do good, and that can happen when we engage productively with the world around us, caring for and curating the world of creation.” In this respect the garden has an important social dimension as well, as a tool for cultural dialogue that will unite diverse publics now and into the future through the shared experience of nature at its most graceful. Richard Pogue Harrison, in his 2008 book, *Gardens*, writes movingly about humanity and history:

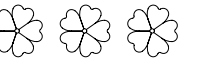
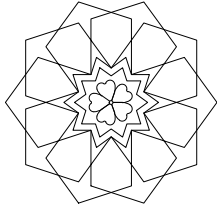
“We inhabit relatively permanent worlds that precede our birth and outlast our death, binding the generations together in a historical continuum... Work builds the world that makes us historical. The historical world in turn serves as the stage for human action, the deeds and speech from which human beings realize their potential for freedom and affirm their dignity in the radiance of the public square.”¹

With the *chahar bagh* as its centrepiece and the performance of water as a primary player in its narrative drama, the Aga Khan Garden at the University of Alberta Botanic Garden evokes the great Mughal gardens of history. In so doing, it promises profound beauty and pleasure to its visitors. Yet, as a site for seed propagation that has the potential to help heal contemporary landscapes damaged by exploitation, it acknowledges the ecological continuum that binds generations worldwide and promises good stewardship. In this it echoes past gardens while providing for the present and, indeed, the future.

Opposite: Ice Chabutra,
Aga Khan Garden



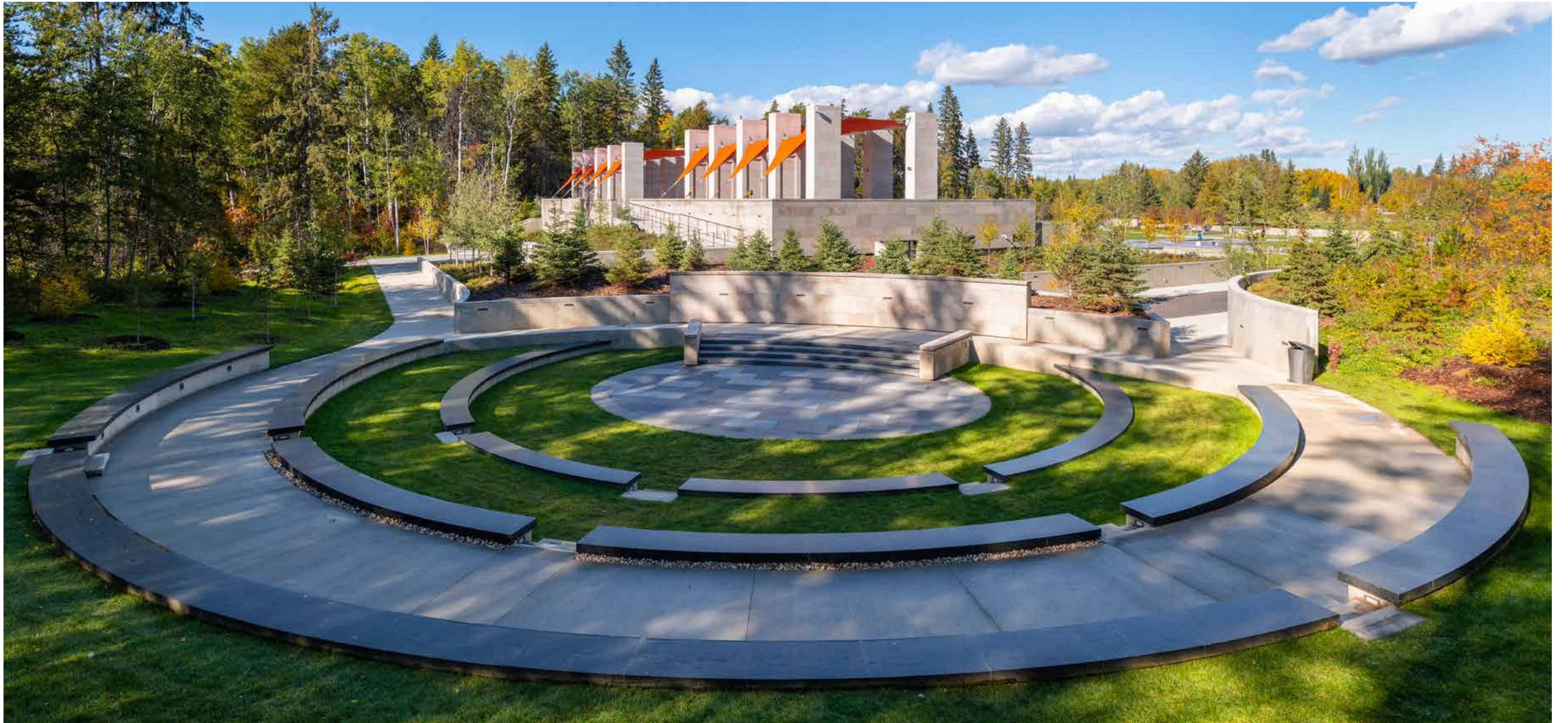
¹ Richard Pogue Harrison, *Gardens: An Essay on the Human Condition*, University of Chicago Press, Chicago, 2008, chapter 1, especially pp. 9–10. Woltz was reading this book while touring India to see its great Mughal-era gardens.

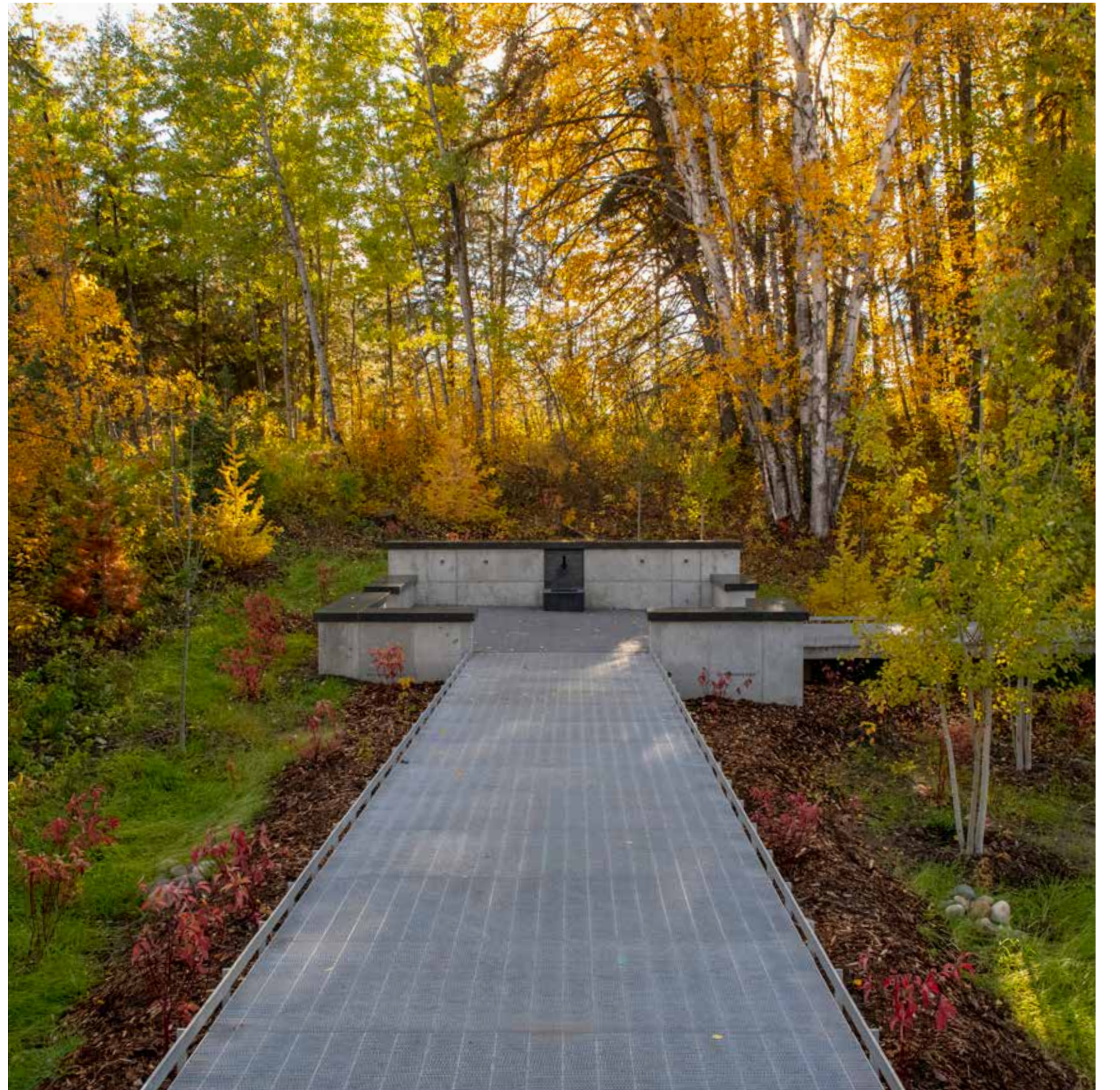


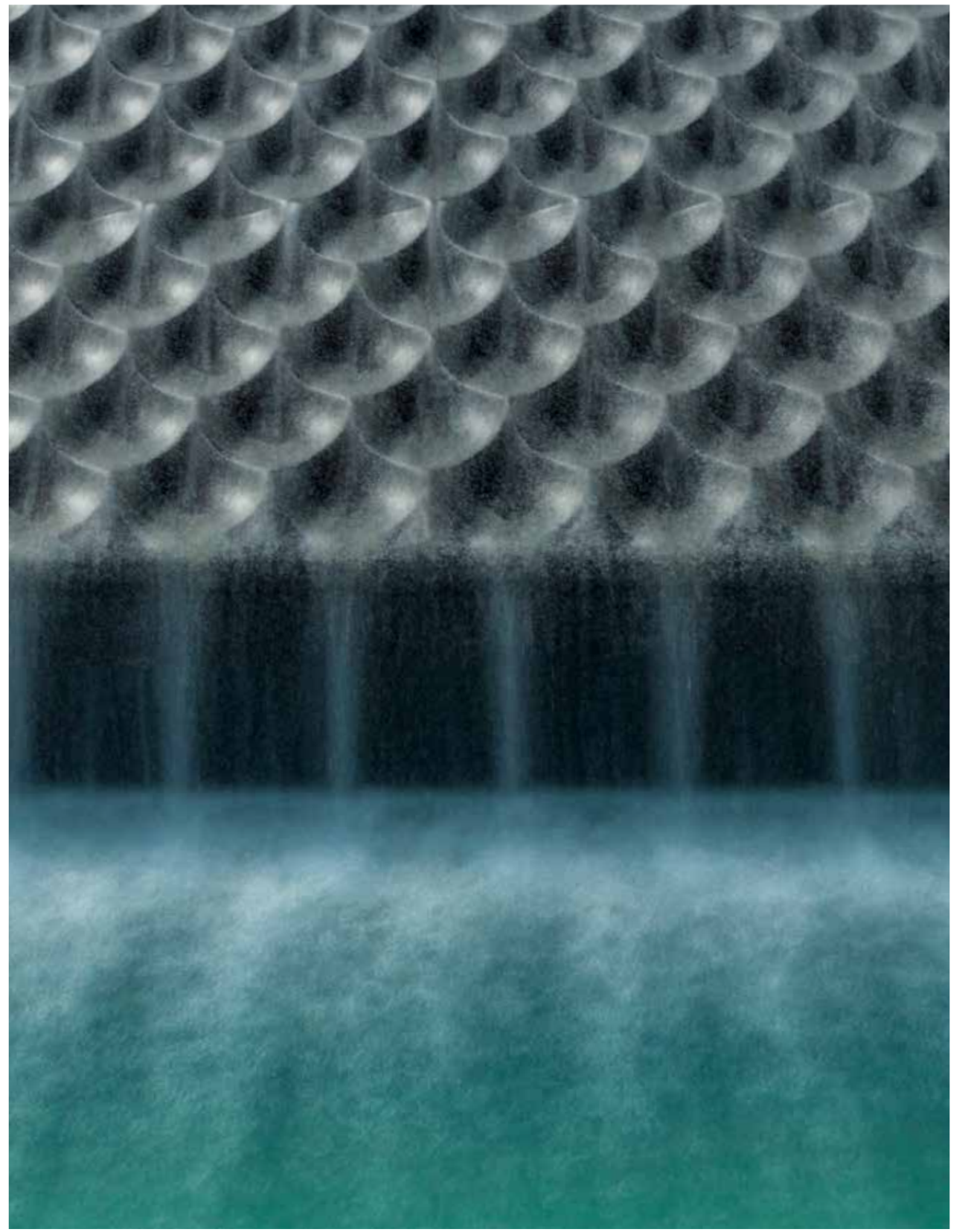
**AGA KHAN GARDEN,
ALBERTA**

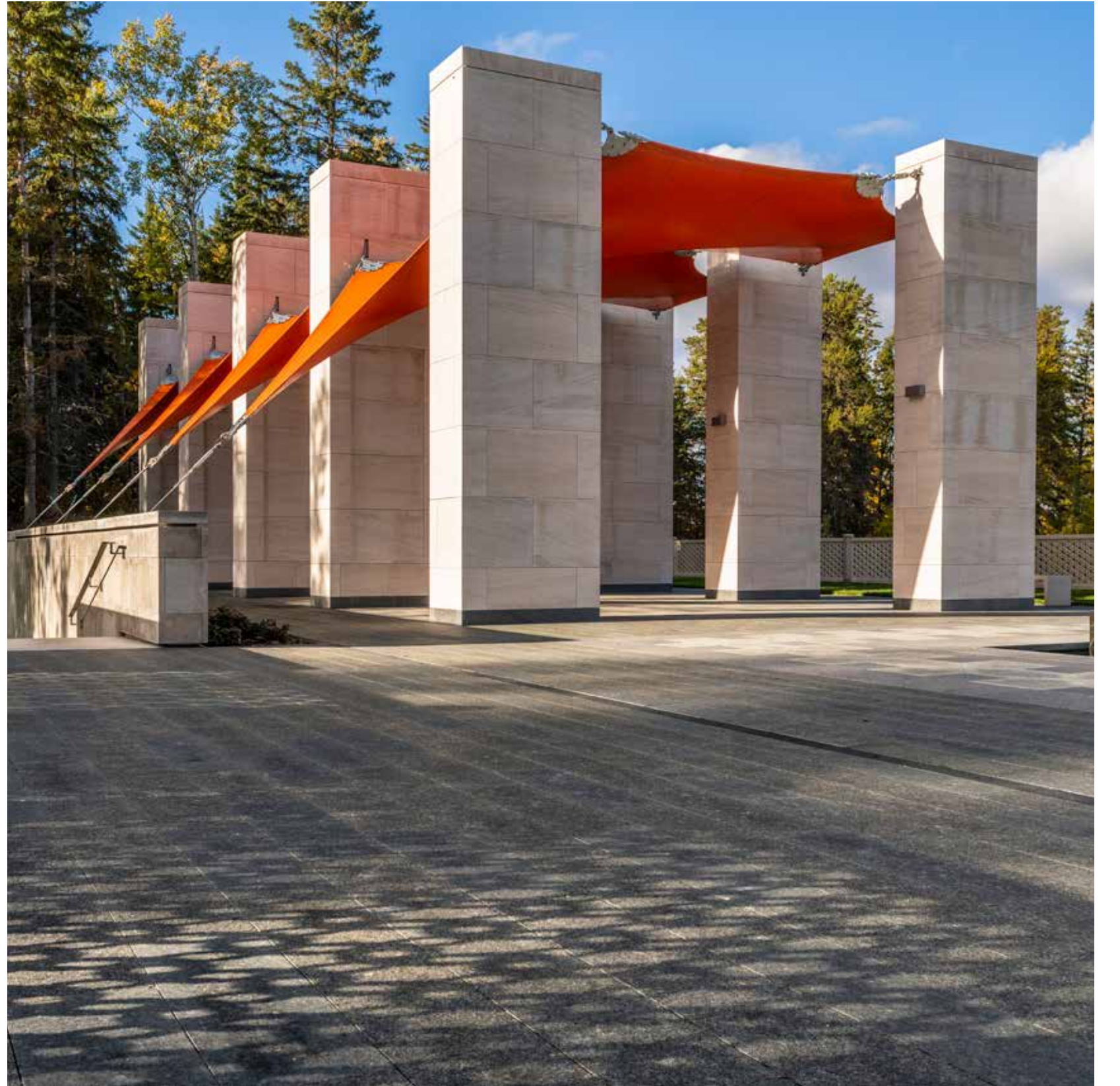
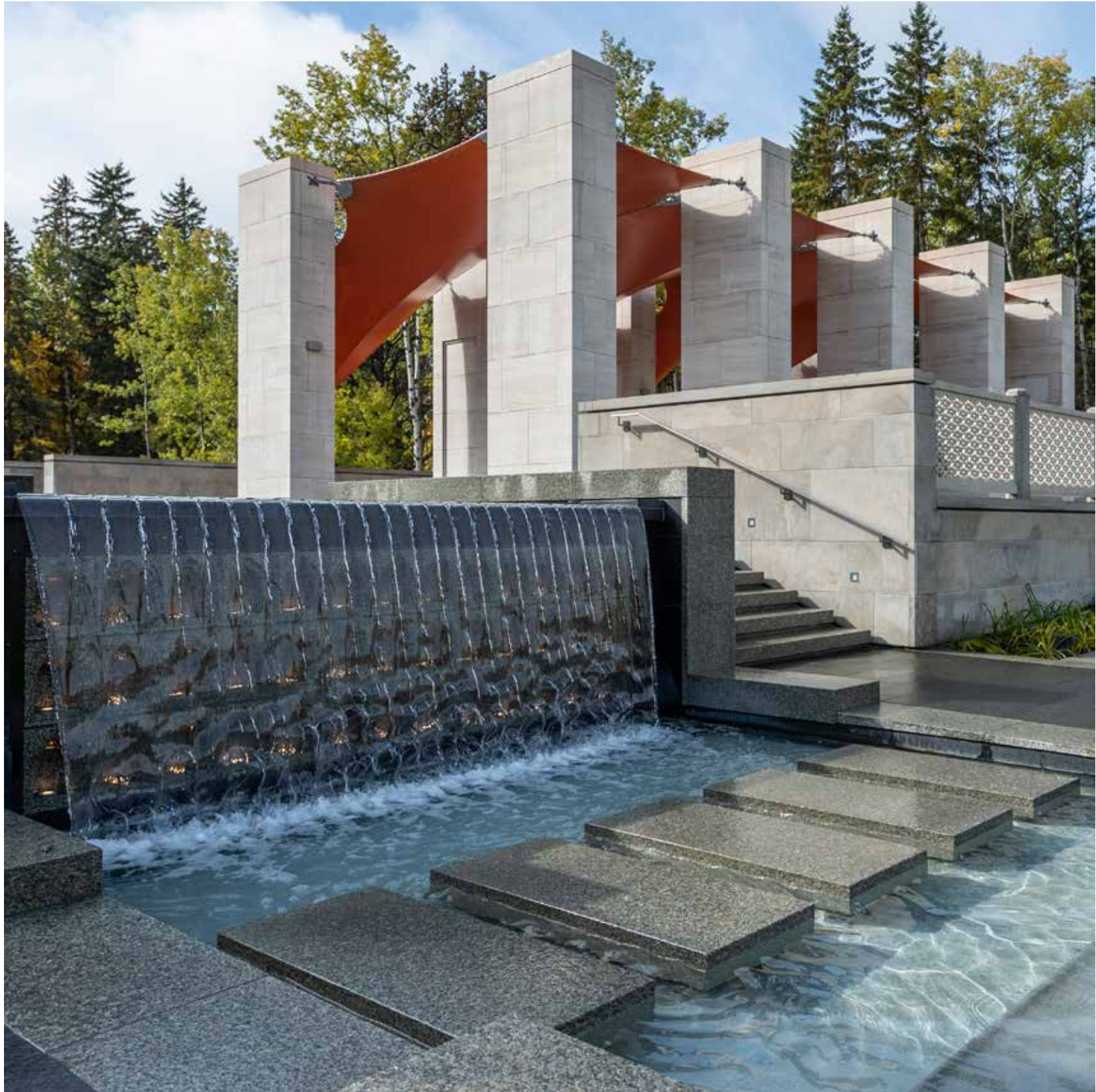




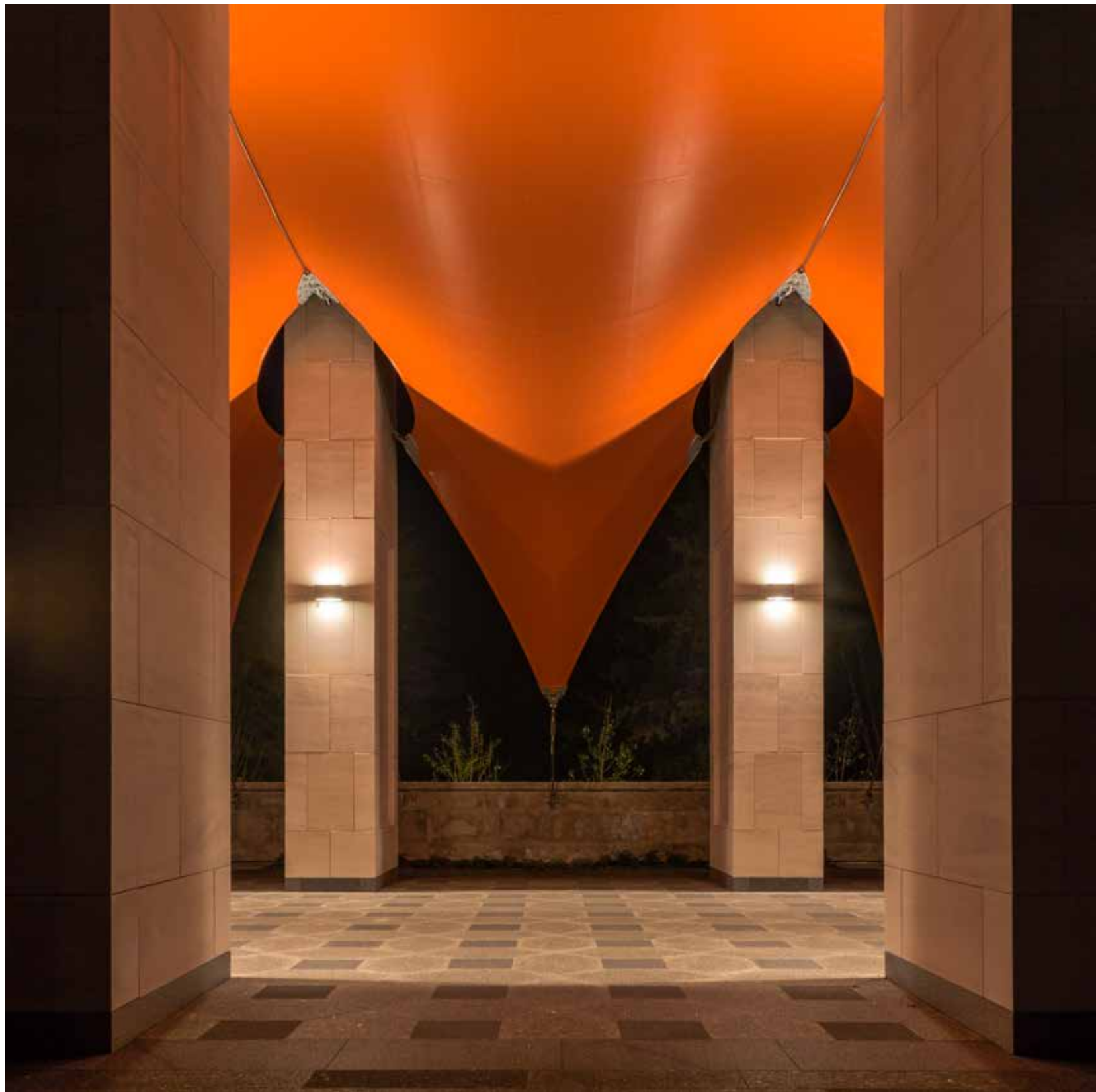


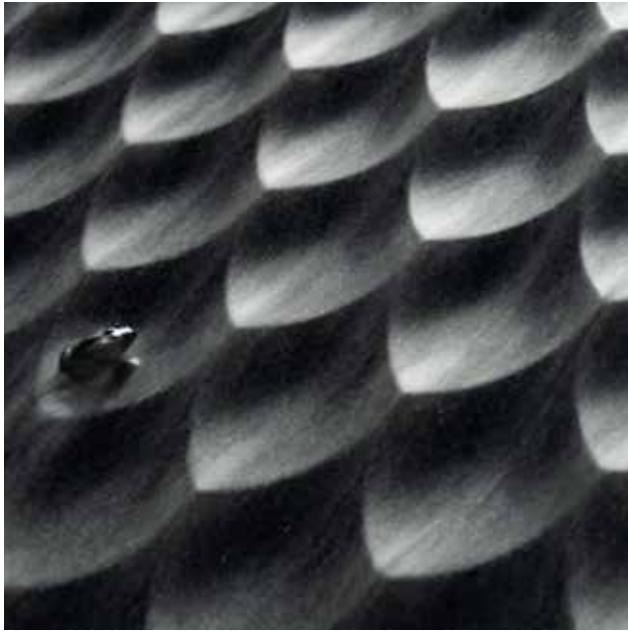




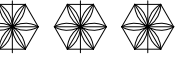
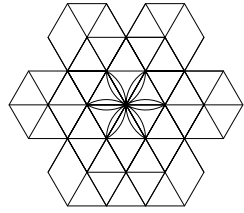








THE ISMAILI COMMUNITY AND INSTITUTIONS



THE ISMAILI IMAMAT

Shia Imami Nizari Ismaili Muslims, more commonly known as Ismailis, adhere to the Shi'i interpretation of Islam, one of the two major branches of Islam, Sunni being the other. The Ismailis form a well-organised, transnational community living in over 25 countries, mainly in Central and South Asia, including Afghanistan and Western China, Iran, the Middle East and Sub-Saharan Africa, as well as in Europe, North America, the Far-East and Australasia.

Islam is the last in the Abrahamic family of revealed monotheistic traditions. All Muslims affirm the unity and transcendence of God (tawhid) as the first and foremost article of the faith, followed by that of Divine guidance through God's chosen messengers, of whom, the Prophet Muhammad, was the last. The Holy Qur'an, God's final message to humankind, was revealed through the Prophet Muhammad. This affirmation constitutes the *shahada*, the profession of faith, and is the basic creed of all Muslims.

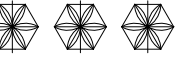
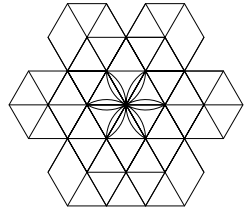
Like all Shi'i Muslims, the Ismailis affirm that after the Prophet's death, Ali, the Prophet's cousin and son-in-law, became the first Imam – spiritual leader – by virtue of his designation by the Prophet. This spiritual leadership, known as the Imamate, continues thereafter by heredity through the progeny of Ali and his spouse Fatima, the Prophet's daughter. His Highness Prince Karim Aga Khan IV is the 49th hereditary Imam of the Shia Imami Nizari Ismaili Muslims, in direct descent from the Prophet Muhammad through Imam Ali and Fatima al-Zahra. Aga Khan IV succeeded his grandfather, Sir Sultan Mahomed Shah Aga Khan III, to the Imamate on 11 July 1957, at the age of 20.

Consistent with 14 centuries of the Muslim tradition of leadership and ethics, covering all interpretations of Islam, the Imam guides the community in matters of faith and also leads the effort to ensure its security and quality of life, as well as that of those among whom it lives. In this tradition, the Aga Khan established and presides over the

Aga Khan Development Network as a contemporary endeavour of the Ismaili Imamate to realise the social conscience of Islam through institutional action.

Widening the frontiers of knowledge through science and learning, and confronting positively the ethical challenges of an ever evolving world, are both seen as a requirement of the faith. The relevance of the message of Islam, requires the faithful to embark on a lifelong intellectual journey in order to comprehend God's creation, and indeed one's own self. The Ismaili Imamate has always emphasised that as the last revelation, Islam is constantly valid at all times and in all places. Spiritual allegiance to the Imam and adherence to the tenets of the Shia Imami Ismaili *tariqah* (persuasion) of Islam, according to the guidance of the living Imam, have engendered in the Ismaili community an ethos of unity and self-reliance. Wherever Ismailis live, they have, under the guidance of their Imam, evolved a well-defined framework of cultural, social and economic development institutions for the common good of all, regardless of race or religion. It is through these institutions that the Ismaili community has been able to express the ethic of compassion and concern for the less fortunate, and to realise Islam's social conscience.

Eleventh July 2017, marked the 60th anniversary of the accession of His Highness Aga Khan IV as the Imam of the Shia Ismaili Muslims. Over the course of the year, July 2017 to July 2018, the Ismaili community globally celebrated His Highness's Diamond Jubilee. The Aga Khan Garden has been designated as a Diamond Jubilee project.

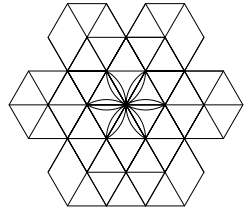


ISMAILIS IN HISTORY

Throughout their history, the Ismailis, who had settled in different parts of the Islamic world, such as the Arabian Peninsula, the Middle East, Persia, parts of North Africa, the South Asian sub-continent and Central Asia, have made significant contributions to the development of Muslim civilisations. For example, during the period of the Fatimid Caliphate (10th to 12th centuries CE), they established the cities of Mahdiyya (Tunisia) and Cairo (Egypt), they founded the university of Al-Azhar and the academy, Dar al-Ilm, in Egypt, as well as other centres of learning. This period was not only distinguished by the development of maritime trade between the lands comprising the Fatimid Empire (such as Tunisia, Egypt, Syria, Corsica, Crete, Malta and Sicily) and far-off lands in Asia, but also by the quality of its scholarship, which drew upon people of all creeds, including Christianity and Judaism. It was an era of profound intellectual and cultural development that established an ethic of pluralism which the Fatimids strongly espoused.

Towards the end of the Fatimid caliphate, in 1094, the Ismailis were subdivided into Nizari and Musta'alian branches. The seat of the Nizari Ismaili Imam moved from Egypt to Persia. With its headquarters at Alamut in northern Persia, the Ismaili state consisted of a network of fortified settlements that extended from Persia in the east to parts of Syria in the west. The Nizari Ismailis, who had prolonged encounters in Syria with the Crusaders, established important libraries in their castles, and also extended their patronage of learning to scholars outside the faith. Following the Mongol invasions in 1256, which led to the destruction of the Nizari Ismaili state, Ismaili centres of activity were strengthened in the South Asian subcontinent, in Afghanistan, the mountainous regions of the Karakorum, the Pamirs of Central Asia and parts of China. The Musta'alian Ismailis eventually left Egypt, taking with them libraries and theologians, philosopher-poets, architects and astronomers to Yemen where an Ismaili state was also founded.

In 1841, the 46th Imam, Aga Hasan Ali Shah, left Persia, where the Imamate had been located for many centuries, to settle in India, establishing his seat at Bombay in 1848. He was the first Imam to bear the hereditary title of Aga Khan, bestowed by the Persian Qajar monarch, Fath Ali Shah. Deputations from the Ismaili community came to him from as far afield as Bukhara, the Middle East and Africa. The 47th Imam, Aga Ali Shah, Aga Khan II, building on the initiatives of his father and predecessor, set about the long-term task of the social development of the community, beginning by establishing educational institutions in Bombay and other Ismaili centres. His successor, the 48th Imam, Sir Sultan Mahomed Shah, Aga Khan III, held the office for 72 years (1885–1957). During Sultan Mahomed Shah's Imamate, far-reaching social, political and economic transformations affected the lives of the Ismailis and neighbouring communities, especially in Africa and South Asia. In response to world events and challenging times faced by the Ismaili community, numerous clinics, hospitals, schools, hostels, co-operative societies, savings institutions and insurance companies were established under the 48th Imam's guidance, with the aim of safeguarding the community's security and long term stability. Since acceding to the Imamate in 1957, the present and 49th Imam, Prince Karim Aga Khan IV, has expanded and transformed these institutions as well as founding new ones, creating the Aga Khan Development Network, a group of international development agencies serving peoples of all faiths and origins.



THE ISMAILI COMMUNITY IN CANADA

The Shia Imami Ismaili Muslims, generally known as the Ismailis, reside in over 25 countries including India, Pakistan, Iran, Afghanistan, Syria, Kenya, Uganda, Tanzania, Canada, the United States, the United Kingdom and other parts of Europe, China and Tajikistan. The Ismaili Muslim community's diversity is a microcosm of the Islamic world, which in itself comprises many communities with differing *tariqah* (persuasion) and cultural traditions.

Like all Muslims, the Ismailis are monotheistic and affirm that Prophet Muhammad (peace be upon him) was the last in a line of prophets that includes Moses and Jesus. In common with other Shia Muslims, the Ismailis affirm that after the death of the Prophet Muhammad, his cousin and son-in-law Ali became the first Imam of the Muslim community.

The first Ismailis arrived in Canada in the late 1950s as part of a professional pool that immigrated to Canada from the United Kingdom and Western European countries. A few Ismaili entrepreneurs also arrived at that time in search of economic opportunities. This steady growth continued until the early 1970s when political changes in many Asian and African countries led to the arrival of larger numbers of Ismailis in Canada. The community went through another important growth phase when Ismailis from Central Asia settled in Canada after the fall of the Soviet Union in the early 1990s. Today, over 100,000 Ismailis are settled throughout Canada, and occupy a variety of positions across the public, private and voluntary sectors. In Canada, Ismailis have become known for their strong principles of self-reliance, volunteerism and support for humanitarian causes.

Opposite: Ismaili Centre Toronto, Canada



The Ismaili community in Canada is governed by volunteers under the aegis of His Highness the Aga Khan, through the Shia Imami Ismaili Council for Canada, headquartered in Toronto. Local Ismaili Councils are based in Vancouver, Calgary, Edmonton, Toronto, Ottawa, and Montreal. Over the last 45 years of Ismaili settlement in Canada, the community has sought to contribute to the fabric of Canadian society by involvement in many spheres of public life and through programmes that demonstrate the ethic of volunteerism and compassion.

In Canada, institutions established by His Highness reflect the permanent presence and values of the Ismaili community, as well as the longstanding role of the Ismaili Imam in creating opportunities for individuals and institutions to learn from one another and work together to improve the human condition. Canada was selected as the site of these institutions, many of them global in scope, in recognition of the values shared by Canadians and the Imam, including pluralism, meritocracy and democracy.

These shared values are reflected in the many development projects on which the Government of Canada and the Aga Khan Foundation Canada have partnered for over 35 years, in places such as Afghanistan, Pakistan and East Africa. The current partnership is expressed through efforts that include improving health and education systems, ensuring that people are able to feed themselves and earn a living, and equipping communities with the tools they need to succeed, regardless of their faith or creed.

The Global Centre for Pluralism, an independent, not-for-profit international research and education centre is located in Ottawa and is a joint initiative of the Government of Canada and the Ismaili Imam. The Centre is inspired by the example of Canada's inclusive approach to citizenship, and works to advance respect for diversity worldwide, stemming from a belief that openness and understanding toward the cultures, social structures, values and faiths of other peoples are essential to the survival of an interdependent world.

Similarly, the Aga Khan Museum in Toronto, fosters a greater understanding and appreciation of the contribution that Muslim civilizations have made to world heritage. Through education, research, and collaboration, the Museum informs and inspires audiences from all cultures by presenting art created in the Muslim world throughout the past fourteen centuries, highlighting the immense contributions of Muslim civilisations throughout human history.

Left: Global Centre for Pluralism, Ottawa, Canada
Right: Aga Khan Museum, Toronto, Canada



The Ismaili Centre Toronto and the Ismaili Centre Burnaby both include places of worship (*Jamatkhana*) as well as spaces for institutional, social, educational and cultural activities. Through programmes and events that range from lectures, seminars, performing arts, exhibitions, cultural and social events, the Ismaili Centres create an understanding of the values, ethics, culture and heritage of the Ismailis and those of Islam in general.

The Aga Khan Park in Toronto on the same site as the Museum and the Ismaili Centre, is the location of a number of cultural, educational and social programmes designed to foster intercultural dialogue and the exchange of ideas. In so doing, the Park contributes to Toronto's vibrant cultural milieu, showcasing Canada's rich example of pluralism in action.

The Delegation of the Ismaili Imam serves as a representational centre of the historical, international and humanitarian dimensions of the Imam's humanistic and development activities. Located on Sussex Drive in Ottawa, the Delegation underlines the significance of the ongoing dialogue between the Ismaili Imam and Canadian governmental and non-governmental agencies.

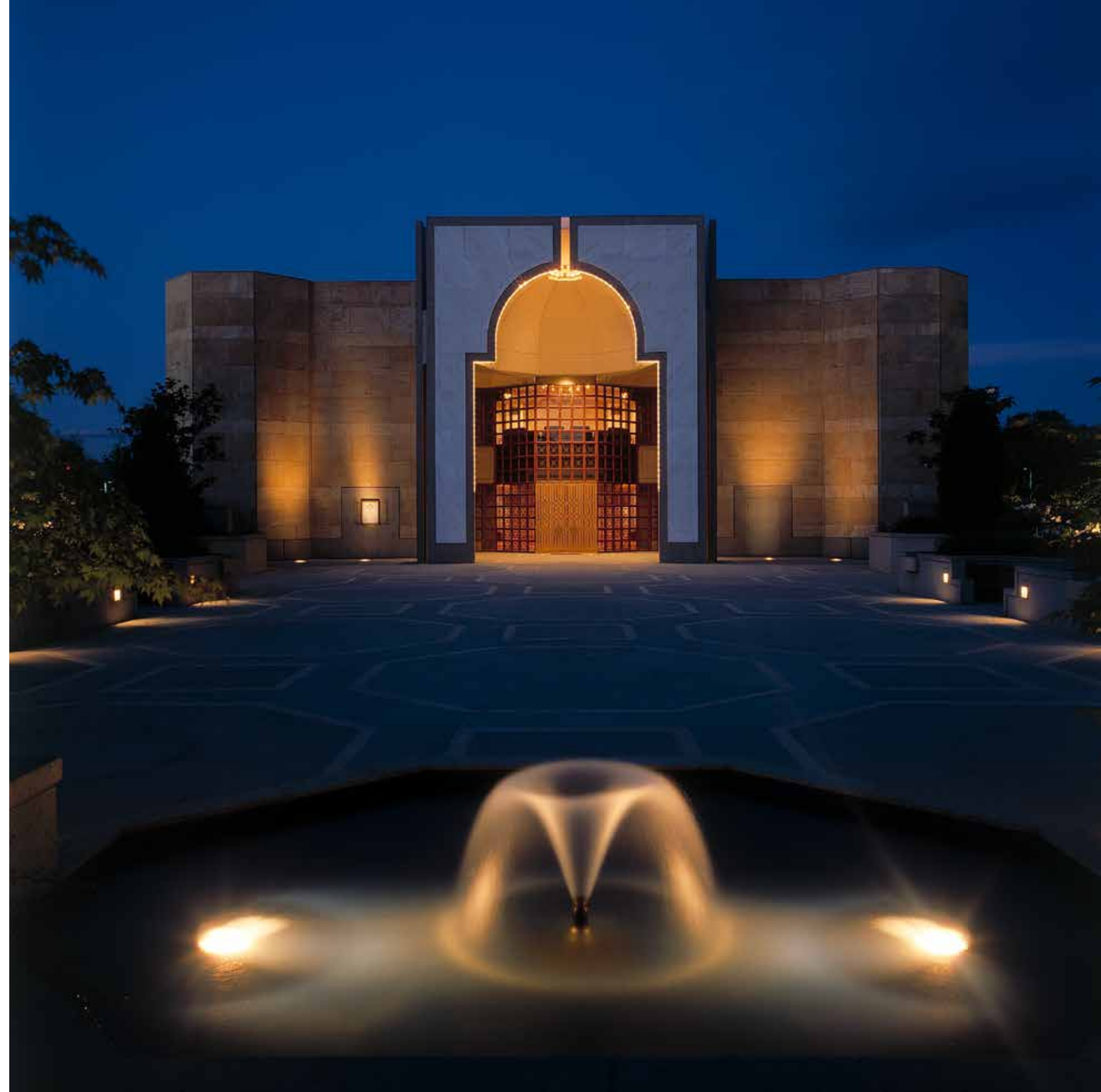


While these institutions may differ in their exact mission and scope, a common thread over the past 40 years has been the lasting and shared commitment of Canada and the Imamat to combating poverty and instability in the poorest, most marginalised and most conflicted parts of the world, fostering peace and stability through pluralism, and encouraging robust democratic institutions and a strong civil society as essential to human flourishing.

In May 2010, His Highness was presented with an Honorary Canadian Citizenship for his global leadership as a champion of humanitarianism, pluralism and tolerance. In February 2014, on the invitation of former Prime Minister Stephen Harper, His Highness became the first faith leader to be given the rare privilege of addressing a joint session of the Canadian Parliament.

Above: Delegation of the Ismaili Imamat, Ottawa, Canada

Opposite: Ismaili Centre Burnaby, Canada



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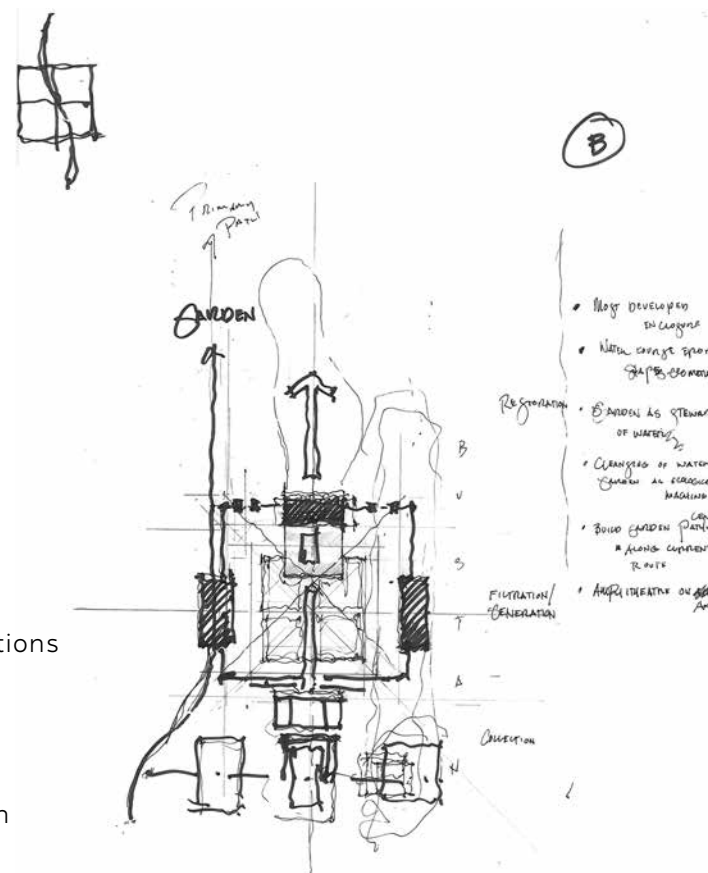


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