INVITED ARTICLE

Rathindranath Tagore and the *Uttarayana*—Santiniketan—Evolution of the Landscape System and its Contemporary Relevance

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Abstract: Santiniketan, situated in Birbhum, West Bengal, was transformed from barren waste land into a lush, tranquil space by Debendranath Tagore around 1862/63, embodies the harmony of land, people, and nature. In 1901, Rabindranath Tagore founded an Ashram School there, further establishing it as a universal learning centre while maintaining its ecological integrity. Between 1918 and 1952, Rathindranath Tagore expanded Visva-Bharati in Uttarayana, applying his academic and practical knowledge. Rabindranath's vision of integrating design with nature was realized through collaborations with artists like Nandalal Bose and Suren Kar, who pioneered innovative buildings and landscaping systems. This initiative brought together distinguished artists and architects from the East and West, creating a distinctive form of ecological architecture in twentieth-century India. Uttarayana represents a cohesive built environment that emphasizes eco-sustainability, addressing pressing issues such as climate change and environmental degradation. Recently inscribed as a UNESCO World Heritage Site, Santiniketan highlights its culture of ecological landscaping and built environment, making modern environmentalism more profound through a comprehensive understanding of Uttarayana's mindful ecological practices.

Key words: Eco-sustainability, Built-environment, Uttarayana-Santiniketan

Rathindranath Tagore and the Uttarayana-Santiniketan Landscape Systems

Rathindranath Tagore (November 27, 1888 – June 3, 1961) was the designer son of Rabindranath Tagore and grandson of Debendranath Tagore, born in Jorasanko Thakurbari, Kolkata. A prominent planner and designer, he championed environmentally focused development in Santiniketan, reflecting the nature-centric visions of his forebears.

Inspired by Rabindranath and drawing on his education as one of the first students of the Santiniketan Ashram School in 1901, Rathindranath began creating eco-cultural habitats at *Uttarayana* in Santiniketan from 1918 onward. He transformed the arid *khoai* (uneven dry laterite) landscape into vibrant green spaces through innovative landscaping, gardening, rainwater harvesting, and the installation of windmills, all aimed at fostering a sustainable built environment.

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Between 1918 and 1952, he pioneered experimental ecological architecture and renewable energy solutions, integrating visual and performing arts within his architectural designs. He was supported by notable figures like Nandalal Bose and Surendranath Kar from Kala Bhavana, as well as his designer wife, Pratima Devi of *Bichitra Karu Sangha*. Today, *Uttarayana* remains a celebrated example of sustainable architecture and landscaping in India, recognized for its aesthetic and functioned vitality locally and internationally.

The *Uttarayana* built environment is increasingly relevant today, reflecting urgent needs in the face of global warming, climate change, and environmental degradation that disrupt human-nature harmony. Human-caused pollution has led to habitat loss and societal displacement, undermining community cohesion and holistic livelihoods worldwide. Moreover, rising pollution levels—air, water, noise, and visual—have eroded the quality of life, diminishing creativity and happiness. In this context, there's an urgent need to develop green habitat designs that promote eco-sustainability and wellness for humans and nature, enhancing societal development. The *Uttarayana* exemplifies innovative, cost-effective ecological architecture, blending Rabindranath Tagore's life vision with the principles of positive psychology to foster mental health and a balanced relationship with nature.

As the third phase of Santiniketan's built-environmental heritage, *Uttarayana* builds on the foundational work of Debendranath and Rabindranath Tagore, incorporating their visions into contemporary sustainable designs. Recently designated a UNESCO World Heritage Site, *Uttarayana* underscores the creative collaboration among the Santiniketan artists' community, which included a diverse array of disciplines. Understanding its significance involves tracing the evolution of green built environments in Santiniketan from the 19th to the 20th century, serving as a model for place-specific creativity and sustainable living ideals.

Santiniketan Built-Environment: The Inception Stage

Debendranath Tagore, the philosopher father of Rabindranath Tagore, established Santiniketan in 1862-63, approximately 180 km from Calcutta (now Kolkata). Originally a barren stretch of twenty bigha (2.6 hectares) of laterite land, it featured only two *chhatim* trees and no grass, situated between Bolpur and Goalpara village. The site was strategically chosen for its elevation above the railway line, promoting natural air circulation and effective drainage.

Son of Dwarkanath Tagore, a pioneer of Indian industry and close associate of Rammohan Roy, Debendranath continued the legacy of societal reformation, promoting humanistic unity beyond caste and creed divisions. Following the deaths of Rammohan and Dwarkanath, he revitalized the Brahmo Samaj's cultural and educational efforts, ultimately leading to the creation of Santiniketan as a harmonious space that integrates ecological and sociological unity, embodying a model of sustainable living. Debendranath aimed to transform this waste land into an urban forestry and spiritual retreat for the Brahmo Samaj, catering to the seekers of truth during the Bengal Renaissance. His philosophy centred on the unity of human and natural environments,

emphasizing that profound truths could be discovered through nature. This initiative sought to create a reformed society amidst the challenges of colonial urban planning and cultural identity loss.

Santiniketan was developed in stages during the tumultuous period of British colonial rule in India when Calcutta (now Kolkata) dominated the country's political, cultural, and commercial life. The British exploited India's ancient forests, leading to widespread deforestation and damaging both human and natural ecosystems. Concurrently, they neglected public health and infrastructure in northern Calcutta, including Jorasanko Thakurbari, resulting in poor sanitation, inadequate roads, and contaminated water supply. The situation worsened as garbage from the affluent white town was dumped into local ponds, contributing to the spread of diseases like dengue and malaria, as highlighted in works by Keshab Chandra Sen, Mahendranath Dutta and Khitindranath Tagore.

Amid these chaotic conditions, Debendranath Tagore sought suitable land in Bengal to create an ideal living environment. He received offers of developed land from followers of his vision, including the Maharaja of Bardhaman and the Singha family in Raipur. However, he ultimately chose to transform a barren wasteland into what is now recognized as Santiniketan, strategically located near Bhubandanga, a natural water source. Initial development involved leveling the uneven *khoai* land and enriching it with fertile river soil from Bardhaman. With the help of skilled gardeners, led by Haridas Mali, who had experience in palace gardens, Santiniketan began to flourish with carefully selected trees and landscaping. Interestingly, this area, once notorious for dacoits, saw a transformation as Debendranath engaged local leaders like Harish Sardar to protect the hermitage, showcasing a remarkable example of societal change. This humanistic approach set the foundation for a peaceful, unified community, continued by both Rabindranath and Rathindranath Tagore.

Slowly by methodical, sustained scientific efforts progressive ecology of this place started developing. An engineer was appointed and a suitable mud-built hutment was built for him near Bhubandanga water body. It was a well-planned and methodical approach with tree plantation, laterite pathways, and space planning for a defined landscape. In the initial stage, the guest house-'Santiniketan Griha' was built, enveloped with matching tree plantations and landscaping with minimum need-based buildings. This built environment approach is relevant in the contemporary, environment-conscious world of developmental ecology. It is interesting to note that this built-up green-covered place identity is known by the name of the first building and garden of this place – Santiniketan, now a UNESCO World Heritage site.

The first phase of Santiniketan's development introduced an open-air ecological prayer space, designed to harmonize with the original landscape featuring just two *chhatim* trees (*Alstonia scholaris*). This area, known as *Chhatimtala*, was enhanced with large flowering trees, climbers, and hedges, creating a peaceful environment conducive to reflection and communion with nature. It served as a unique prayer space for a community seeking tranquillity, unlike anything available in the crowded, polluted environment of Calcutta.

Debendranath Tagore envisioned this space as a way to foster a spiritually-minded society, aligned with the reformative principles of the Bengal Renaissance championed by Rammohan Roy. The prayer area emphasized human-nature harmony, transcending divisions of caste, creed, and religion, and aimed to prepare society for India's freedom struggle. *Chhatimtala* became a central element of Santiniketan's planning, epitomizing the community's ethos. At the heart of this space stood the *Upasana bedi* (prayer pedestal) with a *torana* (sacred gateway), inscribed with the Ashram's motto: "*Tini Amar Praner Aram, Moner Ananda, Atmar Santi.*" This reflected the core themes of vitality, peace, and ecological unity, showcasing the humanistic, scientific, and spiritual creativity that defined Santiniketan.

The next stage of development was the *Upasana Griha* (1890-91), often referred to as the "glass house." This remarkable structure exemplified ecological architecture, featuring fully operable glass doors and windows for natural light and ventilation. Prefabricated in Calcutta using sustainable cast iron components, it was designed to be both functional and aesthetically pleasing, topped with colourful glass and terracotta tiles.

Surrounded by greenery, the *Upasana Griha* served as a space for meditation and community prayer, where the natural environment played a crucial role in regulating temperature during the hot summer months. The integration of plant life and ecological habitats created a vibrant ecosystem, fostering a sense of peace and connection to nature. Over the century, Santiniketan has demonstrated the values of cultural, social, and ecological sustainability. Its development reflects a vision of ecological settlement achieved through the application of art and science. The planning involved collaboration with local communities, including villagers from Bolpur, Birbhum, and Santhal *adivasis*, to foster a humanistic, scientific, and spiritual approach.

Santiniketan's evolution from barren land to a thriving green landscape exemplifies the potential for harmonious living environments, providing a model for future urban and ecological planning. From its inception, Santiniketan aimed to create a landscaped society that prioritized ecological vitality through innovative urban planning. The design integrated cultural elements into spaces like *Chhatimtala*, *Upasana Griha*, *Amrakunja* (mango groves), *Salbithi* (sal groves), and *Madhabi Bitan* (torana with climbers), establishing a vibrant ecological identity. These zones continue to thrive as integral parts of the Ashram's life, over a century later. Leadership came from Debendranath Tagore, supported by the creative talents at Jorasanko Thakurbari, a key hub of the Bengal Renaissance, now recognized as a UNESCO World Heritage Site.

With the establishment of Rabindranath's Visva-Bharati and Rathindranath's development of *Uttarayana*, Santiniketan's environmental culture expanded. Local villagers and Santhals gained better livelihoods, thanks to initiatives started by Debendranath, such as the *Pous Utsav* in 1894, which still celebrates cultural continuity today. Santiniketan exemplifies a successful blend of nature, society, and built environment. It has become a vital social, cultural, and educational destination, benefiting tourism and the creative economy. The sense of place has evolved through three phases: Debendranath's foundational period (1862-1900), Rabindranath's establishment of

the Santiniketan School (1901-1919), and Rathindranath's transition to Visva-Bharati (1918-1953). Visva-Bharati later became a Central University in 1951, recognized for its holistic education and nature-friendly designs. Rabindranath founded the Ashram School (later the "forest school") in 1901 within this ecological landscape. Initially teaching just five students under flowering trees, he fostered a humanistic community dedicated to environmental heritage and cultural continuity, building on Debendranath's vision. The harmony of nature, society, and education continues to thrive at Santiniketan, reflecting its enduring legacy.

The educational and cultural environment of Santiniketan was enriched through dedicated landscaping, tree planting, and green cover that preserved the original habitat design. This effort aligned with artistic and architectural initiatives, fostering cultural vitality in harmony with the spirit of the place. Guided by Rabindranath's creative vision, Rathindranath, with support from *Kala Bhavana* and *Silpa Bhavana*, developed Visva-Bharati, Santiniketan, and Sriniketan, transforming the landscape over several decades while embracing the natural surroundings in line with Rabindranath's dream of integrating nature into architecture. The learning centre embodied the ancient Indian ashram spirit, with Rabindranath's vision for an Open University (Visva-Bharati) emerging in 1918. In his lecture, "The Centre of Indian Culture," he highlighted the historical significance of cultural centres like Nalanda and Taxila in India.

During Rabindranath's era, various built environments were established, including the mudbuilt Natun Bari and the two-story Dehali, along with open green spaces for Ashram school classes. These green spaces seamlessly integrated into daily life, with areas like Chatim Tala, Amrakunja, Salbithi, Madhabi Bitan, Santiniketan Griha, and Upasana Griha becoming essential components of the Ashram school's natural learning community.

Rathindranath - Green Mind, Green Hand

Rathindranath Tagore, the poet's son, was among the first batch of students at his father Rabindranath's forest school, Santiniketan, which opened in 1901. After completing his studies in 1904, he attended the University of Illinois at Urbana-Champaign, where he earned a Bachelor of Science degree in Agriculture in 1909. The university's blend of natural and built ecology inspired him to explore modern cultivation, farming, and horticultural design through a combination of laboratory work and field studies. As one of the first five students of the nature-centric Santiniketan Ashram School, Rathindranath experienced an education deeply rooted in nature. Rabindranath and his wife, Mrinalini Devi, left their grand home in Jorasanko Thakurbari, Kolkata, to establish an open-air learning centre that reflected India's ancient *tapovana* concept. Despite financial challenges, Mrinalini sold her jewellery, and Rabindranath sold property to fund this vision.

The Ashram school was situated on laterite land under trees, where students sat on hand-woven mats in a half-circle while teachers, including Rabindranath, sat on low mud-built seats. Surrounded by nature, the students learned amidst changing seasons, sunlight, and the vibrant life of birds and butterflies. The first mud-and-thatch cottage, "Naturn Bari," provided

accommodation for students and teachers, with a nearby water body serving as the primary water source.

Growing up in this eco-centric environment, Rathindranath engaged in gardening and explored abandoned gardens for rare plant specimens, creating a miniature tree house-museum with his peers. Guided by his father, mother, and teachers, he developed a deep appreciation for the harmony between humanity, nature, and the environment, enriched by artistic and cultural influences woven into their daily lives. Rathindranath Tagore's upbringing in the natural landscape of Santiniketan profoundly shaped his understanding of ecology and its importance. He recognized the vital role of the local environment, including the nearby Kopai River and village life, before pursuing higher education at the University of Illinois at Urbana-Champaign. While at the university, he assisted Jagadish Chandra Bose with his pioneering lectures on plant responses using a Cresco graph, exploring how plants react to various stimuli. He later worked in the Plant Science Laboratory in London under Professor Betson, specializing in plant breeding and Mendelian genetics. In 1912, he returned to the University of Illinois to pursue a master's and Ph.D. in agriculture, built environment, and horticulture, inspired by Rabindranath's vision to modernize farming practices for the benefit of impoverished farmers.

During his time in the U.S., Rathindranath also studied plant genetics and entomology. His professor, Hopkins, encouraged him to establish a soil laboratory on their family estate in eastern Bengal to aid local farmers. However, he had to leave his Ph.D. program due to his father's needs back in India and returned to work on farming and rural development in Selaidah and Patisar. In this region, he founded a soil testing laboratory to provide farmers with scientific soil analysis, enhancing agricultural practices. He played a significant role in developing agri-horticultural techniques, introducing tractor cultivation with the assistance of Prafulla Chandra Roy. Supported by renowned scientists like Jagadish Chandra Bose, a close friend of Rabindranath, Rathindranath was encouraged to join Bose's laboratory in Kolkata.

Rathindranath also helped the villagers of Selaidah and Patisar develop their craftsmanship and rural technologies, producing handloom textiles, clay pottery, low-cost umbrellas, quality fishing nets, and household machines for making puffed rice. He initiated cooperative principles and rural reconstruction efforts, blending his passion for scientific creativity with artistic woodworking, gardening, landscaping, and experimental agriculture in the heart of Bengal.

Rathindranath during the Formative Stage of Visva-Bharati

Rathindranath Tagore rejoined Santiniketan in 1918, inspired by his father Rabindranath's vision for Visva-Bharati. His prior education and practical experience in agriculture and horticulture, along with his involvement in the art movement 'Bichitra' at Jorasanko Thakurbari, equipped him to contribute to the holistic development of Visva-Bharati, Santiniketan, and Sriniketan. Deeply influenced by the creative culture of Jorasanko, he served as both an environmental designer and an artist.

In 1918-19, Rathindranath initiated the development of *Uttarayana* on previously barren land opposite his father's earlier works. This project introduced a new language of built environment that harmonized with the local physical and socio-cultural landscape, engaging Ashram scholars, artists, and artisans from nearby villages. *Uttarayana* became central to Visva-Bharati's mission of fostering global education and cultural exchange, providing functional spaces for collaboration among East and West.

Uttarayana housed Rabindranath's residences, guest accommodations, and performance venues, showcasing experimental art in architecture, landscaping, and ecology. These innovations contributed significantly to modern Indian architecture and landscape planning. Even amidst India's political struggles, Uttarayana symbolized intellectual freedom and cultural continuity, inspiring other centres both locally and internationally. Rathindranath's initiatives, supported by artists like Nandalal Bose, Suren Kar and his wife Pratima Devi, encapsulated Rabindranath's vision of universal creative unity. Contributors from diverse backgrounds further enriched Uttarayana's ecological and artistic endeavours. Uttarayana reflected a unique blend of traditional and contemporary building practices, incorporating open-air sculptures, murals, and elements of Indian architectural heritage. Efforts were made to create sustainable, locally sourced designs that harmonized with the environment, forming the lyrical essence of the Ashram's life. The interplay of built and unbuilt spaces throughout the campus creates a melodic landscape, resonating with nature.

Natural forms in *Uttarayana's* landscaping include recreational urban forestry and rainwaterharvesting water bodies. Open-air spaces for gatherings and cultural performances foster a universal learning atmosphere. Buildings and landscaping were designed to embody Rabindranath's informal living style, guiding us toward a new functional language in green architecture that remains relevant today.

Konarka to Chitrabhanu, Guha Ghar and Pompa Lake

The art of built form at *Uttarayana* harmonizes proportions and visually interprets dimensions, volumes, and spaces throughout the area. The open-air seating at *Mrinmoyee*, with its stepped gardens, connects to sub-centres featuring smaller, low-height concrete seating shaded by palm trees near the *Udayana* building. Raised verandas at *Udayana* also inspired similar structures at *Udichi*, *Shyamali*, *Chitrabhanu*, *Guha Ghar*, and Pompa Lake, developed between 1918 and 1952.

Uttarayana showcases the seamless integration of buildings with nature, painting, and openair sculptures. The architecture from Tagore's era reflects a sincere human connection with the land, blending Indian style with respect for the environment. This neo-traditional architecture aligns with local climatic conditions and soil characteristics, honouring Rabindranath's philosophy of the relationship between humanity and the universe.

Rabindranath's profound love for a natural lifestyle informed the design principles of *Uttarayana*, establishing ethical-aesthetic standards for the built environment. The structures, while simple, exhibit a thoughtful balance of proportion and purpose, incorporating traditional elements alongside innovative materials and construction techniques. His final decades saw a flourishing of art, architecture, civil engineering, and landscaping, culminating in a unique synthesis of built forms and their natural surroundings. Rathindranath continued this legacy, shaping *Uttarayana* into a lasting cultural environment.

Stylized buildings, open-air classrooms, performing spaces, and water-body features blend with sculptures and murals, creating a unique fusion of architecture, sculpture, and painting within a green living ethos. This natural design reflects a revival of art as part of the Bengal Renaissance, emphasizing the relevance of interactive art in modern green habitats. The thoughtful use of land, room sizes, and sustainable materials demonstrates a positive functionalist approach, embracing mud architecture, open-air theatres, and informal gathering spaces.

Uttarayana Buildings and Landscaping

The cluster of buildings at *Uttarayana*, including the seven structures and the raised seating arcade, *Mrinmoyee*, exemplifies the harmonious integration of diverse architectural forms with thoughtfully designed landscapes. The single-storied, split-level Konarka building, constructed between 1918-19 and 1922, is notable for its innovative split-level design that offers stunning horizon views. Its elevated room served as a stage for Rabindranath's dance-drama "*Natir Puja*," which explores Buddhist themes and was performed under a *simul* tree, blending visual arts with the everyday life of the ashram.

Santiniketan provided a balanced curriculum across various disciplines, emphasizing Rabindranath's vision of Visva-Bharati as a universal learning centre rooted in nature and ethical living. *Udayana*, built between 1923 and 1938, reflects a synthesis of Chinese, Balinese, and Indian architectural elements, showcasing effective fenestration and ventilation. Its ground-floor hall, adorned with a bronze sculpture of a meditating Buddha, serves as a multifunctional space for performances, designed by Rathindranath Tagore.

Collaborations with artists like Kintara Kasahara and Achari brought vibrant interiors and Japanese garden aesthetics to life, including the garden house Chitrabhanu and the serene Pompa Lake. On his 75th birthday, Rabindranath's vision of mud architecture materialized in *Shyamali*, featuring high-relief murals created by Nandalal Bose, Ramkinkar and local artists, symbolizing a majestic connection to nature. This building is a melodic pause in the architectural narrative of *Uttarayana*, leading to *Punascha*, where Rabindranath found inspiration for his writings and paintings.

Udichi, built-in 1938-39, is the last house of Rabindranath, surrounded by beautifully designed gardens and rose beds, enriching the campus's architectural heritage. The raised seating area of *Mrinmoyee* embodies the poetic vision of architecture, offering serene spaces where the poet

would write and connect with others. Overall, *Uttarayana* stands as a lyrical testament to Rabindranath's literary and artistic legacy, blending built forms with the lushness of its environment.

Chitrbhanu, Guha Ghar and Pompa Lake

These remarkable examples of ecological architecture are seamlessly integrated with landscaping and water bodies, creating a harmonious environment. They exemplify some of Rathindranath's finest experiments, reflecting Rabindranath's vision of "Santiniketan Laboratory" from his final years (1940/41). *Chitrabhanu*, a studio apartment elevated within a thoughtfully designed landscape, features a miniature water body, sculptures, a lily pool, and pathways leading to the first floor. This ecological zone was specifically crafted for artist Pratima Devi, nestled in the backyard of *Udayana*. The passageways are shaded by a pergola of climbing mango and blackberry trees, complemented by a stepped garden that ascends to the upper level. The interior and exterior of Chitrabhanu resonate with the adjacent Pompa Lake, linked by a natural recreational footbridge and adorned with Ramkinkar's sculpture of fish emerging from the water, nourished by recycled stormwater from the sloped garden. This design embodies an ideal ecological rhythm, emphasizing rainwater harvesting and sustainable practices.

Opposite side of *Chitrabhanu* is *Guhaghar*, Rathindranath's waterfront studio, featuring a workshop and living space surrounded by diverse experimental green plantings. This multifunctional area also served as his office during his tenure as the first Vice-Chancellor of Visva-Bharati from 1951. Together, the landscaping systems of Chitrabhanu, *Guhaghar*, and Pompa Lake represent a unique blend of smart and ecologically sensitive design, adhering to the principle of "small is beautiful."

These architectural ideals are not only significant today but also resonate with contemporary aspirations for ecological living. The built clusters effectively manage temperature control in living spaces, thoughtfully considering the enduring relationships between environmental ecology and sustainable design through an ethical and aesthetic green approach.

Human Space Habitation

Indian traditional knowledge of human habitation, intertwined with cosmic forces such as land, water, air, and flora, has informed our architectural practices for centuries. However, this understanding began to wane over time. The neo-humanist settlements emerging today seek to re-establish a variety of habitation examples, grounded in the philosophy of coexistence. In *Uttarayana*, Santiniketan, this artistic and architectural ethos is integral to the lifestyle, showcasing a fusion that reflects the potential of oriental culture as a universal language respecting land, people, and the environment.

Design opportunities that prioritize pedestrian access, mixed-use communities, and overall quality of life and living were explored, integrating environmental, conservation, and aesthetic

considerations. According to Rabindranath, this represents the ideal blend of life, living, and sustainable livelihood. The spaces created not only address dignity in human habitation but also transform utilitarian structures into works of applied art within a landscaped environment, echoing the continuity of our cultural civilization.

The development of creative learning centres in this setting fostered a permanent identity, with the golden era of *Uttarayana* marking a harmonious blend of art and architecture within diverse landscaped forms—an essential milestone in modern Indian ecological architecture. This neo-traditional approach considers climatic conditions, local soil characteristics, and public health, providing a blueprint for future architectural endeavours focused on environmental harmony.

The revival of free expression also sparked a creative surge in visual arts, influencing surrounding architecture. Inspiration from Indian traditional and tribal design is evident in the eco-habitat of *Uttarayana*, fostering a culture that blends scientific, spiritual, and humanistic unity. This vision reflects a return to ancient Indian ideals of learning from centres like Nalanda and Taxila, reinterpreted in a contemporary context.

Uttarayana stands as a testament to environmental principles through site-specific built forms, relevant in addressing today's environmental crises. It successfully reestablishes the balance between humanity and the natural world, exemplified by Rathindranath's landscaping, which drew from Debendranath's early principles. His methodologies included enriching soil for tree growth, demonstrating a symbiotic relationship between architecture and nature.

Rabindranath's personal style and creative philosophy resonate throughout *Uttarayana*, transforming daily life into a poetic expression through architecture and landscaping. His vision infused the environment with a cultural richness that continues to inspire. Many of his works, including poetry and drama, were born here, reflecting a profound connection to the landscape that has garnered recognition as a World Heritage site.

To truly understand *Uttarayana*, one must appreciate the unity of Rabindranath's life, vision, and work. This rare environmental interpretation holds significant relevance today, especially as we face global ecological challenges. Led by Rathindranath and *Kala Bhavana*, the architecture of *Uttarayana* embodies Tagorean ideals, creating pathways for interdisciplinary studies that honour our interconnected humanistic, scientific, and spiritual narratives—essential now more than ever in our crisis-ridden world.

Uttarayana Revisited in the Recent Time

The integration of art, architecture, landscaping, and urban forestry in *Uttarayana*, Santiniketan, exemplifies a green society that remains relevant today. This is evident in the design of the 'Rathindra Athiti Griha,' a guesthouse for Acharya and dignitaries, recently designed-

coordinated by the author. Inspired by *Udayana*'s architecture and green aesthetics, this building embodies the cultural essence of Santiniketan within a contemporary context. Rathindranath's principles of ethical aesthetics and environmental design, reflecting Rabindranath's ideology, are revisited here, showcasing the effectiveness of ecological architecture as practiced environmentalism.

Rathindranath was known for pre-planning gardens and landscapes alongside building designs, and this approach has been reaffirmed in the construction of *Rathindra Athiti Griha*. The project not only highlights the core elements of *Udayana* but also serves as a tribute to India's modern environmental design heritage. The site-specific approach proves that his ecological ideals are still valid in the 21st century.

This author is also engaged in the conservation and restoration of significant heritage buildings in *Uttarayana*, which serve as living texts of multidisciplinary environmental knowledge often absent from design textbooks. There is a pressing need to open these ecological treasures for practical studies and knowledge sharing, offering role models for sustainable living in the face of contemporary environmental crises. Now inscribed as a World Heritage Site, *Uttarayana* requires active conservation efforts while fostering the unity of land, people, and environment through ethical and aesthetic practices. A deeper understanding of the ecological principles of *Uttarayana* can enrich the study and practice of contemporary environmentalism.

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