

# University Planning and Design under Confucianism, Colonialism, Communism and Capitalism: the Vietnamese Experience

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The university in Vietnam represents a thread of continuity that has managed to survive the political, economic and social turmoil faced so frequently by the Vietnamese people. This paper traces the evolution of the Vietnamese university in terms of its site planning and building design from the Hanoi Van Mieu, a Confucian 'temple of literature' which, built in 1070AD, is regarded as the country's first university, to today's system of general and specialised universities and polytechnic institutions. In the late 1990s another step in the process of evolution began with the rationalization and amalgamation of the tertiary system to form two large, multi-campus and multi-disciplinary universities – the Hanoi National University and the Ho Chi Minh National University.

The paper outlines the major stages in this evolution over nearly a thousand years, dividing the discussion into pre-colonial (feudal), colonial (capitalist) and post-colonial (communist followed by post-*doi moi* market-socialist). It should be noted that Vietnamese scholars place less emphasis on colonialism as a key turning point in their history than this division implies, and, in particular, they often prefer to call the post-colonial period simply the 'modernist period'. Nevertheless, whatever the terminology used, it is clear that successive regimes in Vietnam all sought to put their stamp on the character of Vietnamese education and consequently on the planning of university campuses and the design of university buildings.

The paper also seeks to show, however, that the relationship between political culture and environmental impact in Vietnam's case is complicated by the interplay of national and international influences on cultural development. After identifying some of the main international and national influences on a selection of key Vietnamese universities, the paper addresses the question whether Vietnam's unique history has produced a unique type and set of Vietnamese universities.

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## **Evolution of Vietnamese University Planning and Design**

### **1. Pre-colonial (feudal)**

The Van Mieu or 'Temple of Literature', built in 1070 AD in Thang Long (now Hanoi), is one of the oldest and most significant buildings and among the largest Confucian complexes in Vietnam. Its design and use illustrate the Chinese influence that permeated Vietnamese culture in this period (Logan, 2000, ch. 2). Its dedication to Confucius (Kong Fu Tu) so early in the Ly dynasty seems to indicate that, while Buddhism had pride of place as the dynastic religion, the Ly were already adopting Confucianism as the basis of their national education policy.

The initial plan of the Van Mieu was based on the Temple of Confucius at Qu Fu, his birthplace in China. However, the complex kept evolving through the Tran and Later Le dynasties, only reaching its most complete form under the Nguyen in the middle of the nineteenth century. It had been built on a flat and narrow piece of land, its boundaries straightened up by French colonial administrators in the early twentieth century, but climate, wars and national poverty led to deterioration in the fabric through the century. Since the late 1990s, however, there has been a busy program of restoration, returning the buildings to the way they were thought to have existed in their Nguyen period hey-day.

Like temple compounds in China, the Van Mieu is walled. The main gate or Great Portico opens onto five courtyards - the number five having special significance in Confucianism (five

elements, five virtues, five commandments, five sorrows, etc.). The first courtyard is formal in design, with two lotus ponds - restored in 1992 - and tree planting. The second is more park-like and ends with the iconic Khue Van Cac pavilion. That these two courtyards were the work of the first Nguyen Dynasty emperor, Gia Long (1802-1820), shows the determination of the founders of that dynasty to re-sinicise Vietnam and to find in Chinese Confucianism a set of philosophical, administrative and other useful ideas to strengthen the imperial control over the country and its people.

The third courtyard is the Garden of the Stelae containing a square artificial pool known as the 'Well of Heavenly Brilliance' flanked on the east and west by two rows of stone stelae on pedestals shaped like tortoises, which represent memory. The stelae record the names of successful candidates in the mandarin examinations since 1484. The fourth courtyard is entered through the Dai Thanh Mon Gate (Gate of the Great Synthesis). This courtyard - the Courtyard of the Sages - is more traditionally Chinese in style, with two parallel single-storey buildings along either side of the open space and linked at the north by twin pavilions, the Great Hall of Ceremonies and the High Sanctuary.

The fifth courtyard in the complex came to house the series of educational institutions where students studied Confucian literature and philosophy in readiness for the mandarin examinations.<sup>2</sup> Initially, in 1075, a Royal School was opened to educate the royal princes. In the following year the Quoc Tu Giam ('National School') was added. Here the royal relatives and mandarins' sons were housed and taught from books and wooden printing blocks. In 1253 the Tran Dynasty turned the schools into the Quoc Hoc Vien ('National Institute of Learning'), attracting the best students from all over the country and reinforcing the claim to being Vietnam's first university. It was extended in fifteenth century with the erection of the Thai Hoc auditorium and a hostel for 300 students.

Following the Hanoi model, towns in other provinces also established temples of literature dedicated to Confucius where the names of successful graduates were carved in stelae. These temples also acted as places where students gathered to propagate Confucian ideology in feudal times. Until French colonization, Vietnamese towns were relatively small and lacked infrastructure, means of communications, and public buildings. As a result, even in cities such as Thang Long (Hanoi), Saigon and Hue, universities were not a major townscape feature. Reflecting the dependence of the traditional Vietnamese urban centres on the rural areas, the various temples of literature were often constructed in peripheral areas, located among rice fields. In the case of Hue, the temple of literature stands on the banks of the Perfumed River, some considerable distance from the citadel and commercial town. Devastated by war, the building stands as a ruin in the landscape.

## **2. Colonial (capitalist)**

French colonial domination enabled the transition of urbanism in Vietnam from traditional to modern. In the north (Bac Ky, or Tonkin), this occurred through several stages. At first, during what is referred to by the French as the 'période héroïque' (1873-1888), the colonial authorities focused their efforts on taming the place and its peoples, constructing military installations, roads and bridges, and improving the health conditions in major cities through drainage and water improvement schemes. During the second period (1888-1920), greater emphasis was placed on commercial exploitation of Vietnamese resources and on building Hanoi into a fitting

capital for the French Indochinese Union. While the imperial capital Hue languished, the Doumer Plan covering 1898-1902 proposed a process of re-creating Hanoi as a modern city.<sup>3</sup> Although the traditional 'ville indigène' was tidied up, most of the effort focused on creating a new administrative centre around the central lake, Hoan Kiem, a political quarter in Ba Dinh district where the west wall of the citadel had stood, and new Western residential quarters with wider tree-lined streets full of French-style architecture.

It was in the public building programs of these years that the influence of classical planning and 'Beaux-Arts' design ideas were most strongly felt in Hanoi and in Vietnam generally. This design approach was characterized by a strict adherence to concepts such as symmetry, classical proportions, and use of ornate surface decoration. One of these projects was the establishment by Governor-General Doumer in 1899 of the Vien Dong College (École Française d'Extrême-Orient) for teaching and research in archaeology, linguistics and ethnology. Located in Ly Thuong Kiet Street southeast of Hoan Kiem, the first building was a temporary one; it was reconstructed in 1921 under a different set of Western design ideas. Today the complex houses the Social Sciences Library.

During the third phase of French colonial rule (1920-1945), a move away from classical architectural design models occurred that reflected a shift in colonial administrative policies from the earlier assimilationism to an 'associationist' approach. The pursuit of the earlier policies had been blamed for undercutting indigenous political, economic and social structures. The influence of assimilationism in architecture and planning was also attacked. Christian Pédélahore (1992, p. 296) reflects this criticism when he accuses Auguste-Henri Vildieu, Hanoi's chief government architect in the 1880s and 1890s, of drawing on 'the massiveness and decorative vocabulary of neoclassical architecture in order to subjugate the native masses and demonstrate without doubt the superiority of the new power, at the same time symbolically assuring its longevity'.

So, rather than insisting on the adoption of forms of government and cultural norms followed in metropolitan France, reformist Governors-General in the 1920s and 1930s like Maurice Sarraut, Maurice Long and Alexandre Varenne took the view that colonial policy should be guided by geographic and ethnic factors and recognition of the state of social development then prevailing in Vietnam. This was not a wholesale rejection of the earlier approach: the Governors-General remained determined to continue their modernisation programs, but to do so in ways that would win greater support from the indigenous elite as well as the colonists, these last usually fighting against any liberalisation with vehemence.

In Vietnam architecture and town planning were clearly part of the effort to modernise using associationist means. This included the development of the first comprehensive 'master plans' for Hanoi and other major cities, with attention being given to land use zoning and to traffic circulation. In 1923 Governor-General Long set up a Town Planning and Architecture Service within the Public Works Ministry. Long also invited an architect who was to design some of the most exceptional Vietnamese public buildings of the period – Ernest Hébrard – to come to Indochina to advise the municipal authorities on master plans for Hanoi, Saigon, Phnom Penh and Da Lat.

Hébrard had an established reputation as an outstanding Beaux-Arts trained urbanist when he arrived in Hanoi in 1923. But the five buildings that stand out as landmarks in Hanoi today incorporate Indochinese decorative features based on his extensive Asian field research and

photography, reading and discussions with historians and archaeologists at the EFEO. Through the use of verandahs, window canopies and ventilation devices, his designs were better suited to the local climate than had been the usual French designs with their small windows, mansard roofs and attics.

One of the five is the original main building of the Hanoi University built between 1923 and 1926 in a corner of the original French Concession on Le Thanh Thong Street (rue Bobillet).<sup>4</sup> Teaching only in French language, the university comprised departments of medicine, languages, history and archaeology. Here Hébrard broke from his classical European training to introduce elements of more traditional Vietnamese style, which he had researched carefully in numerous field studies. He also tried to reflect the colonial regime's growing emphasis on its training mission, especially in the impressive facade, as well as the regime's associationist approach through use of the new graphic arts language of his *style indochinoise*. The main tower and huge door in the main gate are important in Hanoi's architectural imagery, particularly as they stand at the end of the major tree-lined avenue of Ly Thuong Kiet Street.

When the Vien Dong College was reconstructed in 1921 it was on a larger scale and with a spatial arrangement said to reflect the concepts of the British 'Garden city' movement. The main gate of the college in Ly Thuong Kiet Street opens onto a courtyard and garden leading to the main block with two other blocks behind. A third tertiary institution, the Indochina College of Fine Arts, was established in Yet Kieu Street, Hanoi, in 1924. The college included a principal teaching block, two workshops and some additional house. Painting and sculpture workshops were on a scale that would allow the making of large canvases and statues.

For many French architectural historians, such as Pédélahore (1992, p. 304), the development of this Indochinese Style was the main legacy of Hébrard's time in Vietnam. By contrast, American Gwendolyn Wright (1991, p. 217) attacks his use of traditional design elements as being no more than a resort to superficial decoration, 'a pastiche of exotic details superimposed on a Beaux-Arts plan, rather than the more radical change in direction that he advocated'. In any case, the Indochina Style has proven to be an important element in the history of Vietnamese architecture over the last century, encouraging the adoption of the best of international ideas and their adaptation to local climatic conditions and cultural traditions. This was a far cry from and considerable improvement in performance over the projects built by French in the first phases of colonisation.

Hébrard also set up the first training program in architecture in Vietnam, creating the architecture section in the Indochina College of Fine Arts in Hanoi. It was here that he taught his Indochinese Style to a first, small generation of Vietnamese architects and urbanistes (planners). Again opinions of this are mixed, with some seeing it in negative terms as reflecting a narrow and patronising agenda that seems to have excluded the possibility of Vietnamese students developing their own national styles of architecture and planning.

Hébrard's work generated considerable controversy from the outset and his stay in Vietnam was cut short. When he left in 1929, his master plan for Hanoi was only partially implemented and several major ministerial buildings were no more than designs in progress. Development was, in any case, interrupted by the Great Depression and only got under way again in late 1930s. By this time, the Chief of the Town Planning and Architecture Service was Henri Cérutti-Maori, and, in Western architecture, the international modern movement and the International Style were in vogue. This movement sought to break from both traditional and classical

architecture; it wanted the form of a building to clearly express its function, and it rejected the type of decorative façade treatment characteristic of both classicism and the Indochinese Style. Governor-General Decoux (1940-1944), in his desire to show that Indochina was progressing, was keen that its architecture and planning should keep abreast of the trends in France. Consequently, Cérutti and his deputy Pineau found him well attuned to their international modernist approach and it was during this period of French-Japanese collaboration in Vietnam that they did their most productive architectural and planning.

One of the new areas in Hanoi opened up under the Hébrard Plan was the Bay Mau Quarter south of the French Quarter. Beyond that, under Cérutti's 1942 Hanoi master plan, regarded as his major planning achievement, an important further extension allowed for urban development as far as the line of today's peripheral ring road. Work on the so-called 'Cérutti Plan' spanned the years 1941-1944. It was characterised by a renewed emphasis on the Haussmannian urban design ideas employed by Hébrard. The plan also included design controls for facades, porticos and other aspects of new buildings as well as site coverage regulations.

A *cité universitaire*, in which Decoux took great pride, was also part of Cérutti's southern extension plan. In an extensive tract of land at the southern entrance to Hanoi, a zone for public administration included sites for a university and *grandes écoles* (specialised tertiary educational institutes). This was in line with modern conceptions of the multi-disciplinary campus with recreational and sporting facilities being developed in the North America and Australia, and was a sharp contrast to the Hanoi University and to the scattered buildings making up universities in Paris at the time.

As with Hébrard's master plan, the Cérutti's plan was never fully implemented. Its failure was due largely to its heavy reliance on the mechanism of land use zoning. In the *cité universitaire* area today, only the road alignment, with its square of streets offset against the orientation of the main boundary roads, still reflects his intentions. While the area has become the home for a number of Hanoi's universities (Polytechnic University, Construction University, National Economics University), they were not built to Cérutti's designs, nor on the specific sites he proposed.

## Saigon

In many ways Saigon differs from Hanoi and Hue. Saigon is capital of the 'new lands'. Most of the population migrating there from further north was of lower class status, practical thinking, not so bound by tradition, and not seeing the need to follow the Confucianism to be a good citizen. This allowed Saigon to create a new culture, with many differences from the northern cultural core areas. Additionally, Saigon was capital of a colony – Cochinchina – ruled directly by the French, whereas Hue and Hanoi remained capitals of protectorates – Annam and Tonkin – controlled (at least in theory) through the imperial structure.

These points of distinctiveness found expression in the history of the university development in Saigon. The first urban planning to cover Saigon was carried out earlier than in Hanoi, when Officer Coffyn at the request of Governor-General Bonnard planned to integrate the twin towns, Saigon and Cho Lon – one essentially Vietnamese, the other Chinese – and to re-divide the conurbation into specific functional areas – residential, administrative, commercial and industrial. But, due to the rigidity of this scheme, Saigon had trouble accommodating other

land uses in its later development and it was not easy to find appropriate sites for constructing university and school systems like those in Hanoi.

While a number of religious and secular secondary schools were built in the nineteenth and early twentieth centuries, there was little development in higher studies. Hébrard was active in the 1920s, especially drawing up the city's master plan but also developing projects like the Petrus School (1925-1928) with his typical mix of elements from Vietnam's architectural heritage and from the Art Deco style popular in France. Towards the end of the colonial period, the Saigon Medical University was constructed in 1947. Dealing with Saigon's hot and humid climate was a main goal in the architect's brief.

### **3. Soviet Socialist Influences**

After the proclamation of independence on 2 September 1945 and the final defeat of the French at Dien Bien Phu in 1954, North Vietnam started to concentrate on education. A number of universities, mostly in Hanoi, were established by leading members of the nationalist and socialist intelligentsia who had returned from resistance bases to the urban centres.<sup>5</sup> Due to the war and economic constraints, infrastructure development was relatively slow in general, but it was perhaps the most intensive period of university planning, design and construction in Vietnamese history because of the huge need for qualified cadres throughout the country.

Now part of the Soviet economic and political bloc, North Vietnam came under Soviet socialist influence in many cultural ways, including in its architecture and town planning. The transfer of design principles and implementation practices to Vietnam played a significant part not only in helping to shape Vietnam's townscapes, but also in reinforcing general Soviet hegemony in Vietnam (Logan, 2000, p. 189). Just as they had been in the Soviet Union, the architectural and town planning professions played a central role in Vietnam's post-1954 reconstruction. Since the Government and Party had become the source of all work, architects and planners were necessarily enlisted in the socialist cause. The official line was encapsulated in the slogan 'Learning from experience, our new architects must carry out the Party's resolutions, developing in our country a national and modern socialist architecture' (Quynh, 1991, p. 167). The professions met the same situation when communism extended to South Vietnam in 1975.

In this period a division began to occur along lines found in many Western countries where some universities fall into a general sector, teaching basic sciences, history, geography, and mathematics, while others fall into a technological sector (construction, irrigation, transportation, etc) or a specialist sector (medicine, music, performance, art, etc). Generally, most universities are organized into blocks where the main block contains lecture rooms and laboratories, whereas the library and research rooms are located in other blocks. Because of such similarity in spatial organization, Vietnamese universities of this period are quite easy to recognize.

Normally, the general location of universities did not depend on number of local residents or population density because students came from across the country but the specific sites to be occupied by the new universities depended on the city development program and urban plan. However, city planning was slow to get under way due to the American War (c. 1965-1975) and,



as a result, universities in the North were forced to find sites for themselves in city centre or in the urban fringe. While these universities enjoyed an historical advantage in being able to find large, relatively convenient sites in the undeveloped suburban areas, disadvantages were experienced in the 1990s when the rapid urbanization led to large numbers of people squatting on university land and creating architectural disorder.

### **Hanoi Polytechnic Institute (Dai Hoc Bach Khoa Ha Noi)**

The creation of Hanoi Polytechnic Institute, built in 1961-1965 on a corner of Cérutti's abandoned *ville universitaire* in Bach Mai, its main administrative building facing the newly-created Reunification Park (now Lenin Park), marked a progressive milestone in the evolution of Vietnamese education. It has become the most important multi-disciplinary university specialising mainly in technologies in Vietnam. It was also one of the first major buildings constructed with Soviet Union technical assistance under an aid program and attempted to tackle the problem of training a specialised national workforce for a modernising economy. Almost all the original academic staff were graduates from universities in the USSR. When it was opened in November 1965, the Institute had five faculties, mainly focusing on the physical sciences, engineering, mining and metallurgy. The university today comprises 13 faculties, 4 research institutes, and 25 research centres, 5 large laboratories and one commercial company, and has nearly 23,000 students.

The site planning and architecture of the Polytechnic Institute may be the best example of Soviet style introduced into Hanoi in the early 1950s-60s period; indeed it ranks highly among the symbols of socialist architecture in Vietnam as a whole. The combination of International Style elements, such as concrete frames and large glass screens, and elements suiting local tropical conditions, expressed in the buildings' composition and the use of corridors, sun- and rain-guards, give a distinctive character to the university complex.

Site planning divided the university into three main sectors: the lecture sector with large assembly room and administration rooms; the workshop sector with laboratories and production area; and the dormitory sector with recreation area and teachers' houses. These basic sectors were arranged in an unsymmetrical fashion in rectangular blocks that run in a north-south direction, mixing with gardens and green areas. In the centre, there is a large rectangular playground like a central square. Such planning shows clearly the careful research and consideration toward tropical conditions: buildings face the south and south-east, the prevailing wind directions; there are corridors around class rooms to reduce the penetration of direct sunshine and torrential rains; and the main buildings are connected conveniently by internal pathways under high tropical trees.

The complex was designed by a team of Soviet architects from Gyprovuz, headed by E. S. Budnik and P. Kuznetsov, and erected by Vietnamese construction organisations with technical assistance and project management by Soviet specialists. The Soviets also introduced the Vietnamese workers to innovative construction methods and provided equipment and some materials. One of the new techniques was the on-site fabrication of the concrete slabs that were to be used in the buildings, there being no industrial production of building components in Vietnam at the time. The project drew on the experience of designing the Technological Institute in the Burmese capital, Rangoon, the first tertiary educational complex designed by Gyprovuz for humid tropical climatic conditions.



All later universities were designed by Vietnamese architects but their work was heavily influenced by the ideas employed by the Soviet architects in the Polytechnic University. Other important universities in the period of 1955-1965 are the Trading University (Dai Hoc Thuong Nghiep) designed by architect Ta My, the Forestry-Agriculture University (Dai Hoc Nong Lam), and the Hanoi Water Resources University (Dai Hoc Thuy Loi Ha Noi).

## Saigon

When architecture in Hanoi looks somehow quite official, relatively uniform – even monotonous – within each period of history, Saigon's architecture has incorporated many more international trends from various overseas-trained architects, especially from France and the United States. The architectural trends of 1960s in Saigon, which are now recognised as belonging to a comprehensive Vietnamese architectural heritage, reacted against the language of colonial architecture (characterised by the use of verandas, balconies and pitched roofs), and instead adopted modern building technologies based on the use of concrete and air-conditioning. Buildings using reinforced concrete skeletons and flat roofs began to appear; their ground floors often had no walls and were used as garages and recreation spaces; the façades commonly had a curtain of metal shades to protect the buildings from both tropical sunshine and heavy rain and to reduce energy consumption. These shades were mass-produced and their popularity represents the first appearance of an industrial aesthetic in Vietnamese architecture. Despite the move towards new technologies, Saigon's architects in this period knew how to combine these with traditional characteristics. By allowing for *phong thuy* (*feng shui*) and the ceremonials associated with ancestor worship that were frowned on in the communist North, they created a distinctive regional variation of early modernist Vietnamese architecture.

The outstanding example of university planning and design that reflects these characteristics is the Medicine University (*Dai Hoc Y*) designed by the architect Ngo Viet Thu. Other universities built in Saigon in that period were the Multidiscipline University (*Dai Hoc Tong Hop*), Pedagogic University (*Dai Hoc Su Pham*), Economics University (*Dai Hoc Kinh Te*). After reunification in 1975, those universities developed into, respectively, the Ho Chi Minh National University (*Dai Hoc Quoc Gia TP. Ho Chi Minh*), Ho Chi Minh University of Technology (*Dai Hoc Bach Khoa TP. Ho Chi Minh*) and Ho Chi Minh Economic University (*Dai Hoc Kinh Te TP. Ho Chi Minh*).

## 4. Post Doi Moi

After the reunification of Vietnam in 1975, universities in the North and South experienced a steep increase in student numbers of students. Educational facilities of universities were seriously damaged due to the war and could be very little improved because of economic restraints. The government at that time concentrated mainly on building houses and administration buildings. Thus the decade after 1975 can be seen as a period of increasing educational demand but decreasing systematic investment in educational facilities. These increasing pressures on the tertiary education system reduced the quality of the education experience and output.

In many ways the story of universities in this period parallels the crisis facing other economic sectors in Vietnam. In 1986 the Sixth Congress of the Communist Party of Vietnam

decided to bring Vietnam back into the global economic system through a set of policies known as *doi moi* (renovation). By 1990 the Soviet Union had collapsed and Soviet aid to Vietnam ended. A re-orientation towards the capitalist world had begun, facilitated by the end of the United States-led trade and investment embargo in 1994. A period of economic reconstruction led to an increased tempo of modernization, industrialisation and urbanisation throughout the country. Western influences are being felt in these processes to an extent unmatched since colonial times. Development of Vietnamese university's system was again on the national plan.

In the strategic plans of provinces and cities, a network of universities was usually considered as part of the new development axes. In Hanoi, a new university area on a gigantic scale was included in the West development axis. In Ho Chi Minh City, new universities were part of the South Saigon New Urban Area, which includes the fully fee-paying RMIT International University of Australia that is currently under construction. In Da Nang, the planned university area lies in the South-West development axis. Hai Phong, Hue, Nha Trang, Bac Ninh, Phu Tho, and Thai Nguyen all have university areas in new development zones. In other words, Vietnamese university networks have become a key emphasis in contemporary city planning in Vietnam. At the moment, the planning of many of these new universities is still largely on paper; existing universities still have to suffer increasing pressures of student over-enrolment while using out-dated facilities. Future development of the university sector is now a critical social issue as it is a key element in the quest for modernisation.

## **Conclusion**

Because of the length of the process, the particular stages it has passed through and the variety of major foreign interventions, Vietnam has ended up with a unique set of universities with many distinctive characteristics in terms of site planning and building design. Although key individuals had a major impact on university campus design, a larger influence resulted from the more generalised implantation of cultural mores and tastes by the regimes in power, diffused through society by means of schooling systems, rigid employment requirements and a host of regulations controlling social life and cultural expression.

The evolution of the Vietnamese university campus exemplifies important issues in planning and design history in Vietnam generally. This is an important part of Vietnam's cultural heritage – and not just the tangible buildings but, more importantly, the intangible heritage of planning and design concepts. Further research is needed to determine the extent to which the similar planning and design processes have operated in Developing Countries elsewhere in Southeast Asia or, indeed, in Africa and Latin America. More universally, the Vietnamese story has value in demonstrating the interplay of culture, 'planning culture' and planning and design theories and approaches. Understanding this interplay is critical to any effective analysis of the historical development of cities and to planning for their future.

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- 1 In Vietnamese, the term *Truong Dai Hoc* is used to indicate all tertiary educational units. There are no equivalent terms for College or Institute.
- 2 The gruelling triennial mandarin exams were conducted at another site - the Thi Huong examination compound near the southern end of Lake Hoan Kiem.
- 3 Paul Doumer was Governor-General of the French Indochinese Union from 1897 to 1902.
- 4 The other four are the Ministry of Finance building (now home to the Ministry of Foreign Affairs), the Louis Finot Museum (now the National History Museum), the Pasteur Institute (now Microbiology Institute) and the Cua Bac Church.
- 5 Such as Tran Dai Nghia, Pham Huy Thong, Ta Quang Buu, Nguyen Van Huy, Ho Dac Di, Ton That Tung.