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viii. Pahlavi, after World War II

Between the close of World War II and the overthrow of the Pahlavi regime in 1979, an ancient and very traditional Iranian culture came fully into contact with contemporary developments, in particular, with the highly scientific and empirical world of the West. The dynamic forces at work and the architectural and city transformations that they fostered may be studied in our consideration of three distinct but interrelated chronological sections, each characterized principally by socioeconomic conditions, national development programs, esthetic expressions of social symbols, and the pitfalls of extreme and rapid growth. The first section deals with the period from the abdication of Reżā Shah in 1941 and the beginning of the reign of Moḥammad Reżā Pahlavī to the so called White Revolution of 1962 and 1963; the second section traces architectural activity and achievements in Iran from 1963 to the major world energy crisis of 1973, and the last section focuses on the six year “building boom” that occurred after the OPEC oil price increase, and concludes with the abrupt termination of this cycle of national construction by the overthrow of the Pahlavi regime.

Period I (1941 1963). This period of renewed encounter with the West had

three phases: First, the war years, in which Iran was occupied by the Allied Forces; second, the post war years until 1952 1954, when the oil industry was nationalized under Prime Minister Moḥammad Moṣaddeq; finally the post nationalization period lasting until 1962 1963, during which time the monarchy consolidated its economic and political power. It was a time of national resurgence. In the aftermath of direct foreign occupation, there was a resurgence of nationalism with the formation of a new sense of national identity and the establishment of national development goals. Beginning as early as 1947, these goals were institutionalized in the National Development Plans. Although the initial seven year plan, which established the Plan Organization, was aborted by the economic and political crisis following the oil nationalization in 1954, a second seven year development plan directly affected the scale and character of architectural activity in the country until 1963.

The concerns of the first period included industrialization, infrastructure development, military buildup, and the new balance of power resulting from these undertakings. The oil industry, for example, grew rapidly, and attempts at nationalization attracted major attention; hydroelectric dam projects, road network construction, telecommunications, and so forth received infrastructural investments. The U.S. Marshall Plan and Point Four Programs, along with other financial, technical, and military aid programs from the United States and its allies, produced Iran's first major encounter with the people and culture of the United States; overnight, these relations replaced the Franco-German liaisons that had developed after World War I.

Because of the slow economy and the necessities of postwar reconstruction, only token architectural and city planning gestures could be afforded. This period produced only symbols of a growing national identity: images of a glorious past, such as newly built or renovated mausoleums of national heroes, poets, and scholars, and images signifying a new order, such as the ubiquitous traffic circles with their pivotal statue of national leadership. The monuments of the period, principally built before World War II, were small, for the most part well crafted artistic conceptions that attest to their Iranian designers' educational formation in prewar Paris (i.e., the Bū ʿAlī Sīnā Monument in Hamadān by H. Seyḥūn). Returning to Iran with École des Beaux Arts training, these designers, under the tutelage of the French archeologist and architect Andre, Godard, established at Tehran University the first Iranian School of contemporary architectural education, with Moḥsen Forūḡī and

Hūšang Seyḥūn as the first two directors. Until its administration changed hands in the early 1960s, the School of Architecture trained an entire generation of Franco Iranian architects in the classic pedagogic programs of the École as transferred to the Iranian setting. The esthetic nature of the architectural theories and attitudes developed for public structures during this time can best be described as “Aryan Monumental” with touches of Islamic Arabesque. Only the airport at Mehrābād by Moḥsen Forūḡī and his Swedish consultants, the new senate building in Tehran by Ḥaydar Ḡīāʾī, and the National Iranian Oil Company headquarters building by ʿAzīz Farmānfarmāʾīān caught the special attention of the public, which was suddenly exposed to an entirely different scale, function, and technology of construction. While these were notable buildings, they never achieved the traditional level of architectural excellence.

Apart from these isolated cases of public building programs, the main construction activity of the time was undertaken by the private sector. The situation of domestic architecture more clearly reveals the ongoing transformations.

The courtyard house of one to two stories has dominated the Iranian urban settlements. Based upon the extended family system, the social mores of Islam, and primarily upon adaptation to a harsh, hot, dry climate, the concept of the introverted “Paradise Garden” house was the natural prototype for the home in the Persian plateau until World War II. These houses were mainly built of brick and adobe by local masons known as *meʿmār*s. Interiors were traditionally without furniture and oriented principally to seating on a carpeted ground; the rooms accommodated the multiple activities of sleeping, eating, study, and entertainment. Environment allowed much use of the courtyard as an outdoor private room; this was encouraged by the excellent passive solar design capabilities of the traditional house (R. Ghezelbash and F. Abozzia, *Courtyard Houses of Yazd*, Tehran, 1984). As a corollary, the compact grouping of houses in clusters indicative of social units, and their organization into pedestrian-oriented urban precincts known as *maḥalla*s, typified traditional housing and community patterns. At the center of these precincts could be found a mosque, a bathhouse (*ḥammām*), a market, and at times, a place of local religious ritual gathering, such as a *takīa*.

During the first period of renewed encounter with the West, this basic building block of the urban settlement was transformed. Though the courtyard house remained the most affordable and popular type of housing, its key inner

workings began to be seriously altered. The introduction of furniture to many homes after World War II and the resultant need for single function rooms, such as dining rooms and reception rooms, had direct and lasting impact on basic house design. The initial response of the more urbane, who were at the forefront of this change, was to create a two part division in the house: The “furnitured” zone was reserved for the guest or the foreign visitor, while the carpet oriented traditional lifestyle zone remained for informal family gatherings and for women’s and children’s private activity. Additionally, with increased urbanization, two European house types that had been first introduced to Tehran in the 1930s—walk up apartments and row houses aligned to the new orthogonal, vehicular streets—became established as integral parts of the contemporary city. Those who could afford it, of course, escaped the growing downtowns and built in the suburb “paradise lost” villas that imitated 19th-century Qajar palaces and were set in gardens or *bāḡ*s of various sizes. Residential buildings for the upper income groups cultivated a “Qajar Modern” style, which represented an eclectic tendency toward integration of the past and the present that was not always architecturally successful. The most direct encounter of most Iranians with Western esthetic symbols was through roads, bridges, and such products as cars, radios, refrigerators, and telephones, and most pervasively, through Hollywood movies. The idea and image of a Western way of life with its associated technology were firmly established by the late 1950s, when the emulation of this lifestyle was prevalent in most urban settlements of Iran. Iranians lacked the resources for its authentic attainment, but there was very little question that the urban elite and the ruling hierarchy had set their full attention on overcoming this apparent discrepancy between goals and present means.

Period II (1963 1973). While the first phase, dominated by infrastructure and by monuments reflecting the national need for a renewed sense of cultural identity, had yielded no outstanding public structure nor any significant town planning, it did establish a sense of stability. At the time, the country was entering a period of new prosperity. Trade of Iranian oil for foreign goods and services had become established, and tourism was developing as a major industry, with both foreign and domestic tourism growing annually. Organizationally, the country had settled down to a working bureaucracy. The third development plan (1963 68) began to provide adequate support for the building of educational and health care facilities, and during the fourth plan (1968-73), new urban settlements were begun and existing urban centers upgraded. New master plans and large-scale public building programs became

a basis of public policy. In the mid 1960s, the return to Iran of the first wave of post World War II foreign trained professional architects and engineers had direct impact on national planning and local construction capability. At the same time, the dominant cultural force in Iranian schools of architecture and engineering shifted from French domination to an Anglo American bias with some Italian influence. Dāryūš Mīrfendereskī and Mehdī Kowṭar, both Italian trained Iranian architects, served as successive deans of the Faculty of Fine Arts of Tehran University. Meanwhile, the School of Architecture at the National University, also in Tehran, was founded.

Iranian professionals, foreign educated or newly trained in Iran, lacked information on the indigenous architectural heritage and traditional building technology. What little scholarship existed had been produced by foreign scholars, with all the inherent limitations of their orientalist and primarily archeological approach. (A major exception to this characterization was the monumental work of A. U. Pope and P. Ackerman, whose *Survey of Persian Art*, although first published in 1938, gained renewed impact by its reissuing in the early 1960s.) In response to this need, documentation on authentically Iranian cultural values and belief systems began to proliferate, revealing the metaphoric nature of Persian expression in the visual, aural, and the literary arts (see N. Ardalan and L. Bakhtiar, *The Sense of Unity. The Sufi Tradition in Persian Architecture*, Chicago, 1973; M. Tavassoli, *Architecture in the Hot Arid Zone*, Tehran, 1974; R. Beny and H. Nasr, *Persia, Bridge of Turquoise*, Toronto, 1975). While the first high rise apartment towers in the city centers of Iran were being built, traditional Persian music began to be government supported—by the Center for Traditional Music, associated with the Ministry of Culture—and was once again appreciated by ever wider circles. In architecture, the traditional buff-colored brick (originally a square of approximately 24 cm, 4 cm high, now with Western standard dimensions of 20 by 7.5 by 10 cm) began to regain its legitimate place among Iranian building materials, while the arch, vault, dome, and the rest of the traditional architectural vocabulary were on occasion used to house extremely contemporary functions. Thus the Iran Center for Management Studies founded by Ḥ. Lājevardī and designed by N. Ardalan was conceived in the traditional architectonic language of the madrasa, yet housed a contemporary Harvard University program of business management education.

Among the building achievements of this period were educational institutions and health services constructed in the major cities and physical education and

recreational facilities such as sports centers. The Tehran Sports Center, built between 1968 and 1972 by ʿA. Farmānfarmāʾīān and Associates (designer: N. Ardalan) for the Ministry of Housing and Development, was intended to recall the Elamite ziggurat of Čoḡā Zambīl and the Hall of One Hundred Columns at Persepolis. The project transformed 200 hectares of barren alluvial plain into parkland suitable for leisure activity. Using available road building technology, more than four million cubic meters of earth were moved and compacted to create a 100,000 seat buff-brick surfaced earthen stadium, which serves also as a dam holding a man made lake in the adjacent excavation pit. The lake was conceived as a water reservoir to irrigate 160 hectares of trees and to allow pleasure boating, while establishing a central focus of activity for many other sport and recreational facilities. The Sports Center was the site of the 1972 Asian Games and has served as a place of national celebrations.

The Šahyād monument, built in 1971 on the occasion of the 2500 year anniversary of the Iranian monarchy, continued the École des Beaux Arts line of monuments dedicated to renewed cultural identity. Designed by the Iranian architect H. Amānat, the structure attempts to unify three major periods of Persian history by combining the Sasanian parabolic arch of Ctesiphon with the pointed Islamic vault in a new construction of concrete and travertine. Conceived within the Roman tradition of the triumphal arch, it houses a museum and has served as the symbolic gateway to the capital city from the existing international airport. Only time will tell of its future urban value, as the new international airport in the south of Tehran comes into operation and the present gateway function of Šahyād is lost.

This period saw much significant work in historical restorations and preservation in the major cities of Iran. The Safavid architecture of Isfahan received special attention after 1964, when the National Organization for Conservation of Historic Monuments of Iran (NOCHMI) and ISMEO (Istituto Italiano per il Medio ed Estremo Oriente) commenced work on the ʿAlī Qāpū, Čehel Sotūn, and the Hašt Behešt; this program resulted not only in the preservation of these historical buildings, but also in the publication of numerous volumes documenting their architectural details and in the training of Iranian craftsmen and technicians with specialist skills. As a result, many other historical structures were transformed, starting in Isfahan (where, for instance, the old caravanserai associated with the 17th century madrasa Čahār Bāḡ, was made into the Shah ʿAbbās hotel) but soon spreading to Shiraz and the holy cities of Mašhad and Qom, where major building complexes were

preserved and the crafts traditions enlivened. In 1973, 600 major building sites were on the list for preservation and 300 of these were actively under repair.

In 1964, Victor Gruen Associates of the United States and the ʿAzīz Farmānfarmāʾīān Association of Tehran, under the direction of the Iranian city planner Fereydūn Gaffārī, were jointly commissioned to produce the twenty five year phased physical development plan that was legislatively approved in 1968 (see *Art and Architecture* 5, March May, 1970), and soon replicated by other planners for all the major cities of Iran. A key factor in these plans was the urbanization of the population living in rural villages. In 1964, Iran was approximately 60 to 65 percent rural and 35 to 40 percent urban. As part of the overall government plan to industrialize Iran rapidly, planners were asked to accommodate a reversal of these numbers by the 1990s. More than 60,000 rural villages scattered throughout the most desolate areas of the Iranian plateau were to be coalesced into approximately 15,000 super villages structured upon mechanized farming principles. Greater access to central education, health facilities, and the marketplace were the anticipated benefits of this process, but the enormous effort and complications ensuing from the displacement of millions of rural dwellers was never fully appreciated.

In retrospect, the master plans produced reveal the Western training and goal motivations of their designers and the respective governmental clients (see “Aryashahr New Town, Isfahan,” by Soviet planners, in *Art and Architecture* 39 40, March June, 1977). A concern for the traditional urban settlement patterns of this region, correct environmental fit, and relevance to the indigenous culture of the majority of the population very rarely were in evidence in any of the new plans. Instead, broad vehicular roadways made great traverses through both traditional settlement patterns and undeveloped, arid lands surrounding the historic cities of Iran in an attempt to accommodate a mass urban population boom. As a result, urban real estate prices around these roads rose nearly 250 percent from 1966 to 1971; land speculation rather than social or cultural benefit was the principal immediate result of the new master plans. A period of speculative construction boom commenced before the full appraisal of adequately developed models of relevant planning concepts related to workable community designs, environmentally adaptive movement systems, culturally conscious building prototypes, or the availability of material resources.

In 1963 material shortages and skyrocketing prices forced a six month ban on

construction in Tehran, but this was only a hint of the problems that would ensue in the third and final phase of Iran's modern architectural history.

Period III (1973 1979). In 1974, Iran convened its second international Congress of Architects, "Toward a Quality of Life." Held at Persepolis under the chairmanship of architect Moḥsen Forūḡī, the conference brought together leading world architects and urbanists such as Buckminster Fuller and Jose, Lluis Sert from the U.S., Kenzo Tange from Japan, and many others to review Iran's progress in its professional response to the challenges posed by increasing oil revenues. Participants in this congress (and the earlier one held in 1970 on "The Interaction between Tradition and Technology") prepared *The Habitat Bill of Rights* (by Jose, Lluis Sert, Moshe Safdie, B. K. Doshi, Georges Candilis, and Nader Ardalan) for the Ministry of Housing and Development, and this book was presented by Iran to the United Nations Habitat Conference in Vancouver, Canada, in 1976. Other participants in Iran's international conferences met again in 1977 to jury the international competition for the National Library of Iran. This competition drew the largest number of international and national entries of any world competition (see *Art and Architecture* 45 46, April July, 1978).

As these events indicate, Iran consciously drew on the highest levels of world technology and expertise in the late 1970s, but with all this attention (and, at times, perhaps because of it) architecture and city planning between 1973 and the 1979 revolution experienced a rapid peak and an even more rapid decline. Designs were developed for several major educational and cultural institutions under the leadership of Iranian architects working with an international cadre of professionals (see "Vision," in R. Beny, *Iran: Elements of Destiny*, Toronto, 1978). Certain key commissions went to leading international architects, such as the Tehran Hotel (Kenzo Tange), the Glassware Museum renovation (Hans Hollein), and a museum in Shiraz (Alvar Aalto). In the field of city planning, new development projects were undertaken on vast scales in proximity to most of Iran's large cities ("Šāhestān [ʿAbbāsābād Development],") by Llewelyn Davies International, Jaquelin Robertson, director, in *Arts and Architecture* 33-34, April July, 1976; "Pardisan Environmental Park," for the Department of Environment, Eskandar Fīrūz, director, designed by the Mandala Collaborative and COMRT; and "Shushtar New Town," by Kamran Diba, in R. Beny, *Iran: Elements of Destiny*). New towns were designed and some construction commenced (see "Bandar Shahpur New Town," by the Mandala Collaborative and SOM in G. Golany, *Design for Arid*

Regions , New York, 1983; “Nuran, The City of Illumination,” by Mandala International, Nader Ardalan, director, in Muriel Emanuel, ed., *Contemporary Architects*, New York, 1980).

Restorations and preservation activities continued to receive government support, with major conferences held on the preservation of entire historic districts. The craftsmanship level among certain artisans such as plaster workers, bricklayers, tilemakers, carpenters, and metal workers greatly improved, and the number of available craftsmen increased.

Conclusion. If Iran’s history of architecture and city planning since World War II can be evaluated at such proximity, it is clear that there have been many cultural gains. The newly acquired consciousness of Iran’s past has led to the renovation and conservation of many historic buildings, and through this process, the traditional crafts were also revived and maintained. Nor were the gains exclusively backward looking; they were introspective and anticipatory. Never before had so much knowledge of Iranian history, particularly architectural history, been accessible to so many people in Iran. Valuable documents of Iran’s history from the pre Islamic past to the Islamic present were revealed, and these provided insights into the fast unfolding future. Certain stylistic periods were favored in this eclectic search for form and identity: aspects of Elamite ziggurat construction, Sasanian parabolic vaulting, Saljuq brick masonry, Safavid glazed faience, and especially the 19th century Qajar architectural vocabulary were recapitulated by the architects in post World War II Iran. A minor but steady interest in the more vernacular “village” architecture of adobe and brick construction also evolved.

From the standpoint of architecture as nature and science, Iranians gained the most advanced knowledge of contemporary science and technology and their practical applications to the building process. In the late 1970s, Iranian professionals numbered among the leading international practitioners of architecture and planning, while traditional environmental modifiers, such as wind catchers and garden houses, received scientific explanation (see Bahadori, “Passive Cooling Systems in Iranian Architecture,” in *Scientific American* 238/2, February, 1978).

At the same time, these gains were accompanied by losses. Among the cultural losses was a certain traditional Iranian “way of life” evidenced by the destruction of many residential quarters in the old towns of Iran, and this affected the full range of income groups. With this loss of traditions, there was,

on a larger scale, a coincident architectural loss of the pivotal role of the mosque in the community. Not one great mosque was built during this period, although many historic ones were carefully repaired, and this situation reflected the operative attitude toward religious and other traditional institutions. There was also a loss of the familiar human scale in the built environment. No new spatial order replaced the traditional order that had grown from a handcrafted technology of building. This inability to fill the void caused by rapid industrialization, urbanization, and secularization is a commonplace problem confronting all rapidly transforming traditional societies, not only that of Iran; nevertheless, the lack of cultural and spatial relatedness of the new urban environments of Iran to their traditional, existing patterns only fostered alienation and unrest. Ecologically, one must count as a loss the inefficient new growth and form of the human settlements of Iran. Tehran with its massive population explosion of the 1970s was not environmentally able to support the large demands put upon it with respect to water supply and adequate green space for its citizens. Fuel exhaust from vehicles, factories, and home fires emitting pollutants into an atmosphere characterized by inversion layers has caused severe pollution problems. Other Iranian cities that have historically maintained a delicate environmental balance while poised on the edge of open deserts today demonstrate similar environmental stress problems to those of Tehran because of population growth, urban sprawl, and pollution. On a microscale, the adaptive indigenous forms of hot arid architecture, characterized by compactness in buildings, high thermal lag construction, south facing porches, natural ventilation, and refreshing gardens have been challenged or won over by discontinuous, isolated forms, “mechanical parthenons” of other bioclimatic regions that do not fit naturally with the hot, harsh environment.

With these dynamics, there were a few significant achievements that can be added to the rich legacy of Persian architecture, but the major lessons of this period are more in the form of questions than answers: How can a traditional society transform its historic built forms and symbols to accommodate its inner cultural values and needs while integrating the new realizations of the twentieth century? How can an energy efficient architecture and planning approach be evolved that enables the effective survival of its human settlements? How can quality of life and human purpose in these habitats be sustained and furthered, while being faced with the constraints of world population explosion, general world resource depletion, and the heightened global interdependency of nations?

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