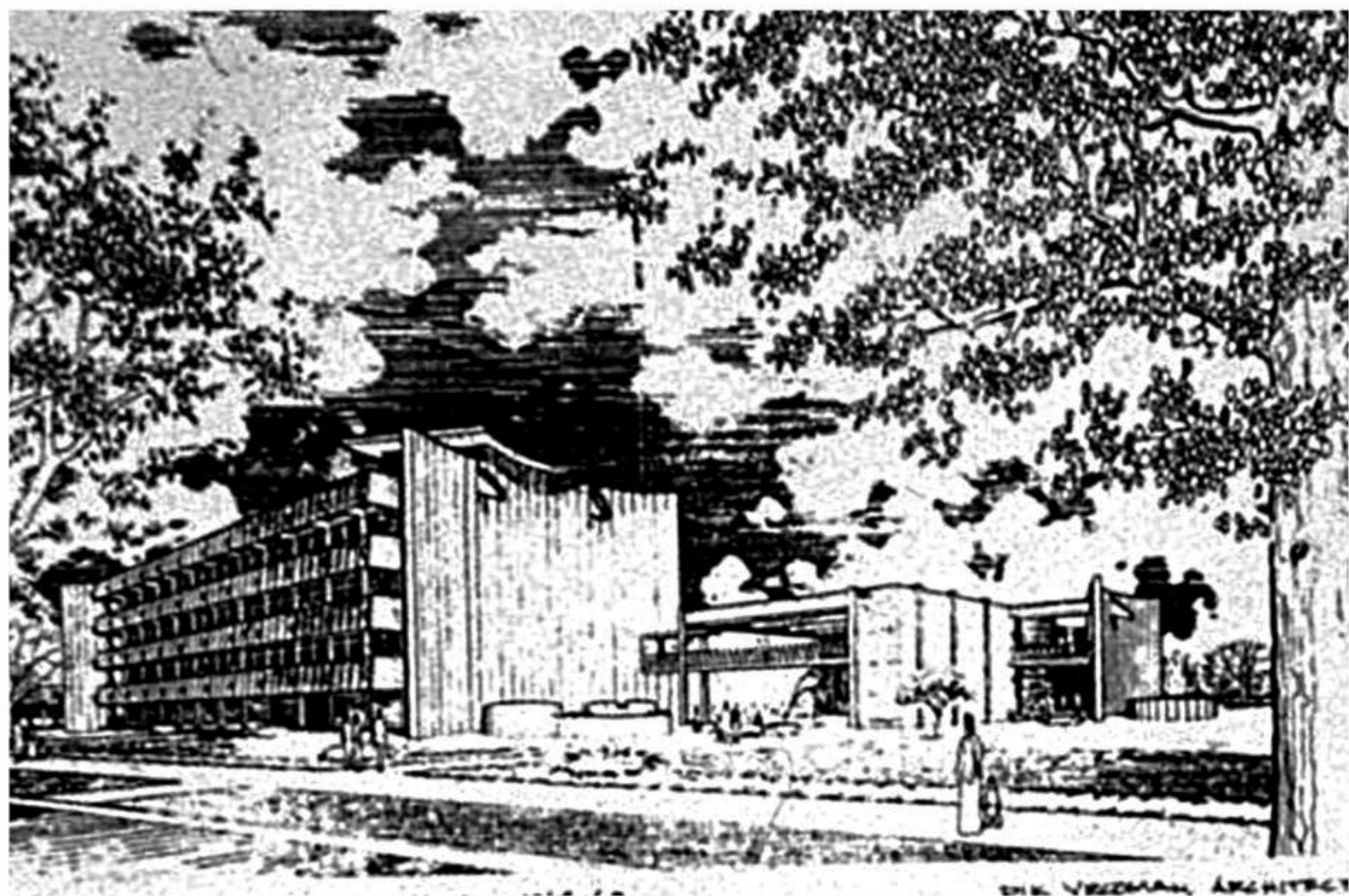




Department of Architecture Building, BUET.



Vrooman's sketch of the building.

A Symbol of Architectural Education in Bangladesh

ADNAN MORSHED

No building symbolises the advent of professional architectural education in Bangladesh during the 1960s more appropriately than the Department of Architecture building, designed by Richard Edwin Vrooman (1920-2002), at the Bangladesh University of Engineering and Technology (BUET). An American architect and academic, "Dik" Vrooman took a leave of absence from his faculty position at the Texas Agricultural and Mechanical University (Texas A&M University), spending 1961-68 in Dhaka to accomplish a lofty pedagogical mission. Other Texas A&M University professors who joined him included: James C Walden, Jr (1962-66) and Samuel T Lanford (1963-65). They were brought to Dhaka through a partnership between the United States Agency for International Development

in East Pakistan during the 1960s. First, Bengalis in East Pakistan were justifiably wary of West Pakistan's military junta (that took over power in 1958 and imposed martial law), viewed as reluctant to relinquish power to a majority-elected democratic government. The people of East Pakistan agitated for self-rule throughout the 1960s that ultimately led to the Liberation War of 1971. Second, during this period world politics were driven by Cold War era calculations in which superpowers sought to expand their spheres of influence.

Given Pakistan's geostrategic location, the United States adopted a foreign policy of forging alliance with Pakistan to resist the ideological expansion of the Soviet Union into



Richard Edwin Vrooman

Engineering College to a full-fledged university or EPUET. The need for creating an architecture department was urgently felt, particularly because there was a dearth of native architectural experts who could shoulder the task of designing various buildings alongside the handful of expatriate architects working in Pakistan.

Vrooman rose to the occasion. Overcoming bureaucratic obstacles, he spearheaded the creation of an architecture programme that would flourish rapidly. He became the first dean of Architecture and designed its flagship building. By 1965, with four American teachers and 68 students at five levels, Architecture grew rapidly as an academic discipline in East Pakistan.

The year 1966 was memorable for two reasons. The five-year programme produced the maiden batch of five graduates. Second, six Bengali students, who went to the USA to study architecture under the USAID-Texas A&M University Participant Program, returned to Dhaka to teach. This not only enlarged the pool of qualified teachers, but also paved the way for local teachers to assume leadership at the Department of Architecture. By 1968 all the expatriate teachers left, bequeathing the responsibility of the Department to local teachers. Shah Alam Zahiruddin, who received his architecture degree from the University of Florida, took over as the second Dean of the Faculty of Architecture and Planning.

The construction of Vrooman's Architecture building began in 1964, more or less contemporaneously with Louis Kahn's Parliament building in Dhaka. Engineer Mohammed Saber Jafar, a graduate of Bengal Engineering and Science University at Shibpur, West Bengal (now Indian Institute of Engineering, Science and Technology, Shibpur), served as local architect for the project.

The BUET Architecture building is located at the north-western edge of the campus on a wedge-shaped site. Two thoroughfares border the site in the north and south, intersecting in the west at Bakhshi Bazar. An internal campus road forms the eastern edge of the site which also provides access to the Architecture Faculty building complex. At the centre of the triangular site was a large pond which was later

filled. Precast concrete pylons were inserted into the unstable soil to provide a secure building foundation. Architect Daniel Dunham proposed a master plan for this part of the campus which was to include the University's main library, auditorium, cafeteria, and BUET teachers' club.

In the vein of Walter Gropius's Bauhaus in Dessau (1925-26), Vrooman sought to design an architecture building that would set a new paradigm for holistic academic environments in the country. He designed the building as a combination of a four-storied academic wing and a two-storied administrative wing organised in an L-shape, offering functional clarity to the building programme. The two rectangular arms of the L-shape and the University library help form an appropriately scaled, lush green courtyard. The recessed corridors on all floors of the academic wing allow a continuous visual link to the courtyard.

The courtyard is also connected to another paved courtyard adjoining the University cafeteria and auditorium. The academic wing includes all the design studios, some faculty offices, a seminar room on the ground floor, and service areas. The administrative wing has a projecting vehicular porch leading to a modest arrival hall. Adjacent to it are a reception area, staff offices, a jury space, and a teachers' lounge. On the southern edge of the administrative wing are the offices of the Head of the Architecture Department and the Dean of the Faculty. A double-height, covered outdoor space on the northern side of this wing serves as a grand jury space as well as a concert theatre. The second floor of this block houses the architecture library, computer centre, and other auxiliary office spaces. The two wings of the building are connected by a bridge at the second-floor level, overlooking the jury space.

The academic wing is rectangular in plan (approximately 200 ft x 80 ft), but features a diagonal beam system, creating a dynamic rhythm between the structure and the building envelope. The east-west axis of the volume allows for north-south cross ventilation and daylight. Studio spaces on the second, third, and fourth floors span the entire width of the building, creating an impression of open-floor organisation which in turn helps foster a sense of academic community. At night, the illuminated building reveals its somewhat piliated transparency to the surrounding campus.

The iconic feature of the academic wing are the precast concrete louver panels, serving as railings while also bringing light and air into the building. Each panel is 42 inches wide and 96 inches tall, and contains 9 angled louvers. Between every two projecting floor beams there are four louver panels, hung at a mild angle to help cut the driving rain. As people approach the building from the east, the louvers collectively present the iconic persona of the building, a structural derivative of the *brise-soleil* theme that defines many of Le Corbusier's edifices. The louvered façade also invokes the Brutalist expression through exposed

concrete and a building mass lifted off the ground by means of heavy piers. For instance, one maybe reminded of the patterned façade of Marcel Breuer's contemporaneous Department of Housing and Urban Development (HUD) in Washington, DC.

Curved concrete walls on the east and west of the academic wing terminate the rectangular plan, while transcending the predictable box-like volume of institutional buildings found in the country. At the top of the curved wall, boldly projecting and centrally placed spouts collect rainwater and drain them to circular water ponds on the ground. Between the building shell and the curved wall are staircases on either ends. Smaller curved walls also support the vehicular porch and staircase on the west of the administrative wing, providing an aesthetic theme for the entire ensemble.

The BUET site is far from Texas where architect Vrooman taught and developed his professional practice prior to coming to Bangladesh. Yet, in this unfamiliar territory, he created an edifice which beautifully blends with its climatic and cultural milieu. Making a suitable gesture to its tropical conditions, Vrooman's louvered building consciously blurs the boundary between inside and outside. It feels as though no other building could propel the journey of architectural education in this country more consciously than Vrooman's creation.

In recent times, many additions have been made to the Architecture building, somewhat compromising its original beauty. An ill-conceived "copycat" building for the Planning department was constructed on the north, eliminating in the process the sculptural ambience with which the Architecture building once rose from a verdant base. Nonetheless, the courtyard of the Architecture building has become a celebrated plaza which hosts a variety of festivals, attracting students and the public alike.

Having spent nearly a decade in this building, first as a student and then as a teacher, I only have fond memories of it. Professional architectural education in this country could not have begun at a more enlightening space.

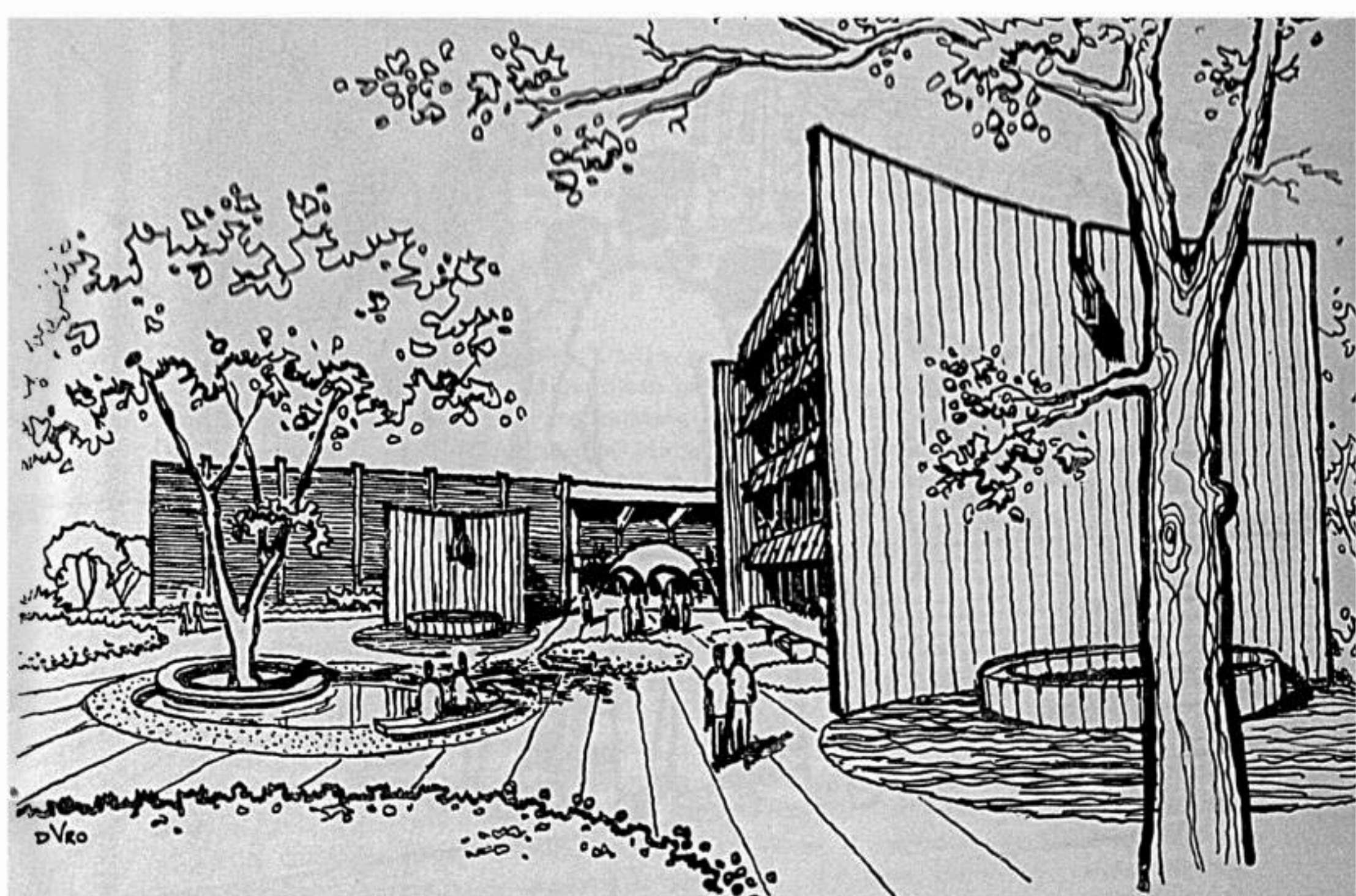
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NEW BUILDING FOR FACULTY ("COLLEGE") OF ARCHITECTURE & PLANNING, BUET. CONSTRUCTION TO BE COMPLETED IN 1968

Vrooman's sketch of the Department of Architecture Building, BUET.

(USAID) and Texas A&M University, aimed at creating an architecture department at the East Pakistan University of Engineering and Technology (EPUET; renamed as BUET after Bangladesh became an independent nation in 1971).

The mission was to train local architects, filling the void of architectural design expertise warranted by the burgeoning building industry, particularly during President Mohammad Ayub Khan's "Decade of Development" in Pakistan. Vrooman and his colleagues were supported by other expatriate architects including Daniel C Dunham (1962-67) and Jack R Yardley (1966-68), both of whom taught at the newly minted architecture programme in Dhaka.

Creating a new academic program was nothing short of a momentous achievement, especially against the backdrop of local and international politics that framed ground conditions

South Asia. As part of this "make friends" policy, the US extended considerable assistance to the economic and educational development of Pakistan through its International Cooperation Administration (ICA, 1955-61).

In 1961, during the presidency of John F Kennedy, the US Congress passed the Foreign Assistance Act which sequestered military and non-military aid to foreign nations. Out of this Act emerged the USAID, designed to administer American economic and technical assistance to the developing nations of the world. Continuing the cooperation and exchange programmes initiated under the ICA, the USAID's objective was to help these countries achieve their long-term economic and development goals. Pakistan received much assistance under this programme, particularly in the education sector.

In 1962, the Government of Pakistan decided to upgrade Dhaka's Ahsanullah