



Peer Reviewed

Title:

Taj Heritage Corridor: Intersections between History and Culture on the Yamuna Riverfront
[Places / Projects]

Journal Issue:

[Places, 16\(2\)](#)

Author:

[Harkness, Terence](#)
[Sinha, Amita](#)

Publication Date:

2004

Publication Info:

Places

Permalink:

<http://escholarship.org/uc/item/92j747wn>

Acknowledgements:

This article was originally produced in Places Journal. To subscribe, visit www.places-journal.org. For reprint information, contact places@berkeley.edu.

Keywords:

places, placemaking, architecture, environment, landscape, urban design, public realm, planning, design, projects, Taj Heritage Corridor, intersections, history, culture, Yamuna Riverfront, Terence Harkness, Amita Sinha

Copyright Information:

All rights reserved unless otherwise indicated. Contact the author or original publisher for any necessary permissions. eScholarship is not the copyright owner for deposited works. Learn more at http://www.escholarship.org/help_copyright.html#reuse



eScholarship
University of California

eScholarship provides open access, scholarly publishing services to the University of California and delivers a dynamic research platform to scholars worldwide.

Taj Heritage Corridor: Intersections between History and Culture on the Yamuna Riverfront

Terence Harkness and Amita Sinha

Present-day Agra's fame rests entirely upon the presence of the Taj Mahal. However, the city is also home to a rich collection of lesser-known and seldom-visited Mughal monuments, many of which are situated on the Yamuna riverfront within a relatively short distance of each other. How this riverfront landscape became the locus of such an astounding cultural heritage is a story that is rarely presented to those who visit the area to see the magnificent Taj. Yet, given the high volume of international and domestic tourism focused on the Taj and the Indian government's interest in expanding this to include other nearby heritage sites, close examination of this landscape and the dynamics of its contemporary use is essential to future preservation efforts.

Historically, the sixteenth- and seventeenth-century Yamuna riverfront in Agra was the private landscape of royalty and nobility, constituted by pleasure, palace, and tomb gardens lining both banks. Vision and movement within the gardens were carefully controlled for an orchestrated experience of the river. However, over the next four hundred years, as the Mughal dynasty declined and was replaced by British colonial rule and the modern Indian state, the historic riverfront gardens gave way to a vernacular landscape of farm fields, orchards and nurseries, with shrines and temples at the river's edge. Today, of the forty-four gardens shown on an eighteenth-century map in Sawai Jai Singh Museum in Jaipur, only five remain. These are the modified gardens of the Taj Mahal, Agra Fort, Itmad-ud-daulah's tomb, Chini Ka Rauza, and Ram Bagh. In addition, Mahtab Bagh, the pleasure garden opposite the Taj Mahal, was excavated in 1996 by the Smithsonian Institution and the Archaeological Survey of India, and efforts are underway to restore it.

Amid growing concern that environmental pollution from the modern town of Agra had the potential of harming the world's most beautiful mausoleum, in 1994 the Supreme Court of India ordered the shutdown of polluting industries there, regulated development within 500 meters of heritage structures (including a 100-m. no-build zone), and asked the Ministry of Environment and Forests to plant a greenbelt around the Taj Mahal. In its Agra Heritage Project report in the same year, the U.S. National Park Service also outlined the concept of a Taj National Park on the eastern bank of the Yamuna river, across from the Taj, which would encompass the remains of Mahtab Bagh and farmland occupied by three hamlets.

More recently, in 2003, the state government of Uttar Pradesh began implementing its own plans for a Taj Heritage Corridor, which it envisaged as reclaiming land from the river between the Taj Mahal and Agra Fort for

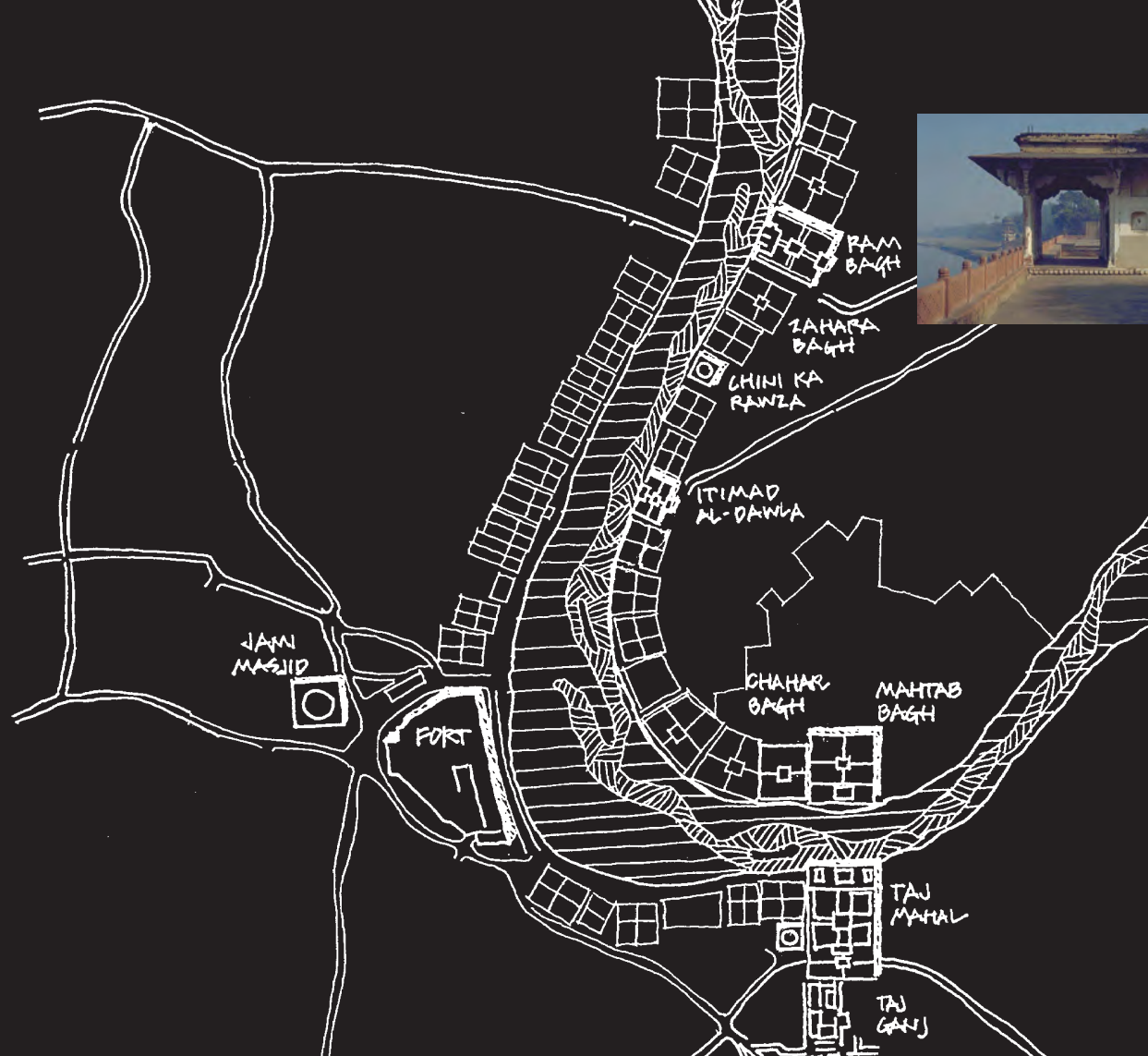
new shops and an amusement complex. However, this was done without conducting an environmental assessment or making the plan public, and the media raised a massive hue and cry, causing the project to be stalled and an inquiry ordered.¹ This project eventually proved extremely controversial, raising fears of excessive commercialization, blocked views of the Taj from Agra Fort, and flooding of Mahtab Bagh.

Though the extensive media coverage of that debacle has succeeded in raising public awareness, it has not included constructive debate on the possible course of action that would make the riverfront accessible to both citizens of Agra and tourists and create an appropriate greenbelt around the Taj.

The Historic Yamuna Riverfront

The Yamuna riverfront in Agra was first described in the memoirs of the founder of the Mughal dynasty on the Indian subcontinent, Babur, who had spent his life in Central Asia and Afghanistan before conquering Northern India in 1526 CE. Disliking the heat and dust of the plains of North India, he created garden enclaves for himself that were a refuge from the chaos and disorder of the surrounding landscape. His nostalgia for Kabul and the many gardens he had built there to enjoy a prospect, take advantage of a running stream, and sloping terrain, was a powerful enough reminder for him to search for sites in Hindustan where he could retreat from a culture and populace he did not understand or appreciate and a climate he found intolerable.² Residing in Agra, he chose to build gardens on the eastern bank of the Yamuna river, across from the Lodhi citadel on the opposite bank.

Though there are no extant gardens or buildings of his time in Agra, Ram Bagh gives us a clue to what a pleasure garden of Babur would have been like — terraced four-square garden plots, rising in levels to an elevated waterfront. Channels and tanks with island platforms brought water into the garden, while the river views and cooling breezes were enjoyed from the waterfront terrace. Vegetation and water were both tamed into rich formal patterns, creating an ordered landscape that Babur felt home in. His favorite was Bagh-I-Zar-Afshan, named after a river in Ferghana, Uzbekistan, where he had spent his childhood. More than one garden was built by Babur and his noblemen on the east bank, causing it to be popularly known as "Kabul," which pleased him, pining as he was for the delicious fruits, salubrious climate, and mountainous terrain of Afghanistan. Babur was temporarily buried in one of the gardens before his remains were transferred to a garden site in Kabul nearly a decade after his death.



Babur's garden legacy was well cultivated by his descendants, who continued to build on the Yamuna riverfront in Agra. His son Humayun possessed the imagination to build a garden on barges floating in the river. A garden with astrological connotations with octagonal halls and a two-storied stepwell was built on the eastern bank.³ The fort, constructed on the ruins of the earlier Lodhi fort on the west bank by his grandson Akbar, contained palace gardens. His great-grandson Jahangir's wife, the formidable Nurjahan, rebuilt Ram Bagh and constructed the tomb garden for her father, I'tmad-ud-daulah, on the east bank. The riverfront garden tradition evolved over a century and culminated in the incomparable Taj Mahal, built by the great-great-grandson of Babur, Shahjahan. The gardens represented a mix — from suburban retreat, to palace grounds, to settings for monumental tombs. They were associated with a variety of functions, yet in their design treatment they showed remarkably faithful adherence to the riverfront garden prototype established by Babur.⁴

The Mughal riverfront garden in Agra (as in Lahore and Delhi) responded to its context both in its siting within the landscape and in its internal layout and architecture. The traditional *charbagh*, with its quadripartite design scheme, was oriented toward the river instead of a cardinal directions. At its far end, above the floodplain, was built a

terrace overlooking the flowing river and capturing its cooling breezes. Deep wells were dug for water, which was lifted by the Persian wheel system into overhead cisterns and supplied to the tanks and channels. Proximity to the river was thus essential to ensure the water supply. But one suspects that equally if not more important was the pleasing prospect afforded by the curving river lined by sandstone and marble pavilions and mausoleums.

Of the visual relationships established by the siting of waterfront gardens, perhaps the most important was the system of visual axes that linked Taj Mahal and Mahtab Bagh with each other and with the river. Located strategically across the river where it bends sharply southward, the two gardens mirrored each other, situating the Taj Mahal in the midst of a vast *charbagh* complex, through which the river ran.⁵ The visions of the Taj multiplied in its many reflections in the river, and in the fountains and tanks of its garden and those of Mahtab Bagh. Eventually, sightlines to the Taj were also a solace to the Emperor Shahjahan as he lay dying, imprisoned by his son within the confines of the Agra Fort. And by the seventeenth century the riverfront visual corridor would have been punctuated by an

Above: Diagram of Yamuna river with Mughal monuments.

Inset: Ram Bagh pavilion on the terrace overlooking the Yamuna river.



these structures acquired enormous symbolic significance by virtue of their synonymy with the personhood of a royal figure — for example, the Taj Mahal was perceived as an embodiment of Mumtaz Mahal. The royal balcony (Jharoka-I-Darshan) in the palace within the fort — Muthamman Burj — framed the emperor as he appeared thrice a day for *darsban* (viewing) by the general populace gathered below on the *maidan* (flat grounds) by the river.

The river was also a corridor of movement both at local and regional scale. Gardens were visited by the Mughal emperors and their families by boat, certainly a more pleasant experience than traversing the torturous urban lanes and entering from the landward side. Shahjahan took a boat from the Agra Fort to visit Mumtaz Mahal's tomb in an underground crypt in the Taj Mahal, entering through an arcade in the great terrace below the mausoleum. Pleasure gardens such as Zahara Bagh and Mahtab Bagh had flights of steps from their riverfront terraces leading down to the water.⁶

Garden design responded to the river in a manner significant enough for it to be shaped by the landscape setting. Vision and movement within the garden were carefully controlled to orchestrate an experience of water flowing in channels and gently cascading from one level to the next. Tanks brimming with water punctuated shaded walks which divided the garden into plots filled with fragrant flowers and sweetly blossoming fruit trees. The walled garden was a sensual retreat from the teeming streets, heat and aridity of the plains, and the dust storms of the neighboring desert in Rajasthan. The garden entry

and threshold were framed in an imposing gateway, which itself framed the main axis leading to a architectural feature — pavilion or tomb — placed at the center or at the far end. The river was framed by an elevated terrace, its sight the climax of longitudinal movement within the garden. Terrace pavilions and their projecting balconies provided panoramic vistas of not only the river but also distinct landmarks such as the Taj. Corner towers surmounted by *chattris* (domed kiosks) gave elevated views of the landscape.

The Yamuna riverfront in Agra was a private enclave of the Mughal royalty and nobility. The shape of its landscape originated in a nostalgic image of the gardens of Afghanistan and Central Asia, evolved under influence of the design aesthetic of the Persian court. Though it assimilated some design features of the native Hindu architecture, it projected an image alien to prevailing cultural landscapes of nearby Mathura and Vrindavan and the more distant Varanasi with their *ghats* and temple spires. The Yamuna riverfront and its splendid tombs, palaces, and gardens were a gift of Mughals to the land they conquered and finally adopted as their own. Built with the incessant toil of native workers and artisans, it at the same time excluded them from using the river as a common public good, and as a sacred landscape.

Above: Plan of a proposed Taj Mahal Cultural Heritage District. Agra Fort is at the top. The Taj and its gardens are towards the bottom left, with the Mahtab Bagh directly across the river. Other historic garden sites extend around the river bend, ending with the Ram Bagh at the right.

Facing page: Children playing on the floodplain below Taj Mahal.



Contemporary Yamuna Riverfront

Four centuries after the demise of the Mughal empire, its best known architectural legacy — the Taj Mahal — has become a symbol of India that tourists flock to.⁷ However, as a tourist destination, the Taj is cut off from the surrounding landscape and is physically disconnected from the surviving Mughal monuments on the riverfront. Of the pleasure gardens, only Ram Bagh remains to any significant extent. And the vegetation in the gardens of the Taj and Itmad-ud-daulah, and Agra Fort reflects the colonial aesthetic more than anything else, giving them a carefully manicured look. The famed moonlight garden or Mahtab Bagh from where the Taj could be viewed in all its glory has only recently been excavated. Other monuments such as Chini Ka Rauza and Humayun’s mosque remain neglected and off the beaten track.

Over time, the historic riverfront of *charbagh* gardens gave way to the vernacular landscape of rural communities on the eastern bank and to a gritty urban edge north of Agra Fort on the western bank. Instead of delicate marble pavilions and red sandstone *chattris*, small shrines have sprung up, attesting to local faith and initiative. Some have *ghats* (steps) leading down to the river, but more often than not dirt tracks are used by animals and humans alike to get down to the water. Farming is done in stretches right up to

the river’s edge and also seasonally on the floodplain, precluding any other use. The floodplain also acts as a *maidan*, a kind of commons for local communities, where children play cricket and fly kites.

On the western bank are signs of concerted efforts by a number of public organizations such as the Archaeological Survey of India, the Agra Development Authority, and the Forestry Department to create a public landscape of gardens, nature walks, nurseries, and parks. To the east of the Taj Mahal, nature trails lead to high points in a hilly landscape, from where direct views of the Taj can be obtained. Shahjahan Park was built as a famine-relief public-works undertaking in the late nineteenth century. In addition, a dilapidated linear park graces the river’s edge along Agra Fort and to its north. Less used as a park and more as a means to get to the floodplain by the local residents, its edge is dotted with shrines and makeshift structures. In between the carefully maintained green areas surrounding the Taj are vernacular landscapes of a Hindu temple, cremation site, and nurseries.

Today, this entire public landscape is fragmented, with no means of getting from one park to another, and no deliberate connection with the river. Though the Taj nature trail is becoming popular for its free views of the Taj, Shahjahan Park lies deserted, fenced from the teeming



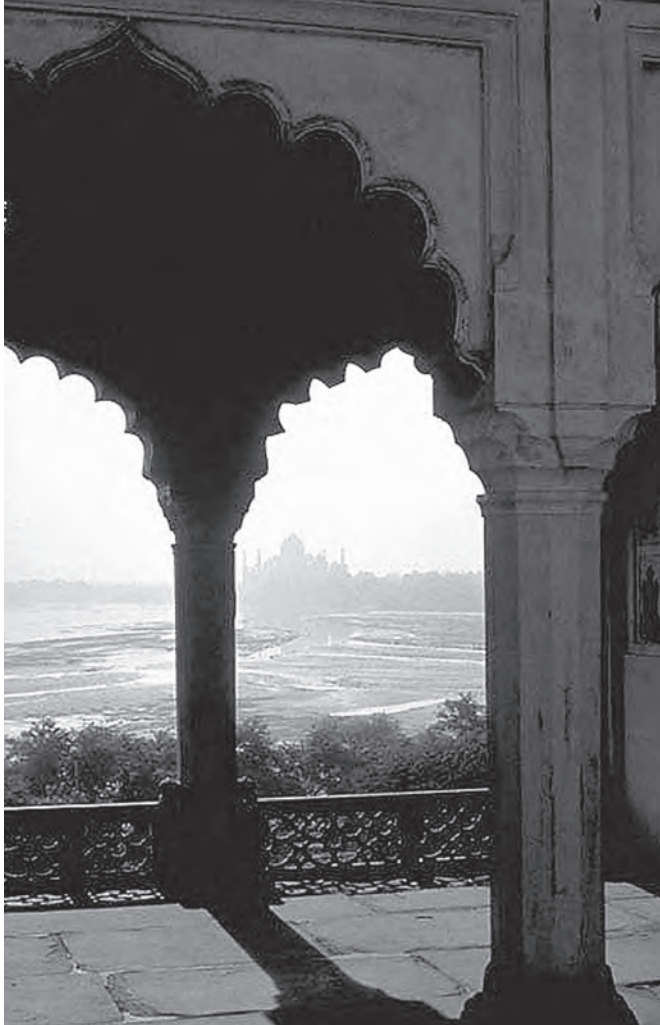
street life of the city. And neither opens onto the river, as does the cremation site and temple *ghats* next to the Taj.

The problem today, then, is that the Yamuna riverfront is open for local but not truly public use. Villagers and urban residents may get to the riverbank and floodplain for their myriad activities, none of which involve the protected heritage sites. But visitors to the monuments are afforded little experience of the surrounding landscape. The *nalas* (stormwater drains) from the city emptying into the river, private farm landholdings, and lack of accessway on the uneven topography make it difficult, if not impossible, to traverse the riverfront corridor, as the Mughals once did in their boats. The historic monuments have thus become islands, representing vestiges of history cut off from the urban life around them. Restricted movement leads to restricted views and isolated experiences of the Taj, Agra Fort, and Itmad-ud-daulah's tomb. The immediacy of the river is lost until one elevates to a viewpoint over the river, or goes down onto its floodway. The Yamuna is no longer used as a public or recreational corridor of movement. And perhaps the greatest loss of all has been in views of Taj: as it is reflected in the waters of the Yamuna and in the fountains of Mahtab Bagh; as it appears in diagonal perspectives that reveal its perfect composition of volumetric masses; and as it changes colors with times of day and the seasons.

A Design for the Future

The Yamuna riverfront is home to two World Heritage Monuments — the Taj Mahal and Agra Fort. As mentioned already, growing concern about environmental pollution and public-interest litigation led the Indian Supreme Court to direct that the marble mausoleum be surrounded with a greenbelt. The state tourism department has also sought design direction for a future Taj National Park. This would be located across the Yamuna from the Taj, surrounding the recently excavated Mahtab Bagh. Since the historic gardens have vanished completely, the 360-acre site is mostly farmland and some orchards also occupied by three hamlets supporting a population of 12,000. Nevertheless, some of the loveliest views of the Taj can be seen from here — the rectilinear geometry of the monumental mausoleum and the vernacular farmland complementing each other.

However, a future Taj National Park could be only one segment of a larger riverfront landscape, one that might serve a common public good, accessible to all, rather than one that is taken over by private hotels selling Taj views to the affluent. But should such a public landscape be a recreation of the past, or a transformed version necessitated by contemporary realities? And, even if the historic landscape could be successfully re-created (which is doubtful



given that historic garden sites are now inhabited), how can it be made open and inviting to the public at large, to recapture the sense of the historic past and the potential of its future?

This very issue was studied in 2000 by a team of faculty and students from the Department of Landscape Architecture, University of Illinois at Urbana Champaign, at the invitation of Uttar Pradesh Tourism Department. Among other things, members of that team prepared a design report outlining plans for a Taj Mahal Cultural Heritage District that would link the area's two World Heritage Sites — the Taj and Agra Fort — as well as other heritage structures on the banks of Yamuna within a green landscape of parks, orchards, and gardens. The premises of this plan remain relevant today, since it drew both on what we know about the historical gardens and on site readings of the present-day landscape.

Management of World Heritage sites entails visitor accessibility as well as conservation. In this regard, while attention has been paid recently to the impact of pollution on the Taj, accessibility and viewshed protection have not received equal attention. This is one reason why the work

by the University of Illinois espoused a model of conservation based on an acknowledgement of the heritage value of the present-day cultural landscape. Such a view expands beyond the “monument-centered” approach followed by the Archaeological Survey of India, itself a legacy of the colonial era, that confines preservation and restoration to historic buildings. One legacy of this older approach has been to neglect and ultimately destroy significant relationships between the buildings and landscape, indoors and outdoors. Thus, even though the Taj and other monuments in historic Agra were walled from the city, they were open to the river and commanded viewsheds that added greatly to their experience. Shorn of their dialogue with each other and the river, today much of their significance has been lost.

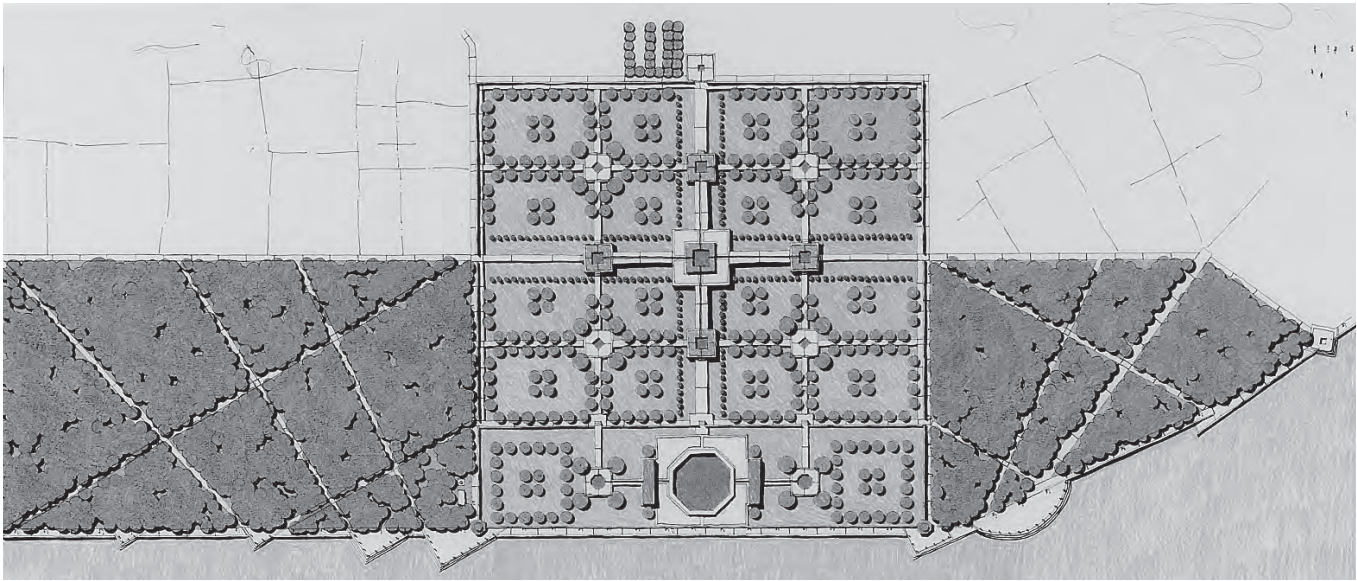
The Taj Mahal is one of the most visited buildings in the world, with most tourists (50 percent international and 64 percent domestic) arriving in Agra in the morning and departing by nightfall. In 1994, 2.1 million people visited the Taj, whereas Itmad-ud-daulah's tomb received fewer than 39,000 visitors. The undervisitation of other nearby historic sites stems from a lack of knowledge of their existence and whereabouts, compounded by accessibility problems. The University of Illinois study estimated that visiting the Taj Mahal alone can take a minimum of two hours — or four hours, if combined with Agra Fort. But this visitation could be stretched to twelve hours if other riverfront monuments were on the visitor's itinerary.

While protection of the World Heritage sites are a paramount concern, our proposal therefore aimed to extend the visitor's experience to include the area's rich context. Its main feature would be a movement promenade that would link the remaining historic sites and bring the riverfront landscape into the civic realm. The promenade would be the central spine of a Taj Cultural Heritage District ensuring legal and administrative protection and public access.⁸ This district would not only encompass all the heritage sites on the riverbank, but also green spaces between and around them — including parks, nature trails, nurseries, and protected farmland. A pedestrian way along the riverfront would connect the multiple heritage sites and extend visitor movement through the careful use of edge and floodway. It would link the city's existing circulation system (which is confusing and tortuous to navigate if one wishes to visit the heritage sites) with the path of the visitor arriving at the edge of the historic district, thus diversifying, reorienting, and distributing access in more congenial surroundings.

Our investigations concluded that the location of this new primary path should be determined by the riverside

Facing page: The Taj Mahal from Mahtab Bagh site.

Above: The Taj Mahal from Muthamman Burj in Agra Fort.



land forms. Indeed, it could largely be built on the well-trodden path along the river embankment. Here it would give access to the river below and heritage sites above, and would also connect the existing public open-space system to the river. This path would allow an extended perceptual experience of the landscape in time, which would provide a meaningful experience for the visitor, allowing for richer and deeper associations to be made. These might include the composition of a compelling cultural narrative about the relationship of historic buildings to the river; the contemporary vernacular landscape of farms, orchards, and nurseries; and the enduring cultural practices of worship and daily use of the river. It would allow the river corridor, until now a void for the Agra citizen and the tourist alike, to become a civic landscape of participation.

This corridor would also provide the same landscape frame developed for the sixteenth- and seventeenth-century city of riverfront gardens. Views of mausoleums and palace pavilions would thus be restored and unfold in a dynamic experience in time. At least sixteen unique and spectacular views of the Taj would entice visitors along the path of movement, each revealing a different facet of the world-famous building. Different from the views one is conditioned to see from picture postcards, these might reveal the mystery and the grandeur of Taj against a changing sky, floating above the waters, and silhouetted against the fields.

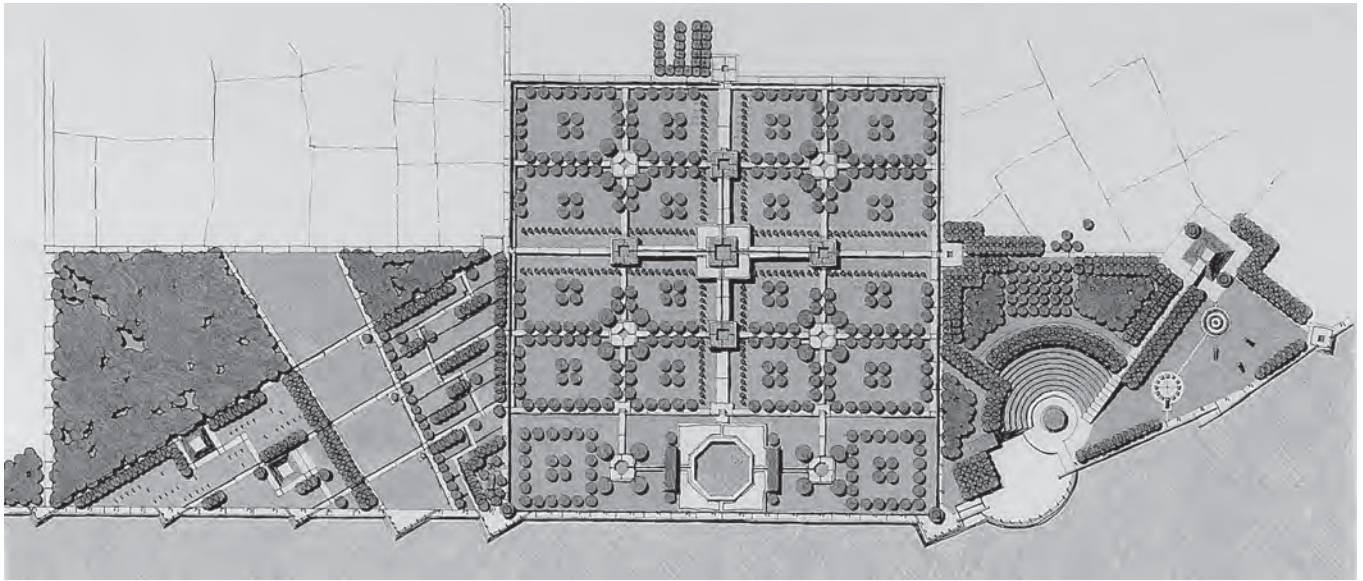
We believe present-day local use of the river and the future of those living in the hamlets and small urban

communities on the eastern bank will not be jeopardized by such a Cultural Heritage District. The promenade, located below the adjacent private land and above the floodplain, with its ramps (for animals) and ghats would create actually improve access to the river for the villagers. And they would have an opportunity to participate in the tourist economy (if they so desire) as boatmen, caretakers of orchards and public gardens, and makers of arts and crafts displayed in the arrival centers.

The design response of linking both within and without and beyond to the larger riverfront setting was also a siting strategy used by the Mughals. This has inspired our proposed open-space system of walkways, plazas, gardens, and parks, and the location of three arrival centers along the promenade, from which arresting views of the Taj would bring a new dimension to the visitor's experience. In the minimum development proposal, paths oriented to the view of the Taj would be designed through mango and guava groves east and west of the restored Mahtab Bagh. In the maximum development scenario, a *charbagh* water garden would be designed west of Mahtab Bagh. Its channels and pools would fill with water during the monsoons, when the river rises and floods. And a second garden, east of Mahtab Bagh, would be designed as a place for gathering and include an earth-mound amphitheater offering a breathtaking Taj backdrop for performances.

Left: Plan of Mahtab Bagh gardens showing minimum development alternative.

Right: Plan of Mahtab Bagh gardens showing maximum development alternative.



This plan provides an opportunity to knit the existing and proposed open space system for a magnificent presence of Mughal heritage in the contemporary landscape without ignoring the present site realities. It would refocus public attention on the historic river corridor, bringing to attention issues of degraded water quality and sewage runoff from the city and the urgent need for enhanced public sanitation. From being a truck farm, buffalo wander, and open sewer, the river might once again be cleaned and become navigable, as it was historically.

The visitor could walk along the river in a shaded promenade, from where she could visit heritage sites, go off on a trail through orchards, take a boat to cross the river, and make use of rest facilities in the strategically placed arrival centers. The visual experience as one moves from the city to the riverfront promenade culminates in the restored Mahtab Bagh or the moonlight garden, where the glowing marble mausoleum can be seen at nighttime, shimmering in the dark waters of the Yamuna.

Acknowledgements

We thank Prof. Vince Bellafiore for his generous support for the Taj Cultural Heritage District project. Brain Orland, Head of Landscape Architecture Department at Pennsylvania State University, and Kenneth McCown at California State University at Pomona, were other members of the design team.

Notes

1. The work was undertaken by National Project Construction Corporation, New Delhi, without getting clearance from Archaeological Survey of India, Central Pol-

lution Control Board, Central Water Commission, or the Ministry of Environments and Forests. It was stopped by the Central Government on grounds of violation of Ancient Monuments and Archaeological and Remains Act and World Heritage Monuments protection and conservation norms as reported in *The Times of India*, New Delhi reports from June 15 to July 9.

2. James Wescoat, Jr., "Landscapes of Conquest and Transformation: Lessons from the Earliest Mughal Gardens in India, 1526-1530," in *Landscape Journal*, Vol. 10, No. 2, (Fall 1991) pp. 105-13.

3. James Wescoat, Jr., "Gardens of Invention and Exile: The Precarious Context of Mughal Garden Design During the Reign of Humayun (1530-1556)," in *Journal of Garden History*, Vol. 10, No. 2 (1990), pp. 106-16.

4. Ebba Koch, "The Mughal Waterfront Garden," in Attilio Petruccioli, ed., *Gardens in the Time of Great Muslim Empires* (Brill, 1997) pp. 140-60.

5. Elizabeth Moynihan, ed., *The Moonlight Garden—New Discoveries at the Taj Mahal* (Seattle: University of Washington Press, 2000).

6. Ebba Koch, "The Zahara Bagh (Bagh-I-Jahanara) at Agra," *Environmental Design—The Garden as a City, The City as a Garden*, Vol. 2., 1986, pp. 30-37.

7. Pratapaditya Pal et al., *Romance of the Taj Mahal* (Thames and Hudson, 1997).

8. Taj Mahal Cultural Heritage District: Development Plan, Department of Landscape Architecture, University of Illinois at Urbana Champaign, 2000.

All illustrations are by the authors.