The Incorporation of Architecture: Bureaucratic Modernism and Global Practice after 1945

In the decades after World War II, a broad transformation occurred in the scale and scope of professional architectural practice. My dissertation explores this shift, in particular the rise and international extension of the range of large-scale, collaborative, and team-based architectural practices which came to be labeled as corporate. An evaluation of these practices reveals a climate of postwar speculation on the corporation as a social and institutional form, and challenges existing histories of modernism based on the art-historical tropes of originality, singular authorship, and the periodization of early, high, and late avant-gardes. The dissertation situates these transformations in practice through the history of The Architects Collaborative (TAC), founded in 1945 by seven young practitioners together with Walter Gropius as an experiment in anonymous, team-based design methods.

Central to this history is the deep involvement of TAC and other corporate firms with the transnational, oil-based economies of the Middle Eastern Gulf states after 1945. A chapter of the dissertation explores the involvement of TAC and other U.S. firms with the Kuwaiti oil boom after 1973 and the speculative finance economy to which it gave rise, while another chapter describes TAC's design for the University of Baghdad as part of an extensive modernization program under the Iraq Development Board in the 1950s, These chapters explore the cultural constructions of foreign and local and the complex economies of material, labor, and expertise through which the work of TAC and other Western firms in the region took shape.

The AKPIA Student Travel Grant allowed me to travel to Kuwait in January 2014 to study the archives of Pan Arab Consulting Engineers (PACE), the local consultant for all of TAC's projects there from the 1960s to the 1990s, containing drawings and correspondence related to many of these projects. Additional travel to Abu Dhabi, Dubai, Sharjah and Doha during the trip allowed me to more comprehensively document and compare numerous buildings by TAC and other U.S. firms built from the 1960s onward, including buildings that were produced through TAC's Kuwait branch office between 1976 and 1994.

The following article was developed based on research conducted during my AKPIA Student Travel Grant trip in January 2014.

Speculations: U.S. Architects and Modernization in Kuwait

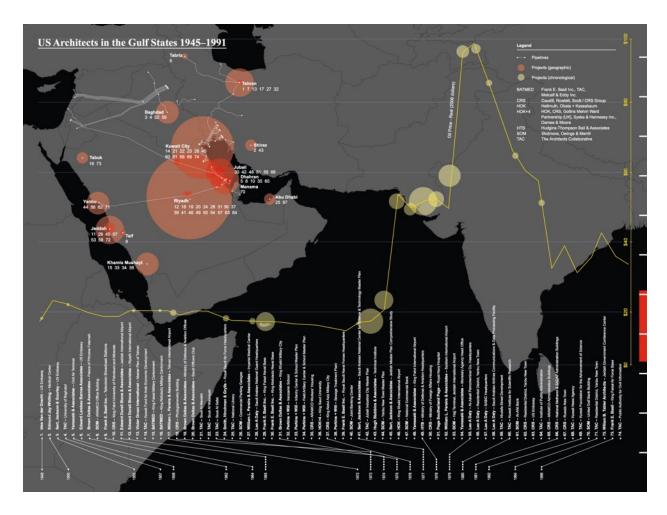
Within a few short years after the start of the global spike in crude oil prices after 1973, a raft of journal articles in the United States had begun to speculate in earnest about the new opportunities for architects to build in the expanding economies of the Middle Eastern Gulf states. Written in the manner of apprehensive but enticing field guides to the region, such articles sought to outline the opportunities, risks, and intricate protocols that Western architects would have to negotiate if they hoped to chase the specter of petroleum-fueled development and the tempting yet often precarious finance economies to which it gave rise. Governmental complexes, vast military cities, new towns for oil workers, international airports, banking towers, commercial centers, and luxury hotels were among the vast array of commissions on offer for foreign firms able to navigate this new market, financed by a spectrum of public and private clients made wealthy by national oil revenues. In Architectural Record, Charles Hoyt wrote of the "oil-rich Middle East... the new frontier for professional services," and asked with both anticipation and unease: "is this the new client?" In Fortune, Walter McQuade warned that "for the eager American construction men involved, there are rich rewards to be earned, but there are also immense difficulties." 2 National Geographic offered a guide to Gulf countries that were riding "a magic carpet of petrodollars... to undreamed-of prosperity and influence," and wondered: "Who are those oil-rich Arabs, and what are they doing with all that money?"3

What these articles chronicled above all were the speculative dimensions potentially lucrative yet risky—of this desire by Western architects to enter the global market for architectural commissions in the Gulf. Reaching its peak between the oil embargo that followed the Middle East war of October 1973 and the series of intertwined political and economic events that marked the end of the Gulf construction boom after 1982, the heaviest presence of U.S. firms in the Gulf states paralleled both the spike in crude oil prices and the corresponding recession in the United States and Europe in this decade. This desire thus formed a natural corollary to the desperation of many Western architects to escape the increasingly precarious conditions of practice in their own countries, on the opposite side of the revised formulas of oil and capital exchange that had so enriched the Gulf states. In this way the involvement of U.S. architects in the Gulf acted as a hinge between the collapsing space of Western building practice and the coveted but also economically risky territories of the Middle East, where these firms hoped to chase those same sources of wealth that had been suddenly evacuated from architectural commissions at home.

¹ Charles Hoyt, "The Oil-Rich Mideast: The new frontier for professional services?" Architectural Record (June 1975): 101.

² Walter McQuade, "The Arabian Building Boom is Making Construction History," Fortune (September 1976): 112.

³ John J. Putman, "The Arab World, Inc.," National Geographic (October 1975): 494.



The notion of *speculation* provides a useful framework for understanding the cultural and economic forces that governed both both sides of this equation. The term alludes on the one hand to the processes of speculating for oil reserves, which had generated the national wealth of the Gulf states so precipitously after World War II. On the other, it refers to the global mechanisms of financial speculation that were erected on top of this oil revenue, which included the creation of new state and parastatal institutions in the Gulf from banks and investment companies to international aid organizations, as well as private companies like the engineering and construction conglomerates that would prove crucial in mediating the relationship between foreign firms and local projects. In this exchange, the search by U.S. architects for commissions in the Gulf constituted a related form of financial speculation, a process that often carried significant levels of professional risk beyond its potential benefits.

Speculation carried additional meaning in the context of Kuwait, among the first and most extreme examples of large-scale urban transformation in the Gulf states following the master planning and demolition of much of the existing center of Kuwait City after 1952. Here it resonates with the idea of *spectacle*, which historian Farah Al-Nakib has posited as a by-product of Kuwait's extended modernization by the 1980s. Exploring the ideological construct of *al-nadha* (the

Timeline of projects by U.S. architects in the Gulf states correlated to graph of crude oil prices and location of major oil pipelines, 1945—1991. Research: Michael Kubo. Design: Pentagram. Published in Gilabert, Kubo, Miljacki, and Schafer, ed., Office US Atlas (Zurich: Lars Müller, 2015).

awakening) as the main driver of the processes of modernization in Kuwait after 1950, Al-Nakib argues that beyond the government's attempts to plan a functional city center through the demolition of the existing fabric, development in Kuwait was driven by the desire to create the urban spectacle of "a cityscape that would serve as the definitive symbol and visual reflection of Kuwait's newfound modernity." These ambitions were emblematized early in Kuwait's modernization by the Fahad Al-Salem Street development after 1957 and later by the iconic Kuwait Towers (Sune and Joe Lindström of VBB and Malene Björn of Björn & Björn Design, 1965–1977). At the same time, the term resonates with the contemporaneous sense of Kuwait as a speculum, or mirror, for the changes taking place in architectural practice in the West. Forming the obverse of the corporate images of an abstract finance economy based on the distant specter of "oil" that circulated in the U.S. in this period, there lay the parallel conviction among visitors to the Gulf that in its urban spectacle, "Kuwait today is like a mirror of all that is totally modern in the western world." 5

Architectural historians on both sides of this equation have continued to pass over these relationships as no more than "an exemplification of familiar modalities of architectural globalization, including the emerging star system, boutique architects and large corporate design offices," as if such phenomena were unworthy of analysis. Yet it is precisely in the relationship between the changing economy of Western architectural practice and the deep involvement of foreign architects with the processes of modernization in Kuwait and other Gulf states that the evolution of more anonymous, corporate architectural practices can be traced. Just as modern architecture and urbanism in the Gulf cannot be understood without accounting for the sustained role of U.S. architects after the 1960s, so too the conditions of practice for U.S. architecture firms in these decades cannot be described without exploring the fundamental consequences of their engagement with the oil economy.

Kuwait funds

Among the Gulf states, Kuwait played an early and outsized role in constructing these new global processes of exchange. The nation had been among the first Gulf states to fully nationalize its oil industry, with its rapid takeover of financial control of the Kuwait Oil Company (begun as a joint-venture between the Ameri-

⁴ Farah Al-Nakib, "Kuwait's Modern Spectacle: Oil Wealth and the Making of a New Capital City, 1950–90," Comparative Studies of South Asia, Africa and the Middle East, Vol. 33, No. 1 (2013): 9.

⁵ Gardiner, *Kuwait, The Making of a City*: 31. On the late modern mirror-glass buildings through which "the fetishism of 'oil' as pure liquidity, pure circulation" was reified and abstracted in the West in this period, see Reinhold Martin, "Materiality: Mirrors," in *Utopia's Ghost: Architecture and Post-modernism, Again* (Minneapolis: University of Minnesota Press: 2010): 93–122.

⁶ Lukasz Stanek, "Mobilities of Architecture in the Global Cold War: From Socialist Poland to Kuwait and Back," *International Journal of Islamic Architecture*, Vol. 4, No. 2 (2015): 366.

can-owned Gulf Oil Corporation and the British-owned Anglo-Iranian Oil Company)—first negotiating 60 percent ownership in 1974 and then full ownership the following year—providing a model that was quickly exploited in Saudi Arabia, Iraq, Qatar, and Abu Dhabi.⁷ At the time Kuwait was the third-largest oil producer in the Gulf after Saudi Arabia and Iran and the sixth-largest in the world, extraordinary figures given its relatively minute size. Moreover, Kuwait provided a home for the entity directly responsible for the 1973 embargo and the ensuing price shocks that launched the "second" oil boom after World War II: the Organization of Arab Petroleum Exporting Countries (OAPEC), established in 1968 with Kuwait, Saudi Arabia, and Libya as its founding members.

Even more crucially for its regional importance, both the state's inability to absorb the enormous quantities of oil revenue and the desire to ensure its protection among the Arab states (particularly relative to the territorial claims of Iraq) led the Kuwaiti government to establish an unprecedented framework for lending international aid for development projects in the Arab world, the Kuwait Fund for Economic Development (KFAED), immediately after achieving independence in 1961. Western observers of the Kuwait Fund in the 1970s reflected on the institution's uniquely "Arab character" and the remarkable success of its lending model in the Arab world as compared to traditional Western sources of development aid such as the World Bank. Within three years of its establishment, the list of Arab countries in which large-scale development initiatives backed by the Kuwait Fund were in progress or soon to be underway included Jordan, Egypt (then part of the United Arab Republic), Tunisia, Algeria, and Morocco, with projects ranging from irrigation and agricultural development to electrical power plants, mining, and tourist infrastructure.8 In the twelve years prior to the 1973 embargo, Kuwait was the world's largest donor of aid relative to GDP and the seventh-largest overall after the United States, the Soviet Union, Britain, Germany, Japan, and France, the traditional Cold War sources of international aid. An astonishing 15-20 percent of the country's national budget was given to foreign aid projects in these years. The result of this framework was that "it was the small Gulf oil state of Kuwait which was the first to make a more serious effort to use oil money constructively in the Arab world."9

Yet the most immediately visible impacts of Kuwait's newfound wealth were at home. Within a few years of the discovery of the Burgan oil field in 1938 and its exploitation in earnest after World War II, the state embarked on an ambitious program of urban clearance and development beginning in the 1950s that would fundamentally alter the structure of the city center. The key mechanism for these efforts was a state policy of land acquisition and resettlement that enabled the

⁷ Robert Stephens, *The Arabs' New Frontier* (Boulder, CO: Westview Press, 1976): 38.

⁸ The Kuwait Fund for Arab Economic Development, promotional pamphlet (The Kuwait Fund for Arab Economic Development, June 1964).

⁹ Stephens, The Arabs' New Frontier: 33.

almost complete demolition the old town as specified in the first master plan for Kuwait, prepared in 1952 by the British town planning firm of Minoprio, Spenceley & Macfarlane. The ensuing landscape of multi-lane streets and vacant urban parcels—many left empty for decades due to the extreme land values that resulted from their initial purchase at artificially inflated prices—provided the ground for the construction of a vast array of governmental, institutional, and commercial projects through which the state sought to reconfigure the spatial and economic bases of a modern Kuwait on the world stage.

The role of foreign architects in creating this image of modernity was crucial. By the time of the second boom in oil prices in the 1970s, the city center of Kuwait had become the territory of what Lukasz Stanek has described as "a global market of architectural resources which, besides labour, included building materials and technologies, discourses and images... most often combined on the ground with resources from local and regional networks."11 For many observers of the steady influx of foreign architects to Kuwait, "the famous names that were appointed to build as a consequence" of the city's modernization constituted "a veritable Who's Who of the international giants, all candidates for the front cover of TIME magazine. Nothing but the best."12 Such commentary was typically reserved for the major civic icons of Kuwait's development, a list that included Michel Ecochard's National Museum of Kuwait (1960–1983), Arne Jacobsen's Central Bank of Kuwait (1966–1976), Kenzo Tange's Kuwait International Airport (1967-1970), Jorn Utzon's National Parliament (1972-1982), Reima and Reilli Pietilä's Sief Palace Complex (1973–1983), and Arthur Erickson's Al-Sawaber Housing (1976–1981, though Erickson's office was only involved until 1977). So too the roster of foreign luminaries encompassed the largely Team 10affiliated group of architects invited after 1968 to submit visionary large-scale proposals for the city center, including the Pietiläs, Alison and Peter Smithson, BBPR, and Candilis-Josic-Woods. 13 Largely in the background of these discussions were more anonymous, large-scale practices like The Architects Collaborative and Skidmore, Owings & Merrill, as well as the heavy presence of professional architects from socialist European countries including Poland, Bulgaria, Czechoslovakia, Hungary, Romania, Yugoslavia, and Greece. 14

¹⁰ See "Town Planning in Kuwait," *Architectural Design* (October 1953): 272–273. On the Land Acquisition Policy (LAP) of 1951 and its consequences, see Suhair A. Al-Mosully, *Revitalizing Kuwait's Empty City Center* (Ph.D. Dissertation, Massachusetts Institute of Technology, 1992) and Asseel Al-Ragam, "The Destruction of Modernist Heritage: The Myth of Al-Sawaber," *Journal of Architectural Education*, Vol. 67, No. 2 (2013): 243–252.

¹¹ Lukasz Stanek, "Mobilities of Architecture in the Global Cold War": 366. Stanek describes this complex as part of broader processes of "mondialisation," a term taken after Henri Lefebvre to refer to "the emergence of architecture as a worldwide techno-scientific phenomenon after World War II from within competing visions of global cooperation and solidarity."

¹² Neil Parkyn, "Kuwait Revisited," Middle East Construction (September 1983): 40.

¹³ See "Proposals For Restructuring Kuwait" and "Kuwait: The Smithsons' Scheme," Architectural Review (September 1974): 179-190.

¹⁴ An account of the socialist architects working in Kuwait in this period is Stanek, "Mobilities of Architecture in the Global Cold War."

In assessing the work of these international architects in Kuwait, contemporary Western critics combined astonishment at the sheer scale of the country's urban transformation with a persistent misgivings about the ability of such "star" designers to contribute meaningfully to these processes of modernization. Neil Parkyn, a British architect in Kuwait who returned in 1983 to assess the city's development after a five-year absence, admitted that "given the firm clues and themes there for the taking—strong light, privacy and formality, waterfront sites in some cases, abundant resources, competent contractors—some of the stars turned in their standard home performance, airfreighted to Kuwait Bay."15 ("Not," he was quick to venture, "that this was always inappropriate.") Others reflected on the speed and impact of urban change, reflecting on the ways in which "For good or ill [oil] has brought enormous material and moral changes to Kuwait, transforming it in little more than a decade from a quiet traditional desert town into a kind of Arab Los Angeles, spreading its highways and suburbs over the surrounding desert to take in the daily flow of its scores of thousands of big American cars."16 Such statements seemed to confirm the fears of architects like Parkyn that Kuwait's construction boom had become nothing more than a "showcase for the world's architectural prima donnas." 17

Yet the office that best exemplified the imbrication of U.S. architects with Kuwait's large-scale urban transformation was in many ways far more anonymous than the signature architects whose buildings provided a ready image of spectacle for both Western and Kuwaiti critiques. This was The Architects Collaborative (TAC), the team-based practice established in 1945 in Cambridge, Massachusetts by seven young architects along with the German émigré Walter Gropius. TAC's heavy presence in Kuwait began in 1968 with the commission to design the headquarters of the Kuwait Fund for Arab Economic Development, a project gained after a diplomatic trip by partner Louis McMillen to seek work in the Gulf states as an extension of the firm's ongoing involvement with the University of Baghdad in Iraq after 1957.¹⁸

The inauguration of the first Kuwait Fund building in 1974 began a period of thirty years of sustained work in Kuwait for TAC, so much so that the firm opened a dedicated branch office there in 1976 (the only international office run by the firm until its bankruptcy in 1995, aside from the one it had begun in Rome in 1959 to conduct work on the University of Baghdad project). TAC's dozens of projects in Kuwait over these decades included a series of commercial

¹⁵ Neil Parkyn, "Kuwait Revisited": 40.

¹⁶ Stephens, The Arabs' New Frontier: 39.

¹⁷ Neil Parkyn, "Kuwait Revisited": 39.

¹⁸ Interview with Sabah Al-Rayyes, May 29, 2013. Ironically, one of the initial motives for the Kuwait Fund's aid program to Arab countries had been to bolster international support for Kuwait in the face of territorial claims by Iraq under General And al-Karim Qasim, whose rise to power following the coup of July 14, 1958 had spelled the demise of nearly all of the cultural projects by international architects commissioned under the pro-U.S. Hashemite monarchy of Faisal II, with the notable exception of the University of Baghdad.



TAC with PACE, Kuwait Fund for Arab Economic Development, Kuwait City (1968– 1974), model. Courtesy PACE Archives.

developments for the Kuwait Investment Company combining ground-floor souks with parking, offices, and housing (1973–1979), the Kuwait Institute for Scientific Research (1979–1983), the Kuwait News Agency (1981–1987), the Kuwait Foundation for the Advancement of Science (1982–1986), and the Public Authority for Civil Information (1986–1992). This involvement in the Gulf reaped benefits in other countries in the Middle East as well, including numerous projects in Saudi Arabia, the United Arab Emirates, Iraq, and Jordan. While the bulk of the articles directed to U.S. architects in the 1970s reflected the palpable anxiety for those unfamiliar with the Middle East about how to access this market and negotiate its risks, the situation was clearly different for firms like TAC that had already been working in the region for two decades at the time of the oil embargo.

Concrete was the material of choice in nearly all of these buildings. Indeed, precast and poured-in place concrete became the preferred materials for the vast array of large-scale commissions designed by U.S. firms in the Gulf States between the 1950s and the 1980s. Perhaps no construction material better embodied the relationship between large-scale architecture firms in the United States and the expanding economies of the Middle East. A synthetic material formed by the chemical interaction of ingredients produced through varying technical means, concrete hardened the complex exchanges among Western architectural specifications, transnational material networks, local construction firms, and on-

Kuwait Fund for Arab Economic Development, construction photo, c. 1972. Courtesy PACE Archives.

site labor through which the building economy of the Gulf states took shape in these decades.

The resulting buildings were often seen by local architects as modern as much for their technical proficiency and material refinement as for any stylistic or architectural expression. A significant element of these transactions was the changing signification of concrete as a "local" material, one in which foreign technics and on-the ground material and labor were synthesized. In Saudi Arabia, Caudill, Rowlett & Scott (CRS), the architects of the University of Petroleum and Minerals in Dhahran (1964–1982)—among the earliest large-scale projects by U.S. architects for Gulf clients after the University of Baghdad and Minoru Yamasaki's Civic Air Terminal in Dhahran (1958–1961)—had found that "in Saudi Arabia even the sand does not behave the same as sand elsewhere... wind-blown desert sand loses its sharp, irregular edges and does not bond well."19 Instead sand had to be obtained from the seashore and mixed with local limestone and cement to produce sufficient hardness. Yet for CRS the resulting composite still constituted "a Saudi product" despite its reliance on Western protocols of sourcing and assembly, one that was "sand-blasted to expose aggregate and matrix, color compatible with the jebel site."20 In this way, in contrast to purely import materials like steel, concrete directly materialized the transnational mixture of expertise and

¹⁹ Jonathan King and Peter Langdon, ed., The CRS Team and the Business of Architecture (College Station, TX: Texas A&M University Press, 2002): 143.

²⁰ Charles E. Lawrence, Saudi Search (Houston: CRSS Research, 1986): 9.

matter at play in these buildings, literally hardening these flows into the image of a "local" architectural expression.

A crucial element in the work of U.S. firms in Kuwait was the presence of consulting firms, large engineering and construction conglomerates that acted as mediators of foreign technical expertise and construction details with on-theground protocols. This differed from the situation in Saudi Arabia, for example, where much of the contractual and logistical work of U.S. firms was enabled by para-statal multinational clients like the Arabian-American Oil Company (Aramco) or more directly through Western proxies like Bechtel and the U.S. Army Corps of Engineers.²¹ Key to TAC's proficiency in the Gulf was their sustained collaboration with Pan-Arab Consulting Engineers (PACE), the consultant for nearly all of the firm's projects in Kuwait as well as those of other large U.S. firms, notably Skidmore, Owings & Merrill (SOM). As with TAC and PACE, foreign and local firms frequently operated together through joint-venture agreements, a way of satisfying the governmental regulation that foreign firms were required to work with Kuwaiti consultants for all construction projects in the country.²² PACE's close association with TAC also began with the Kuwait Fund headquarters, one of the earliest projects taken on by the firm after its establishment in 1968.²³ Indeed, the growth of this relationship was crucial for PACE's emergence to become one of the largest consultants in the Gulf, as its founding members later credited their acquisition of drawing standards and design protocols in the first years of the office directly to their work with TAC.²⁴ Conversely, it was largely through the close relationship with such consulting firms that TAC grew into one of the largest architectural practices in the U.S. these decades, sustained by dozens of large-scale projects, both iconic and anonymous, in Kuwait.

It is no coincidence that TAC's arrival in Kuwait came via an entity whose creation reflected a sophisticated philosophy of the relationship between Western technologies, local resources, and modernization efforts in the Arab world. The Director-General of the Kuwait Fund, Abdulatif Youssef Al Hamad, spoke of the

²¹ On Aramco, see Robert Vitalis, *America's Kingdom: Mythmaking on the Saudi Oil Frontier* (Stanford, CA: Stanford University Press, 2007) and the various area guides for foreign workers published by the company, such as *Aramco Handbook: Oil and the Middle East* (Dhahran, Saudi Arabia: Aramco, 1968). On the role of the U.S. Army Corps of Engineers in Saudi Arabia, see Robert P. Grathwol and Donita M. Moorhus, *Bricks, Sand, and Marble: U.S. Army Corps of Engineers Construction in the Mediterranean and the Middle East 1947-1991* (Washington, D.C.: Center of Military History and Corps of Engineers, United States Army, 2009). On Bechtel in the Middle East up to 1958, see *Bechtel in Arab Lands, A Fifteenth-Year Review of Engineering and Construction Projects* (San Francisco: Bechtel Corporation, 1958).

²² For example, the requirement for foreign firms to involve a local consulting office with the design and supervision of works in Kuwait was specified in a letter from Sabah Al-Rayyes of PACE to Louis A. McMillen of TAC regarding the contractual agreement for the Area 5 and 9 commercial parking garages (the Souk Al-Manakh and Souk Al-Safat), sent between June 14 and August 22, 1975. A draft of the joint-venture agreement between TAC and PACE for the Area 5 and 9 garages is dated August 26, 1975. Courtesy PACE Archives. SSH, one of the largest consultants in Kuwait, claims that the requirement for foreign firms to work with local consultants after 1973 was the result of lobbying by partner Salem Al-Marzouk, a U.S.-educated civil engineer then in the Ministry of Public Works and a member of the National Assembly. Rod Sweet, ed., *SSH Design: The First 50 Years* (http://lissuu.com/sshdesign/docs/50_years_book): 47.

²³ The project number given to the Kuwait Fund project by PACE was 68006, with the first two digits indicating the year of the commission, indicating that this was the sixth project ever taken on by the firm in the year of its founding.

²⁴ Interviews with Tarek Shuaib, current head of PACE and son of founding partner Hamid Shuaib (August 1, 2012), and founding partners Sabah Al-Rayyes (May 29, 2013) and Charles Haddad (May 30, 2013).

reciprocal relations of dependence among the Arab countries, in which Kuwait's need for territorial protection and its lack of natural resources could be remedied through the lending of developmental aid to foment support within the region: "We are a small country and rely on our neighbors for almost everything—food, teachers, labor. In turn we share with them what we have, money." Abroad, Al Hamad lectured audiences in the so-called "first world" about the Arab perspective on the changing equations of trade that had enabled the creation of institutions like the Kuwait Fund and their role in revising the traditionally exploitative relationship of the Western powers to the oil-producing Gulf states:

For years our countries lived literally at the periphery of the world, too weak and too poor to protest against the management of national wealth by foreign private interests, against the low price of oil, against the rapid exhaustion of our reserves, against the draining away of export receipts, and the alienation of the whole oil sector from the national economy. History and the conjunction of several favorable factors began to change all this in the late sixties. We began to recover sovereignty over our national resources, to analyse the different aspects of the world oil markets, to accumulate knowledge, and this led finally to what we refer to sometimes as "the oil revolution." ²⁶

Instead of this unilateral model of resource exploitation, the conception and operation of the Kuwait Fund "envisaged a triangular cooperation between the technologically advanced oil-consuming countries, the oil producers with surplus funds, and the developing countries seeking to industrialize and modernize themselves. Oil money and Western technology would together transform the economies and societies of the Third World, including the Arab countries."²⁷

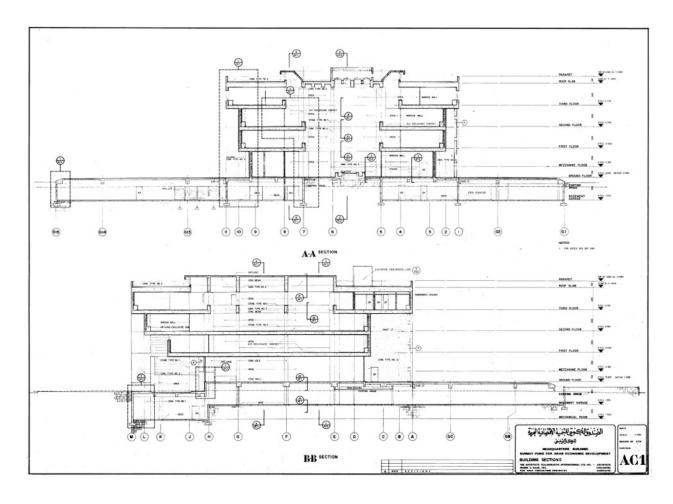
The construction of the Kuwait Fund's own headquarters made these triangular relationships explicit, involving a large U.S. architecture firm, a technologically sophisticated local consultant, and a client empowered to provide both an expressive and a functional symbol of the new role of oil revenue in reshaping the modern Arab states.²⁸ The building consisted of square rings of offices suspended around an enclosed central courtyard, held by an outer ring of piers under an

²⁵ Putman, "The Arab World, Inc.": 523.

²⁶ "Some Aspects of the Oil Controversy: An Arab Interpretation," lecture given by Al Hamad at the Industrial Development Bank of Japan in Tokyo, May 8-9, 1975. The lecture was published as *Some Aspects of the Oil Controversy: An Arab Interpretation* (The Kuwait Fund for Arab Economic Development, May 1975).

²⁷ Stephens, The Arabs' New Frontier: 65.

²⁸ In 1985 Al Hamad moved on to become director of Arab Fund for Social and Economic Development, an inter-governmental aid body created in 1974 as an expansion of the Kuwait Fund's country-specific purview to sponsor cooperative projects of multinational scope. There he extended his role as a sophisticated architectural patron with the creation of the exceptionally lavish Arab Organizations Headquarters Building, inaugurated in 1994 with TAC partner Louis McMillen as architectural consultant. In addition to headquarters of the Arab Fund, the building Inter-Arab Investment Guarantee Corporation (created with the help of the Kuwait Fund in 1974 to guarantee loans to Arab corporations against non-commercial risks), the Arab Maritime Petroleum Transport Company, and the global headquarters of OAPEC, the multinational agency that organized the global oil embargo in response to the Middle East war in October 1973.



overhanging roof. This parti had appeared in earlier international civic buildings by TAC, first at the U.S. Embassy in Athens, Greece (1956) and later in their Library building for the University of Tunis School of Law (1962), developed for the United States Agency for International Development (USAID). What was new at the Kuwait Fund was the ziggurat-like stepping of the office floors and the simplified, monolithic character of its massing, with deep piers of sandblasted concrete merging into a solid upper floor punctuated by an irregular pattern of vertical slit-windows. Stephen Gardiner, the author of perhaps the sole booklength survey of Kuwait's modern architecture in these years, praised the stepping back of these platforms "to reveal the entire contents of the building—its space, contents, structure, materials." Contrasting the building's openness with the introversion of Jacobsen's Bank, which he likened to "the closed, heavily guarded world of finance," he related the Kuwait Fund building in turn to the international mission of its client, as a headquarters dedicated to "cultural exchange, education, discussion, ideas." For Gardiner, its meticulous sand-blasted

Kuwait Fund for Arab Economic Development, sections. Courtesy PACE Archives.

²⁹ Gardiner, *Kuwait, The Making of a City*: 137. Robert Stephens, a British visitor studying the Kuwait Fund's institutional structure a few years after its opening, noted that while some of its employees had apparently held "misgivings for fear that it might lose something of the compact intimate atmosphere" of its previous offices on the outskirts of the city, the new headquarters ensured that "through imaginative architectural design and the determination of the staff, much of this atmosphere has been preserved in the new building while gaining in space, comfort and modern equipment." Stephens, *The Arabs' New Frontier*: 57.





Kuwait Fund for Arab Economic Development. Photographs: Nick Merrick © Hedrich Blessing. Courtesy PACE Archives.

concrete and stone reflected a sumptuous headquarters in which "the outstanding excellence of the detail depends largely on the clear expression of materials—the simplicity with which weighty components like beams and columns are put together, and the candour with which the granite aggregate of the concrete is displayed."³⁰ Many of these details became signature elements of TAC and PACE's projects in Kuwait and throughout the Gulf, particularly its patterning of recessed slit-windows topped with circular arches, set within sheer concrete surfaces.

Tower and souk

To the extent that specific architectural types can be identified with Kuwaiti modernization after the 1970s, two stand out as a particular legacy of the U.S. firms that participated in the construction of the city center. One was the office tower, emblematic of both the proliferating array of new financial institutions that dominated Kuwait's urban landscape and the cargo-cult of technological culture offered by corporate U.S. firms.³¹ The Kuwait Fund was among the first of these, adding a concrete office tower by TAC adjacent to its main headquarters, completed after 1981, that suggested the firm's interest in Araldo Cossutta and

³⁰ Gardiner, Kuwait, The Making of a City: 137-138.

³¹ On the concept of architectural "cargo-cult" and the emblematic role of SOM office towers in signifying "nearness to the fountain of technological culture," see Peter Smithson, "The fine and the folk: An essay on McKim, Mead and White and the American tradition," *Architectural Design* (August 1965): 394.



TAC with PACE, tower addition to Kuwait Fund for Arab Economic Development (1974–1981), construction photo. Courtesy PACE Archives.

I.M. Pei & Partners's administrative tower for the Christian Science Center in Boston, Massachusetts (1964–1973).³²

Three other new financial entities—the Bank of Kuwait and the Middle East, the Industrial Bank of Kuwait, and the Kuwait Real Estate Bank—came together to develop the Joint Banking Centre, a complex of three prismatic towers designed by SOM with PACE (1976–1982). Among the U.S. firms that became major players in the Gulf, SOM's presence in earnest began relatively late with the design of the Hajj Terminal in Jeddah, Saudi Arabia (1975–1982), a project that promptly led to prominent commissions for banking towers in Saudi Arabia, Kuwait, and Bahrain.³³ In these towers, attention to the harsh desert climate and an interest in uninterrupted mass led the firm to develop an aesthetic of what might be described as "Gulf monoliths," simple geometrical solids whose power derives from an alternation of sheer blank surfaces in stone or concrete with overscaled, often deeply recessed openings. This series reached its peak in the hermetic

³² On the Christian Science Center, see Mark Pasnik, Michael Kubo, and Chris Grimley, ed., *Heroic: Concrete Architecture and the New Boston* (New York: Monacelli Press, 2015). The master plan for the Christian Science Center included TAC's Church Park Apartments (1967–1973), directly across from Cossutta and Pei's complex.

³³ Among the U.S. firms with the heaviest presence in the Middle East by the 1970s, the earliest arrivals were TAC (the University of Baghdad, begun 1957), Minoru Yamasaki & Associates (the Civic Air Terminal in Dhahran, begun 1958), Brown Daltas (the Palace of Princess Fatemah in Tehran, begun around 1962), and CRS (the University of Petroleum and Minerals in Dhahran, begun 1964). Later arrivals included Leo A Daly (the Saudi Arabian National Guard Headquarters in Riyadh, begun 1973) and HOK (the King Saud University in Riyadh, begun 1975 in a consortium with CRS and three other foreign firms). SOM's first commission in the Gulf may have been an office building for ARAMCO in Dhahran (1962), though little about the project is known. A timeline of these and other projects by U.S. firms in the Middle East is given in Eva Franch i Gilabert, Michael Kubo, Ana Miljacki, and Ashley Schafer, ed., Office US Atlas (Zurich: Lars Müller, 2015): 750–753.





National Commercial Bank (1977–1983) in Jeddah, Saudi Arabia, a windowless triangular volume with offices facing onto interior courts revealed on the exterior by three immense openings on its otherwise blank facades.³⁴

The Joint Banking Centre was won by invited competition in 1976 over entries by TAC, Philip Johnson, and Kenzo Tange, though the scheme was subsequently redesigned by SOM. Its three banks are articulated as an offset composition of triangulated slabs, each occupying roughly one half of a square in plan, with the other half occupied by skylit banking halls at the base of each tower. The two short sides of each tower exposed to direct sunlight are windowless, with office windows subsumed into the long face of each tower, bracketed by monolithic stair cores. The result was what Parkyn regarded as a "striking abstract composition of solids in the sunshine, supported by immaculate detailing. No attempt at 'Arabic' forms or a false vernacular; a precise, telling statement to which nothing can be added or taken away."35 Outwardly expressive of the unity of Kuwait's banking industry, the external uniformity of the three towers gives way to customized interiors particular to each bank, chosen among a remarkable twelve alternative schemes developed by SOM for the three banking halls (six options were developed for the executive floors). The resulting complex was "considered the first 'world class' series of office towers in the third generation of Kuwait's post-World War II building programs," not least for an interior "palette of materials of enormous richness which this project demonstrates in such superbly sumptuous style."36 This sense of luxury was amplified to an extreme at the Al-Ahli Bank (1981–1987), where stone-clad semi-circular cores flank spanning of-

Left: SOM with PACE, Joint Banking Centre, Kuwait City (1976– 1982). Courtesy PACE Archives.

Right: Joint Banking Centre, south facades. Photograph: Michael Kubo, January 2014.

³⁴ Aybars Asci, the senior designer for SOM's Al Hamra Firdous Tower in Kuwait (2011), has described the current firm's awareness of this Gulf aesthetic of monolithic forms and its explicit interest in reviving this lineage in their design for the Al Hamra tower. See his recent talk at the *Export Agendas* symposium at Northeastern University, Boston, February 25, 2015.

³⁵ Parkyn, "Kuwait Revisited": 40.

³⁶ Maeve Slavin, "Blue Chip Banking," *Interiors* (November 1984): 130, 141.

fice floors whose decor befits the relatively more ostentatious character of a privately held, rather than state-affiliated, bank.

The other building type that marked Kuwait's development in the 1970s was less iconic, yet far more consequential in its impact on the structure of the city center. These were the modern "souks," multistory structures built as infrastructural anchors for the large urban mega-blocks designated as urban "Areas," each one divided into smaller parcels for development. Referred to as souks on account of their enclosed shopping areas, these were regarded as evolutions of the enclosed linear souks planned under Saba George Shiber in the 1960s. In reality these were commercial parking garages, new hybrids of lower-level commercial spaces, multistory parking garages, and upper-level offices and/or housing. As they developed in the 1970s, these new amalgams reflected the particular realestate economics that resulted from the rapid demolition of Kuwait's city center in the 1950s and its interrelated products: artificially inflated land values, large empty spaces overrun with cars, and the urgent need to alleviate traffic congestion.

The Land Acquisition Policy of 1951 had provided the key mechanism by which the state was able to rapidly clear nearly the entirety of the old town center of its existing fabric of courtyard houses and narrow streets to make way for an ambitious modernization program of new roads and public buildings. Under this scheme, land was purchased from property-owning families within the old town walls (itself demolished to form the green belt that defined the new city center) at deliberately inflated rates, reputedly up to ten times above market value, as an expedient way both to distribute oil revenue and to bring development areas rapidly under state control. These families were then given corresponding plots by lottery and interest-free loans (originally 70,000 Kuwaiti dinars for the first to move after 1952) to build homes outside of the green belt, generally as singlefamily villas rather than traditional urban courtyard houses.³⁷ The consequence of this policy was that land values in the city center remained permanently raised to such artificial levels that that many parcels remained undeveloped for decades, as "land speculation became a much more lucrative venture than construction for the private sector."38 Combined with the extreme congestion that followed the opening of car traffic through the old center (among the main drivers of the Minoprio, Spencely & Macfarlane master plan), the result was an urban landscape of multilane roads and half-empty mega-blocks, overrun with parked cars.

Faced with the urgency of combating these choking conditions of traffic congestion, the state sought to incentivize private developers to build public infrastructure on land that would otherwise remain empty for speculation. The solution was a decision to sponsor the construction of forty commercial parking

³⁷ Al-Ragam, "The Destruction of Modernist Heritage: The Myth of Al-Sawaber": 245.

³⁸ Farah Al-Nakib, "Kuwait's Modern Spectacle": 13.



garages for 1000 cars each within the green belt, a decision Gardiner criticized as "hardly a recommendation for planners of experience." Such structures had already been predicted in the studies for the city center submitted by BBPR to the Municipality in 1969, which called for a series of sixty-meter "landmarks" that would provide observation points and recreation areas, "supplied by large autosilos" below. The mechanism for inducing private developers to build parking (on which little profit could be made) was a "build-operate-transfer" (BOT) arrangement in which sites were bid to developers to build commercial structures on twenty-five year leases before transferring their operation to the government, with twenty-five percent of their space allotted to profit-generating uses, i.e., rental offices and ground-floor souks. So ubiquitous were the garages built over the next decade that for Western visitors like Parkyn, by the early 1980s they had "come to represent, in a surprisingly short space of time, almost a 'traditional' Kuwaiti building form—small shopping units for rental grouped around an internal public concourse, topped by parking levels and office floors."

Foreign firms played a crucial role in realizing this new infrastructural type. The Kuwait Investment Company (KIC), one of the many new financial institutions created in the wake of the oil boom, commissioned TAC to design three of

Cover of drawing set for TAC with PACE, Souk Al-Manakh, Kuwait City (1973–1979). Courtesy Municipality of Kuwait.

³⁹ Gardiner, *Kuwait, The Making of a City*: 42. The locations of these garages as built are recorded in a map by the State of Kuwait Ministry of Public Works, Roads Administration, Kuwait City, ca. 1980s. Courtesy MIT Dome.

⁴⁰ Studio Architetti BBPR, The Future Development of the Old City of Kuwait, report submitted to Ministry of Planning, Kuwait, 1969: 4.3.

⁴¹ Parkyn, "Kuwait Revisited": 40.

—between 1973 and 1979. Local consultants SSH designed two others with SOM, Souk Al-Kuwait and Souk Al-Kabeer (1973–1976). Others were completed in conjunction with British firms (Souk Al-Muttaheda and Souk Al-Masseel, Jack Bonnington Partnership with KEO, 1973–1979) or by expatriate Polish architects (Souk Dawliyah, Ryszard Daczkowski and Edward Lach for Gulf Engineering Office, completed 1978). These projects occasionally laid bare the intersection of differing demands and technical abilities between local and foreign firms, as when the concrete frame of the Souk Al-Kuwait collapsed while under construction (killing laborers who slept on the building's open-air floor slabs at night), a failure rumored to have been caused by the contractor's overzealous desire to increase the speed of construction.⁴²

The BBPR study had envisioned an extensive "connecting framework" of elevated passages that would connect these and other buildings via "moving stairways, conveyor belts, and air-conditioned spaces" throughout the old city center between the Sief Palace and Safat Square. ⁴³ By the early 1970s this scheme had been translated into a proposed monorail ringing the city center along roughly the same route, which would have connected Souk Al-Manakh, Souk Al-Kuwait, Souk Al-Safat, and Souk Al-Wataniya, among other buildings. ⁴⁴ In fact, no such elevated connections were ever built. The result was a patchwork of urban interiors surrounded by empty spaces, tenuously connected to the existing network of souks that had been extended under Shiber.

Visitors seemed ambivalent about the impact of these new structures on the city. Parkyn, for example, could claim that via "the new multifunction souk superblocks... it is now possible to traverse considerable sections of the downtown area *without* stepping onto the sunbaked sand or fragmentary pavements remaining from the First, or was it the Second, Great Surge of urban renewal in the '60s and '70s," while at the same time warning that "their proliferation and presumed success raises interesting issues not resolved in a city which still thinks in terms of single site development... At present they stand in isolation, having no 'back' or 'front,' often no planned linkage to the next one." Seen as suffering from the same lack of urban cohesion that marked the city's more iconic "monuments-to-be," Parkyn wrote that as of 1983, most of the souks were still free-standing "among parked cars, the ruins of what remains of Kuwait's stock of single-storey courtyard family houses and the dusty walk-ups from the 1950s building

⁴² Interview with Sabah Al-Rayyes, May 29, 2013.

⁴³ Studio Architetti BBPR, The Future Development of the Old City of Kuwait: 4.1, 4.2.

⁴⁴ The southwest portion of the Souk Al-Manakh was originally designed to accommodate a future monorail stop on the first parking level above the ground floor and mezzanine, a feature indicated in the drawing set as of September 1974. See drawing sheet A6, "Plan—Level 5 (Showing Future Monorail) 100 Cars," dated September 6, 1974. Courtesy PACE Archives.

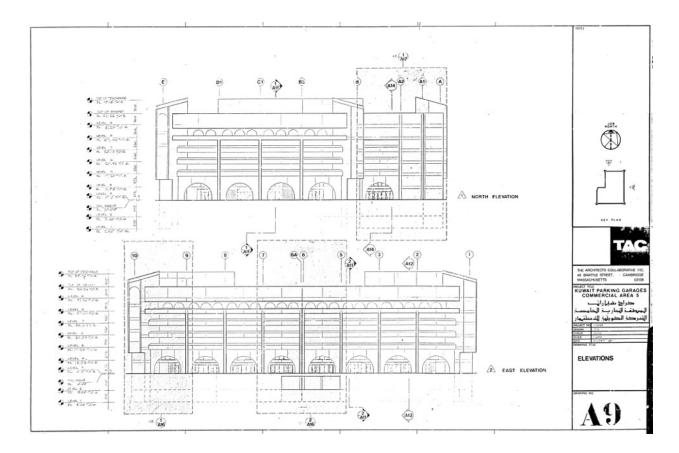
⁴⁵ Parkyn, "Kuwait Revisited": 40.

TAC with PACE, Souk Al-Wataniya, Kuwait City (1973–1979). Photograph: Michael Kubo, January 2014.

boom.... they float like giant and beautifully constructed space stations in a sea of sand, although this sand is apparently some of the most expensive real estate in the world, on paper at least."46 The most extreme example of the type was the Souk Al-Wataniya (1974–1979), in which a mat of courtyard housing on the top floor provided a surreal afterimage of the traditional structure of the city center prior to 1952, now floating above the infrastructural blocks which had replaced it.

Yet it was another souk designed by TAC, the Souk Al-Manakh, that unwittingly became the decisive site—if not the symbol—of the speculative building economy and its hazards at the end of the boom in crude oil prices. Less exceptional than the Souk Al-Wataniya in its mix of functions, the building was organized with five levels of parking and top-floor offices above a commercial ground

⁴⁶ Ibid: 42. Among these isolated "monuments-to-be," Parkyn identified Utzon's National Parliament (1972–1982), Mohamed Makiya's Kuwait State Mosque (1977–1981), and John S. Bonnington Partnership and KEO's Kuwait Stock Exchange (1978–1986).



floor and mezzanine and two levels of parking below ground. A seemingly innocuous request for TAC to redesign the first underground parking level to accommodate offices for the Kuwait Stock Exchange in 1978 marked the moment when the Souk Al-Manakh became the place in which the real risks of the Kuwaiti finance economy would ultimately manifest themselves in force.⁴⁷ Within a year the Souk had become the site of a vast unregulated market for speculating on foreign companies that were prohibited from being traded on the official stock exchange, open to Kuwaiti citizens only and restricted to government bonds and securities on entities registered in Kuwait. The vast majority of these "companies" existed on paper only, fictional entities registered abroad by Kuwaitis in other Gulf states (particularly the Emirates) solely for the purpose of trading on the Souk Al-Manakh exchange. By early 1982 storefront offices on the ground floor of the souk were selling to traders for up to \$50 million, and the government worried about the potential collapse of a black market that operated almost exclusively on post-dated checks and held more total investment than Kuwait's annual revenue from oil.⁴⁸ The stock bubble finally burst in August of that year,

Souk Al-Manakh, north and east elevations. Courtesy PACE Archives.

⁴⁷ Invoice from Moncef Eladhari (TAC) to Hamad Al Bahar (Kuwait Investment Company) for "conversion of level two parking floor in the Area 5 Commercial and Parking Building to office use for the Kuwait Stock Exchange and Associated Functions," December 18, 1978. Courtesy PACE Archives.

⁴⁸ "Kuwait's Bustling Stock Souk," *The New York Times*, April 5, 1982: D1.

by which time it had ballooned to absorb \$94 billion in excess speculation.⁴⁹

The sudden collapse of the Souk Al-Manakh exchange was among the most dramatic of the events that spelled the end of the boom in construction by U.S. architects working in the Gulf after 1983. The crash caused a fifty percent decline in construction in Kuwait within the year, an immediate and heavy blow to foreign firms that had overcommitted to work in the country. The ripple effects of the Souk Al Manakh combined with the economic impacts of the Iranian Revolution, the beginning of OPEC price quotas on oil production in 1982, and the Iran-Iraq War to reveal the underlying volatility of financial and architectural speculation that dictated the rise and fall of U.S. firms in the Gulf. Many of the same offices that had grown in size through the 1970s primarily due to work in the region now suffered the negative effects of this involvement following the decline in crude oil prices.

Among their more general consequences, these events were among the specific factors that precipitated the end for TAC, slowly but inevitably, after 1983. Office memos registered the slow process by which the firm laid off waves of staff and tried unsuccessfully to shift its practice back to domestic work in the U.S, unable to recoup its assets and suffering from the end of the construction boom in Kuwait and other Gulf countries. Within a year TAC had reduced from 390 employees to 220 and kept declining, eventually down to 50 and then to a handful by the 1990s. A final blow for the firm came with the Iraqi invasion of Kuwait in August 1990 and the ensuing Persian Gulf War, when some \$2 million in payment for TAC's ongoing work in Iraqi were frozen. The firm ultimately filed for bankruptcy in April 1995, just before the next wave of petroleum-fueled development by U.S. architects in the Gulf, now in the United Arab Emirates, Qatar, Bahrain, and other inheritors of the speculative economy of oil.

⁴⁹ Ihsan A. Hijazi, "Kuwait in Bailout Effort After Market Collapses," *The New York Times*, December 20, 1982: 29, 32; Paul Lewis, "Kuwait's Market Bailout," *The New York Times*, February 18, 1983: D1, D7.

⁵⁰ See "Points Discussed With Bank of Boston," TAC office memorandum, July 18, 1983; letter from John C. Harkness to all members of TAC, September 28, 1983; "Future Commitments in Iraq," TAC office memorandum from John Hays to board of directors, November 28, 1983. Courtesy MIT Museum.