

ŁUKASZ STANEK

University of Manchester

Mobilities of Architecture in the Global Cold War: From Socialist Poland to Kuwait and Back

Abstract

This article discusses the contribution of professionals from socialist countries to architecture and urban planning in Kuwait in the final two decades of the Cold War. In so doing, it historicizes the accelerating circulation of labour, building materials, discourses, images, and affects facilitated by world-wide, regional and local networks. By focusing on a group of Polish architects, this article shows how their work in Kuwait in the 1970s and 1980s responded to the disenchantment with architecture and urbanization processes of the preceding two decades, felt as much in the Gulf as in socialist Poland. In Kuwait, this disenchantment was expressed by a turn towards images, ways of use, and patterns of movement referring to 'traditional' urbanism, reinforced by Western debates in postmodernism and often at odds with the social realities of Kuwaiti urbanization. Rather than considering this shift as an architectural 'mediation' between (global) technology and (local) culture, this article shows how it was facilitated by re-contextualized expert systems, such as construction technologies or Computer Aided Design software (CAD), and also by the specific portable 'profile' of experts from socialist countries. By showing the multilateral knowledge flows of the period between Eastern Europe and the Gulf, this article challenges diffusionist notions of architecture's globalization as 'Westernization' and reconceptualizes the genealogy of architectural practices as these became world-wide.

Keywords

Gulf architecture
socialist Poland
architectural
globalization
postmodernism
knowledge transfer
architectural labour

A visitor to Kuwait City in 1983 described it as a 'showplace for the world's architectural prima donnas'.¹ The landscape of the city was indeed shaped by architects of international renown, with Arne Jacobsen's National Bank of Kuwait (1976), the Airport by Kenzo Tange (1979), the National Assembly

Building by Jørn Utzon (1984), followed by structures designed by Rifat Chadirji, Arthur Erickson, Hassan Fathy, Mohamed Makiya, Reima and Raili Pietilä, The Architects Collaborative (TAC) and Skidmore, Owings and Merrill (SOM).² Yet behind what appears to be an exemplification of familiar modalities of architectural globalization, including the emerging star system, boutique architects and large corporate design offices, complemented by a small group of esteemed specialists in 'Arab' architecture, the production of space in Kuwait in the late 1970s and 1980s was defined by yet another actor: architects from socialist countries including Bulgaria, Czechoslovakia, Hungary, Poland and Yugoslavia.³ This article will discuss their work with particular focus on a group of Polish architects, mostly from Wrocław, who left for Kuwait by the late 1970s after a decade of successful professional work in socialist Poland. They were employed by Kuwaiti design offices and, together with other expatriate professionals, they contributed to a change in the townscape of the city-state by designing and supervising construction of the first generation of high rises, and of housing neighbourhoods, commercial buildings and public-use buildings. Architects from socialist countries working in Kuwait and elsewhere hardly fit the familiar image of architectural globalization that juxtaposes an architectural elite shaping urban icons to the cultural practices of migrant workers associated with 'globalization from below'; and yet they were crucial, if rarely accounted for, agents of globalization of architectural practice.⁴

The Gulf has become a favourite example of such processes and, in *The Global Architect*, Donald McNeill describes the 'rapid intensification' of architects' travel, when 'territorial boundaries that had kept most architects tied to a small set of national markets no longer make much sense for design firms capable of operating in the dynamic economies of the Gulf and China'.⁵ McNeill sees these processes as a consequence, or a facet, of the globalization of capitalism, which accelerated after 1989 when 'the geopolitical fixities of the Cold War softened up to create new markets in East and Central Europe'.⁶

By contrast, this article shows that, far from being a 'new market' opened to the globalization of architectural practice after the fall of the Soviet Bloc, socialist countries played an important role in the global mobility of architectural services in the 1970s and 1980s. Consequently, this mobility is not to be understood as 'Americanization' or 'Westernization'; neither can it be explained with the unilateral scheme of 'diffusion' of architectural and planning knowledge from metropolitan centres.⁷ It appears, rather, as multidirectional, both in the sense of competition and collaboration among professionals coming to Kuwait from around the world, and in the sense that the Wrocław architects, while in Kuwait, learned at least as much as they brought with them. This knowledge proved an asset for those who returned to Wrocław after 1989 and the end of socialism in Poland.

The work of architects from socialist countries in the Gulf, more generally, was conditioned upon and contributed to the emergence of a global market of architectural resources which, besides labour, included building materials and technologies, discourses and images; these were most often combined on the ground with resources from local and regional networks. But the insistence on the global, rather than 'transnational', character of the exchanges discussed in this article stems also from its larger context. The present article is part of a research project focused on what I have identified elsewhere as architecture's 'mondialisation',⁸ which is to say the emergence of architecture as a worldwide techno-scientific phenomenon after World War II from

within competing visions of global cooperation and solidarity. Socialist internationalism and the Non-Aligned Movement were among such visions which programmatically took the world as a dimension of practice and imagination in the context of the Global Cold War.⁹ They became crucial frameworks for the recruitment of architects and planners from Eastern Europe since the late 1950s, hired for contracts abroad.¹⁰

Within this larger research project, the focus in what follows on a spectrum of actors and practices in Kuwait in the late 1970s and 1980s allows historicizing of the mobilities of architectural resources in the economic, cultural and techno-political conditions of the final two decades of the Cold War. The work of the Wrocław architects will be shown as dependent on the institutional framework created by socialist Poland at a time when the authorities in Warsaw were putting increased stress on the economic benefits of labour export and on securing employment for large groups of intellectual workers of big state companies, and as waning ideas of 'socialist internationalism' were at best being paid lip service. This shift was paralleled by a change in architectural terms. The previous generation of Polish architects can be seen as agents of the mondialisation of modernism, orientating their work abroad in large part according to the principles of CIAM (Congrès internationaux d'architecture moderne), however adapted and modified. The Wrocław architects in Kuwait, though, responded to a pervasive disenchantment with these principles that was felt as much in the Gulf as in socialist Eastern Europe.

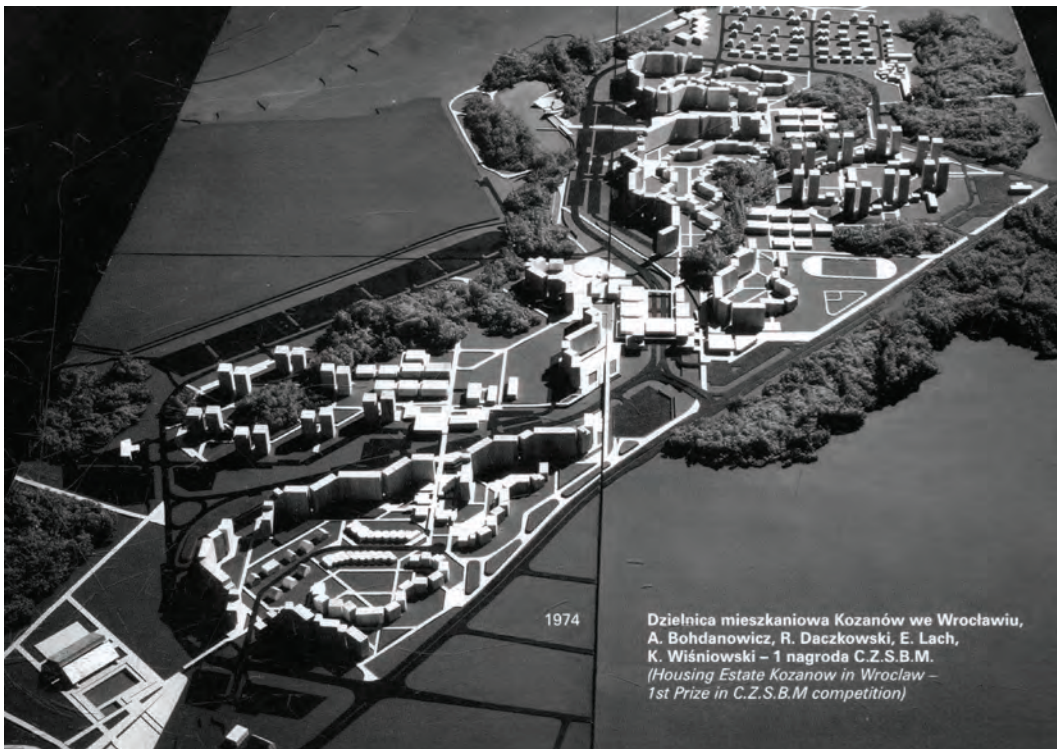
The response to such disenchantment had been articulated in the work of the Wrocław architects before they travelled abroad, and this will be accounted for in the first part of this article, together with a review of the institutional conditions of their employment in Kuwait. The second part will show how their work in Poland reverberated with the critique of post-oil urbanization in the Gulf and with the shift in international architectural culture associated with postmodernism. Their designs in Kuwait responded to this new climate of opinion, characterized by a turn to what were perceived as 'local', 'traditional' or 'familiar' forms and ways of use, and often at odds with the social reality of the rapidly urbanizing Gulf. These tensions will be discussed in the third part of this article by focusing on the ways the Wrocław architects re-imagined the relationship between the pedestrian and the car in Kuwait. Rather than following authors who discuss architecture as a 'mediation' between (global) technology and (local) culture,¹¹ however, this part will show that techno-scientific expert systems (technologies of prefabrication, managerial and logistical schemes, Computer Aided Design software, or CAD) facilitated an engagement with the specific 'context' of the Gulf. The article's final section will show how these expert systems, characterized by Science and Technology Studies (STS) scholars in terms of their capacity for de-territorialization and re-territorialization,¹² found a pendant in the inter-subjective 'profile' of architects from socialist countries working abroad.

From Socialist Poland to Kuwait

In simpler terms, this is a story about a group of friends. Andrzej Bohdanowicz, Ryszard Daczkowski, Wojciech Jarzabek, Edward Lach, Krzysztof Wiśnowski and many other protagonists of this study graduated from the architectural school of Wrocław Polytechnic in the late 1960s. Some of them were invited to join the Chair of History of Urbanism at the Institute of History of Architecture, Art and Technology,¹³ where their research addressed questions

of regional architecture. Composing various teams, they worked together on numerous competition projects, some of which they won. One of these was the competition for a section of the City Centre Housing Estate in Łódź (1969), which became a flagship project of the regime of Edward Gierek, first secretary of the Polish communist party from 1970 to 1980. Among other projects reflecting Gierek's modernization effort were competitions for city centres and new housing districts, in particular the Kozanów neighbourhood in Wrocław, a project that won first prize in 1974, designed by Bohdanowicz, Daczkowski, Lach and Wiśniowski.¹⁴

In spite of this success, these architects became disillusioned with the conditions of work in Poland, which was characterized by the submission of architecture to the apparatus of the Party and the state-controlled building industry, the domination of planning over architecture, and the increasingly apparent economic and political crisis of the 1970s. Their competition entry for Kozanów is a case in point. Breaking with the 'real existing modernism'¹⁵ of undifferentiated, homogenous apartment blocks being constructed in Poland since the early 1960s, Kozanów was designed as a 'small city within a big city' [Figure 1]. Their design was a topographically sensitive composition of diverse housing typologies, linked by a cluster of low pavilions with social facilities. In spite of the fact that the project won first prize in a national competition,



Krzysztof Wiśniowski.

Figure 1: A. Bohdanowicz, R. Daczkowski, E. Lach, K. Wiśniowski, Kozanów Estate, competition model, 1974. K. Wiśniowski archive, Kuwait City.

it was rejected by the Ministry of Construction, which did not accept the flexible prefabrication system proposed by the architects. As one of them recalled, 'I had to go back to designing the very same apartment blocks that, we were told during our studies, don't work'.¹⁶

In this context, the invitation to Kuwait, mediated by a Palestinian alumnus of Wrocław Polytechnic, was a welcomed change. The first group to come to Kuwait, in 1976, included Lach and Daczkowski, who were employed in the Gulf Engineering Office (GEO), and later co-opted Jan Matkowski and Mieszko Niedźwiecki. Wiśnowski and Bohdanowicz were employed in 1977 by the office of Shiber Consult, headed by Victor Shiber, brother of the renowned Palestinian architect and urban planner Saba George Shiber who worked in Kuwait from 1960 until his death in 1968.¹⁷ In 1978, Jan Urbanowicz, Jacek Chryniowicz and Jarzabek replaced Wiśnowski and Bohdanowicz in Shiber's office, where they cooperated with the Industrial & Engineering Consulting Office (INCO). INCO's director, Mohammad Al-Sanan, recalls the group's successful competition entries for Site C of the Sabah Al-Salem district (designed in 1977, constructed in 1982) and for the Kuwaiti National Theatre (designed in 1978, unrealized).¹⁸

The competitions that were won allowed them to legalize their employment in the Gulf. They signed contracts with Polservice, the central agency of foreign trade in socialist Poland, which mediated contracts of labour export. Over the course of the 1970s, the Polish authorities increasingly foregrounded their mercantile interest in export of intellectual labour which generated the foreign currency needed to finance the Gierek regime's modernization efforts and, later, to pay off its debts.¹⁹ Such tripartite contracts between foreign commissioners, professionals and mediating institutions were typical for architects from socialist countries employed abroad, including Czechoslovak and Yugoslav architects working in Kuwait.²⁰ The Wrocław architects coming to Kuwait recommended others, including their wives and partners: Danuta Bohdanowicz, Zdzisława Daczkowska, Elżbieta Niedźwiecka, Rudolf and Ewa Staniek, Anna Wiśniowska and Marian Żabiński. Architects from other Polish cities were arriving as well, including Janusz Krawecki, who was invited by a former student at the School of Architecture of Kraków University of Technology, and Włodzimierz Gleń of the Kraków state office Miastoprojekt, whose extensive experience in Baghdad proved very useful in the Gulf.²¹ Krawecki and Gleń contributed to the first high-rise buildings in Kuwait.²² These architects found employment in various Kuwaiti offices: INCO, SSH, the SOOR Engineering Bureau, the Arabi Engineer Office, the Kuwait Engineering Office (later the Kuwait Engineering Group, or KEG) and GEO (later Gulf Consult).²³ The professional links with Poland were rarely severed and Jarzabek, for example, sent plans for the church of St Mary Queen of Peace in Wrocław-Popowice (1994) from Kuwait, the details of which resemble those of the Al-Othman Centre he co-designed in Hawally (with Lach for KEG, 1995). After the declaration of martial law in Poland (1981) most of them decided not to return and the monthly fee imposed on them by Polservice (up to 50 per cent of their salaries, as Bohdanowicz recalls, paid in cash to the Polservice representative in Kuwait) was one more incentive to break with the state socialist system.²⁴

Labour conditions for the Wrocław architects in Kuwait on Polservice contracts were different from those of Western 'consultants' in the Gulf, such as Constantinos Doxiadis or Michel Ecochard, and from employees of large state-socialist companies working in the region, such as Energoprojekt of Yugoslavia or Bulgaria's Technoexportstroy. The daily routine of the Polish architects was

characterized by their intense engagements with clients and contractors, and direct supervision of the building sites, where many details were drawn when needed.²⁵ They cooperated with Kuwaiti professionals, mainly educated in the United Kingdom and the United States, with professionals from the region (Egyptian, Iraqi, Lebanese, Palestinian), as well as with architects and engineers from India and Pakistan. Exchanges were intense with British professionals in Kuwait, specialists in the architecture of schools, hospitals and housing since the period of the protectorate, as were exchanges with offices from the United States.²⁶ The latter were based on financial links between the United States and Kuwait and often resulted from joint-venture agreements between Kuwaiti and foreign firms; such agreements were increasingly required for larger projects by the authorities and private clients alike.²⁷

Architects from other socialist countries contributed to this cosmopolitan character of Kuwait. The designer of the Sava Centar in Belgrade, Stojan Maksimović, was invited by the Kuwaiti government to participate in the competition for the Conference Center at Bayan Park, which he won in 1980 (the realized project, however, has little to do with the design which he prepared together with the Kuwaiti office Archicentre).²⁸ In cooperation with Czech architect Alexander Gjuríč, Archicentre won the international competition for the Amiri Diwan, the offices of the emir, prominently located next to the Seif Palace.²⁹ But it was the Yugoslav construction firm Energoprojekt that became the pioneer in establishing contacts with Kuwait; as early as the 1960s, Ljiljana Bakić had designed a number of private villas and public facilities.³⁰ The Hungarian office KÖZTI followed, with designs for housing neighbourhoods and mosques within the Coastal Strip Development Project, the urban design of which was delivered by Miastoprojekt-Kraków from Poland.³¹ Bulgarprojekt of Sofia designed the slaughterhouse in Kuwait and bid for other projects, including the Arab Cities Organization Building; the latter was not constructed, in contrast to several buildings in the UAE designed by Bulgarprojekt.³²

State companies from socialist countries operated in Kuwait within a highly competitive market, divided between South Korean, Indian and Pakistani contractors (receiving commissions for which cheap labour provided competitive advantage) and Japanese, European and American firms, who were increasingly joined by Kuwaiti and Saudi contractors (competing for technically challenging projects).³³ Companies from socialist countries were part of the latter segment, either individually or as subcontractors. Some of these were highly visible commissions: Yugoslavia's Union Inženjering constructed the Kuwait Towers (1977), the icon of modern Kuwait; Energoprojekt was responsible for the Ministries Complex (1981) and the military hospital (1987); and Strojexport and Armabeton of Czechoslovakia contributed to the construction of the Water Towers (1977).³⁴ The planetarium for Kuwait was supplied by the GDR's Carl Zeiss of Jena (1986), and the steel sections of the new telecommunication tower (1993) were provided by Poland's Mostostal-Zabrze, which in the 1980s counted Kuwait as one of its main clients.³⁵

In a 1983 interview, the Kuwaiti ambassador to the United States, Sheik Saud Nasir Al-Sabah, complemented Yugoslav companies and explained to a US journalist: 'You have to understand [that] Kuwait is a completely open market, no political consideration is given as far as the tender is concerned'.³⁶ This attitude followed the attempts of Kuwaiti diplomats to secure the 'neutrality' of their country within Cold War geopolitics in the Middle East: Kuwait maintained close relations with the West while accepting Soviet

military assistance and securing its economic interests as a founding member of OPEC.³⁷ On this 'open market', the relatively modest fees of architects from Eastern Europe were used as bargaining leverage by mediators such as Polservice. However, even after the Wroclaw architects decided to break with Polservice and stay in Kuwait on their own, their salaries remained lower than those of Western experts. This showed the persistence of Cold War cultural hierarchies in the Gulf, reinforced by reports in the local press about the inferior quality of technology from socialist countries and their outdated managerial models.³⁸

Beyond Post-Oil Urbanization

'Upon my first landing in Kuwait, I saw a forest of cranes and I decided to stay', recalled Lach.³⁹ However, as another observer put it, this construction boom was taking place 'among parked cars [and] the ruins of what remains of Kuwait's stock of single-storey courtyard family houses'.⁴⁰ The Kuwait that confronted the architects from Wroclaw was the result of three decades of rapid urbanization, financed by the state's oil revenues.⁴¹ The first master plan of Kuwait by the British planners Minoprio, Spencely and MacFarlane, in 1951, had envisaged a transformation of what was then a settlement of courtyard houses into a commercial and business 'city centre', surrounded by new residential suburbs linked by a system of radial and ring roads. While much of the urban fabric of Kuwait was erased, only a few urban projects were realized, and the next master plan, commissioned in 1968 from the British consultants Buchanan and Partners, took this condition as its starting point. Revised in 1977 and endorsed by the Municipal Council, this plan suggested a linear development following the coast, consisting of housing neighbourhoods with new centres, and the construction of two new towns in the south and the north.⁴² A specialist on car traffic in cities, Buchanan suggested a renewal of the city centre by assigning specific areas to commercial uses and civic and government programmes, filling the gap in the urban fabric and laying out pedestrian zones.⁴³ This plan defined the development of Kuwait from the late 1970s until the Iraqi invasion in 1990, and formed the framework for architectural practices of this period.

The architects from Wroclaw, during their work in the Gulf, were exposed to and contributed to the critical rethinking of the boom-era urban development in Kuwait. Falling oil prices, the disruptive effect of the Iran–Iraq War and the crash in 1982 of the Suq Al-Manakh, the unofficial stock exchange, contributed to a more reflexive climate of opinion. Prefigured by some forewarnings by Saba George Shiber from the mid-1960s,⁴⁴ calls abounded over the course of the next decade to preserve the little that was left of the old Kuwait.⁴⁵ The 1981 revision of the master plan declared the Behbehani compound, the American Mission, the traditional suq and part of the Sharkh frontage as conservation areas. The Al-Ghanim Dasman, the Naif Palace and all historical mosques were to be preserved.⁴⁶ The architect Ahmad Al-Ansari suggested that plazas in the Green Belt be used for the display of Kuwaiti traditions and folklore,⁴⁷ in line with the broad definition of heritage promoted by the National Museum, itself designed by Ecochard and opened in 1983. The Kuwaiti architect Ghazi Sultan supervised the first renovation of a traditional building that was pursued by the municipality: the Old Kuwait Courts (1987).⁴⁸ Fathy, the Egyptian architect of international renown, designed the Beit Al-Reihan house, praised in the Saudi architectural journal *Albanaa (Construction)* as following 'the pattern of



Edward Lach.

Figure 2: W. Jarzabek, E. Lach, *Senior Citizens Housing*, 1970s. E. Lach archive, Wroclaw.

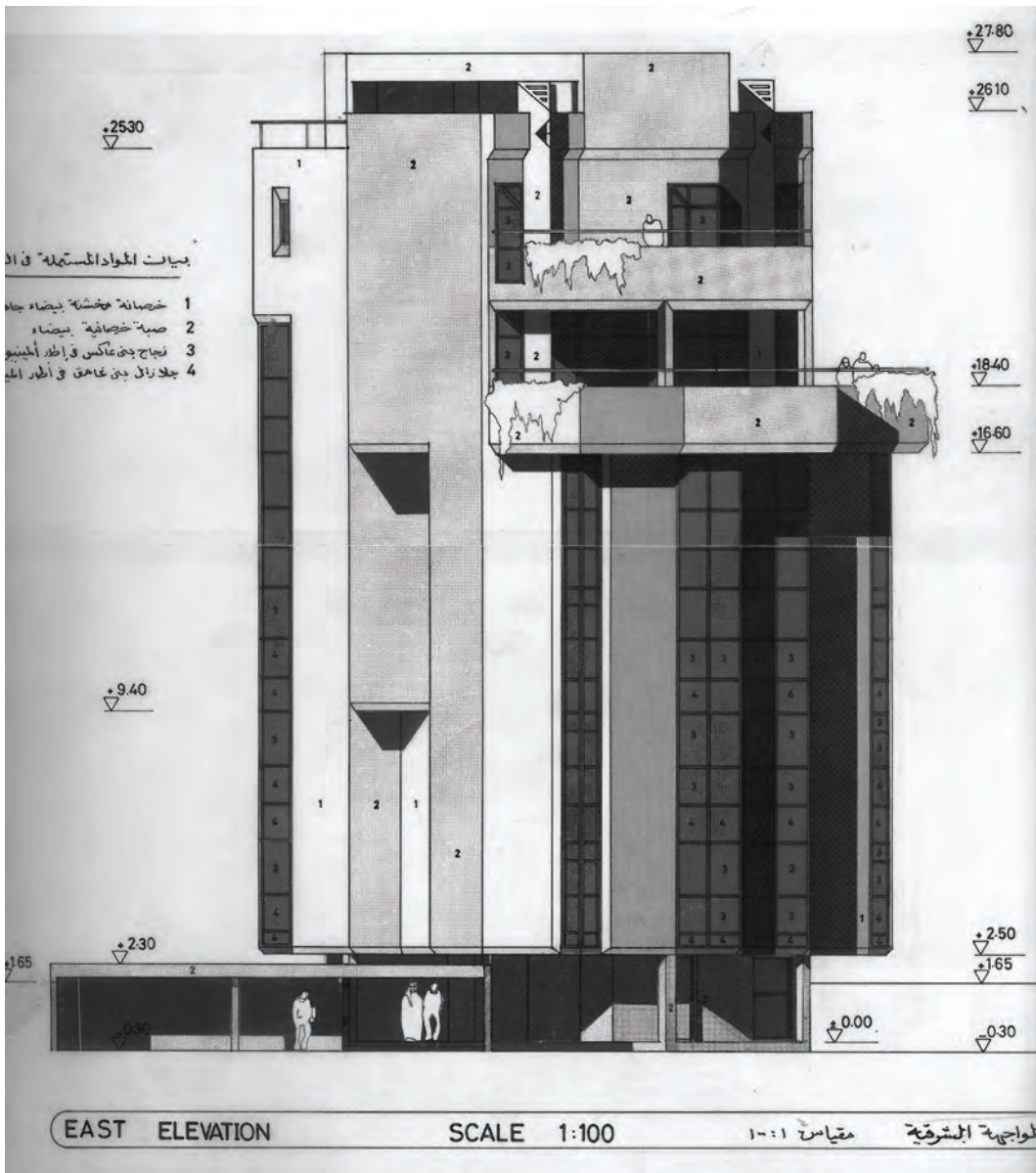
Arabian palaces which observe the Arabian Kuwaiti environment characteristics'.⁴⁹ Similarly, the project for senior housing in Sharkh by Jarzabek and Lach referenced the scale, disposition, sequence of spaces, materials and details of the disappearing courtyard houses in this area, photographs of which were included in all presentation drawings [Figure 2].⁵⁰

The unbuilt Jarzabek and Lach design fed into the general critique of post-oil urbanization in the Gulf press, both popular and professional, which debunked 'modern architecture' and lamented that the city-state was becoming 'a dumping ground for alien architectural landmarks'.⁵¹ Hence, commentators writing in *Albanaa* targeted forms that they considered to be alien to the Gulf: apartment blocks with oversized spaces between them ('similar to the theory of Le Corbusier'), private villas with large spaces around them, the car-oriented city and the gridiron plan.⁵² The critique included the analysis of the courtyard house as a flexible and multi-purpose space, opposed to the reductive understanding of the division and separation of functions imputed to the CIAM tradition.⁵³ This shift in opinion sometimes happened very quickly: if in 1978 the Al-Sawaber project by Erickson in Kuwait City was praised by the daily press as 'modernistic, breaking with the stereotyped, impersonal, rectangular blocks of bricks', already in 1980 the project was criticized as not allowing for privacy, and hence against Islamic tradition.⁵⁴

Debates about 'Islamic', 'Arab' and 'Muslim' architecture and urban design took place in a number of conferences in the Gulf countries over the course of the 1980s. During these events, the widespread demand for operative guidelines for design practices was confronted by scholars through a discussion of the constructivist character of such concepts, often based on the extrapolation of specific urban forms, which only slowly shed orientalist fantasies and Western-centred theories of culture and urbanization.⁵⁵ Published in journals in Arabic and in English, and hence accessible to expatriate architects, most of these voices differed little from the discourse of a modernism 'adapted' to local conditions, which had proliferated since World War II in colonial 'tropical' modernism and its postcolonial mutations.⁵⁶ But new themes were emerging as well. Besides the widely argued (if rarely realized) postulates of accounting for specific local conditions in terms of climate, social structures, customs, and local materials and technologies, the debates introduced architectural form as a self-sustained condition and not a 'result' of other factors. The Iraqi architect Kahtan Al-Madfai, for example, argued for a continuation of traditional forms, which he catalogued as either monumental or domestic.⁵⁷ Another example is the discussion of the *mashrabiyya* which stressed its synthetic character in the way it serves multiple functions: anchoring the building in a visual tradition, regulating climatic conditions, negotiating the relationship between public and private space, and linking the building to local economies, craftsmanship and materials. Some authors engaged in a speculative enterprise of translating the laws and values of the Shari'a into architectural and urban-planning principles, while others explicitly opposed the association between architecture that is constantly evolving, and immutable, eternal religion.⁵⁸

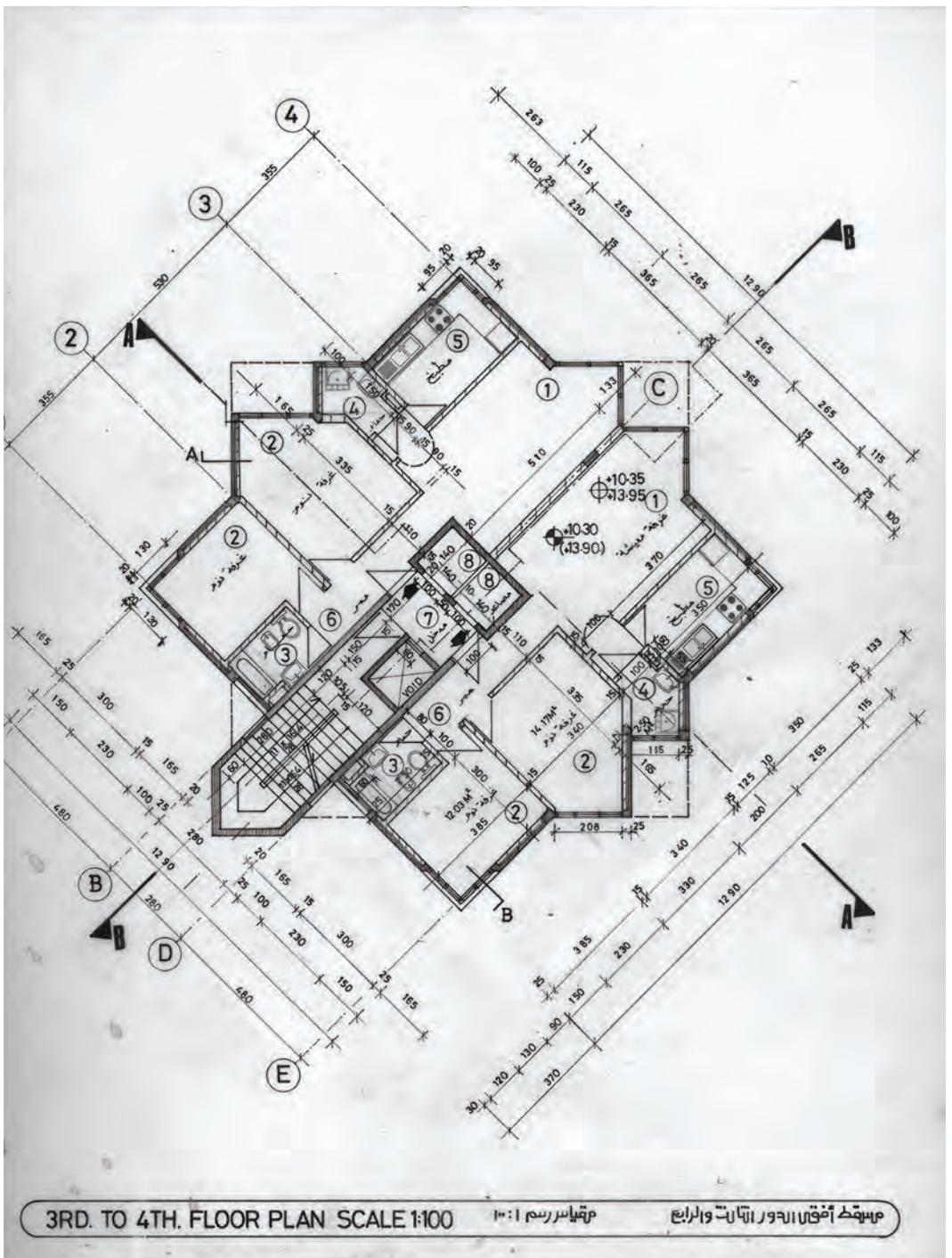
Some of these debates resonated with international discussions on post-modernism, to which architects from socialist countries who were working in Kuwait gained easy access by means of journals, exhibitions and newly constructed buildings. For example, in 1985 the journal *Middle East Construction* published Basil Al-Bayati's designs of a mosque in the form of an oversized open book and of a telecommunication tower shaped as a gigantic palm tree.⁵⁹ These designs could have been included in any of the postmodernism manifestos which Charles Jencks had been publishing for a decade, and which were reflected by authors writing in Kuwait since that time.⁶⁰ Jarzabek, by reading *The Architectural Review* in Kuwait, discovered the work of James Stirling, his ferryman to postmodern architecture, which then reverberated not only in his Kuwaiti designs, but also in those he drew in Poland upon his return in the 1990s. Professionals in the region followed the development of Baghdad closely as it was led by Chadirji under Saddam Hussein with the participation of Denise Scott Brown, Robert Venturi, Ricardo Bofill and Erickson: a 'laboratory of postmodernism' where new urban typologies were tested.⁶¹

Beyond academic and professional discussions, the dissatisfaction with post-oil urban development in Kuwait was shared by inhabitants of state-subsidized housing, interviewed for the first time in the mid-1970s by the National Housing Authority (NHA). With the aim of guaranteeing every Kuwaiti citizen an accommodation, the NHA divided housing into two categories: LIG (Low Income Group) and AIG (Average Income Group); their dimensions were often generous and, for example, in the Messila neighbourhood, LIG housing was built on lots of 300 sq. metres, and AIG housing on lots of 500 sq. metres.⁶² These housing areas were realized by the NHA, together with mosques, shopping malls and schools, for which Mieczyslaw Rychlicki and Daczkowska delivered type designs in the early 1980s (for Gulf Consult).⁶³



Andrzej Bohdanowicz.

Figure 3a: A. Bohdanowicz, Al-Mazidi Building, Fintas, elevation drawing, 1982. A. Bohdanowicz archive, Kuwait City.



Andrzej Bohdanowicz.

Figure 3b: A. Bohdanowicz, Al-Mazidi Building, Fintas, plan of the 3rd and 4th floors, 1982. A. Bohdanowicz archive, Kuwait City.

The NHA interviews conveyed the uneasiness with the typologies that had until then been applied by the housing authority, ultimately deemed foreign and unsuitable. Instead, the inhabitants expressed preference for one-storey courtyard houses that included the *diwaniyya* (semi-public/semi-private room for male visitors), accessible from both inside and outside the dwelling unit, usable roof space, and a paved courtyard with an area for plants.⁶⁴

Reference to an often-unspecified 'Islamic tradition' was becoming a standard requirement by the 1970s in governmental commissions in the Gulf, and foreign designers needed to comply.⁶⁵ The London-based office Fitzroy Robinson Partnership designed banks in Dubai, Abu Dhabi and Muscat in a generic modern idiom, for example, but its design for the Ministry of Foreign Affairs in Muscat was given a 'vernacular appearance'.⁶⁶ Similarly, the design of the Kuwait Law Courts by Basil Spence Partnership evolved in order to accommodate stylistic recommendations and the sequence of its seven façade variants shows a transformation from the abstract grid of the competition project into a display of 'familiar elements of Islamic geometry and decoration'.⁶⁷

Yet it was precisely such a 'cosmetic' application of ornamental motifs on the façade that was debunked by the most notable architects from the region.⁶⁸ Their differing design positions notwithstanding, Chadirji, Makiya, Sultan and Abdel Wahed el Wakil agreed in their search for a tectonic facade and a more 'organic' connection between the skin and the structure. Examples included Chadirji's housing project in Hawally (1968), Makiya's State Mosque in Kuwait City (1985)⁶⁹ and, less known, the integration between the plan and the façade in the Al-Mazidi building in Fintas, designed by Bohdanowicz (1982, demolished). The plan of the building was based on an eight-point star; in the words of the designer, 'an Arab geometry', the *gestalt* of which appeared only in the pronounced balcony of the penthouse, otherwise resulting in an abstract checkerboard of bright stone and tinted glass [Figure 3b].⁷⁰

Negotiating Urban Typologies

What this overview shows is a sentiment shared by many among Kuwaiti elites, professionals, academics, journalists and inhabitants, that urbanization patterns of the previous two decades needed to be left behind. The Wrocław architects projected into this sentiment their own uneasiness with post-war urban designs in Poland, as it had been expressed in projects such as Kozanów. Yet this overview also shows that the concomitant demands for a more 'contextual' design differed widely in motivations and references, and that calls for a 'local', 'traditional' or 'familiar' environment in the Gulf, more often than not were either going in incommensurable directions or left unspecified. The architects from Wrocław responded with a variety of proposals and, in what follows, these will be reviewed by focusing on urban typologies that negotiated the relationship between the pedestrian and the car in Kuwait. This focus will allow a bringing together of questions of technology, lifestyle and rhythms of everyday life, and will also demonstrate that this 'contextual' turn at times foregrounded tensions within the processes of space production in the Gulf, rather than assuaging them.

Pedestrians and cars were at the centre of one of the first designs in Kuwait by the architects from Wrocław: the competition entry for Site C in the Sabah Al-Salem district, submitted in 1977. This community of 60,000 people, combining LIG and AIG housing, was designed as a part of the



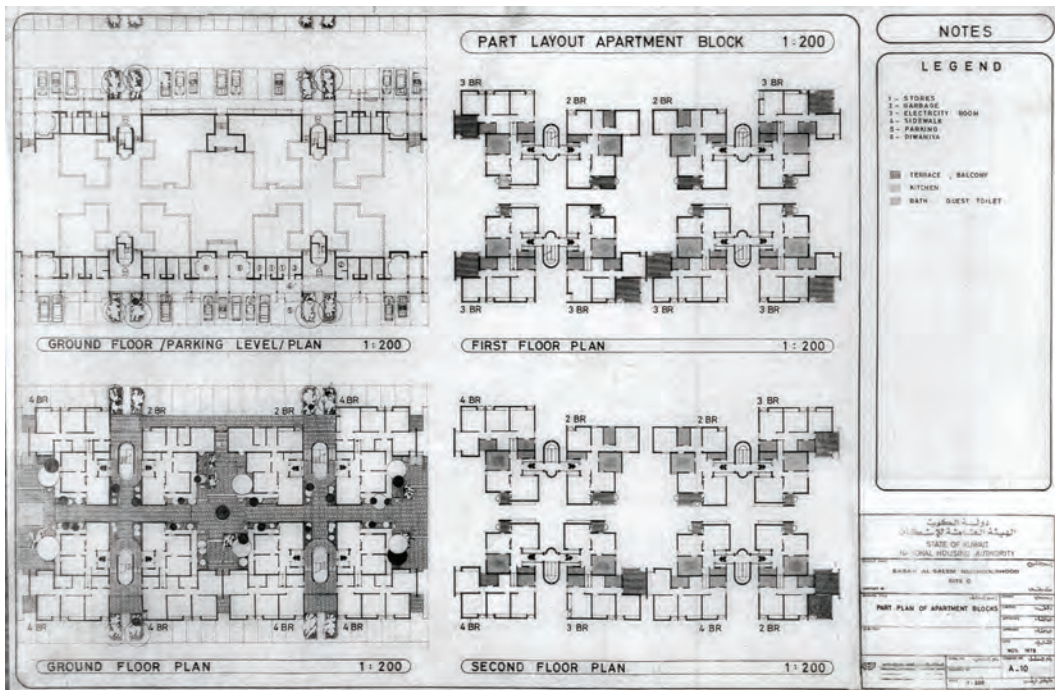
Łukasz Stanek.

Figure 4: A. Bohdanowicz, W. Jarzabek, K. Wiśniowski for Shiber Consult/INCO, Site C, Sabah Al Salem, 1982. Photograph by Ł. Stanek taken in 2014.

linear-urbanization scheme proposed by the Buchanan plan. Sabah Al-Salem was one of the biggest districts planned in Kuwait in the 1970s, organized in neighbourhoods of c.3000 housing units with social facilities, further divided into 'sites' of 300 to 500 housing units.⁷¹

After the competition was won by Bohdanowicz, Jarzabek and Wiśniowski for Shiber Consult, it was developed together with INCO and realized in 1982. The design comprised sand bricks and cement blocks for walls, with ceilings and staircases in reinforced concrete poured on site, and after several years it was retrofitted with elevators [Figure 4]. The competition brief by the NHA included requests for an 'Arab design' and floor plans that sustained traditional customs, and the designers responded with an interpretation of Kuwaiti courtyard typology. This typology, they argued, allowed secure privacy, enhanced by a split-level disposition, with the day area below and the night area above.⁷² The day area included two larger rooms, one of which could be separated from the rest of the apartment and used as a *diwaniyya*, while the night area could be used as a living room for the entire family. This differentiation of privacy in the apartment followed the recommendations of the NHA, as did the possibility of transforming the terrace into an additional bedroom.⁷³ The ground floor apartments were extended by a small garden or patio, separated from the public space by a wall [Figure 5].

Another key attempt to respond to the 'local tradition' was, in the words of the architects, the careful design of external spaces, topography and greenery.⁷⁴

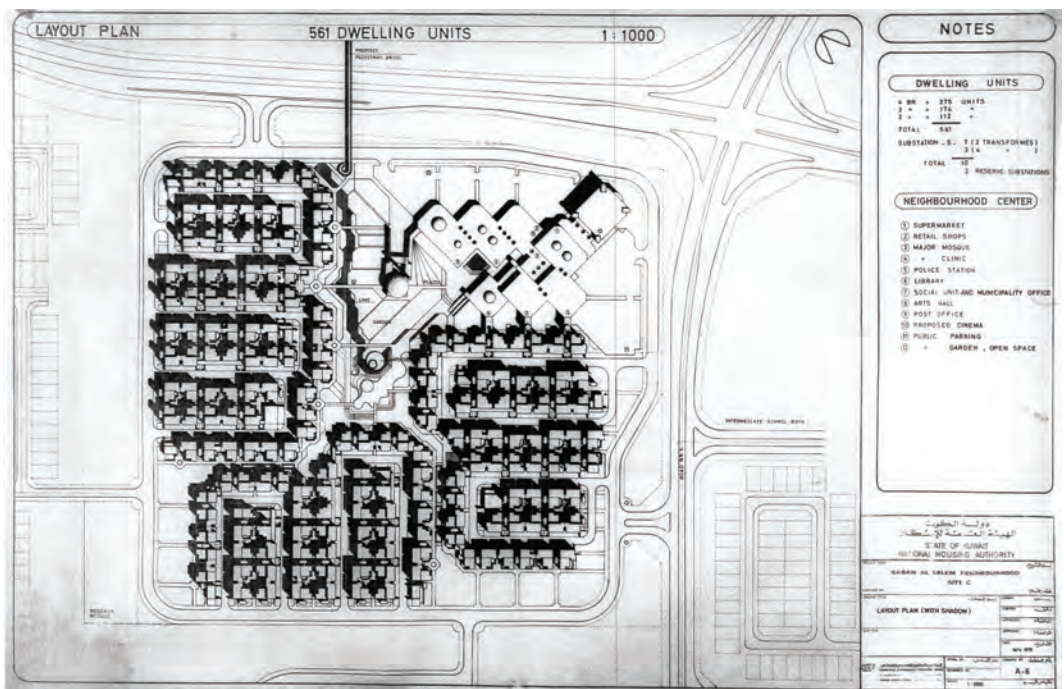


Krzysztof Wiśniowski.

Figure 5: A. Bohdanowicz, W. Jarzabek, K. Wiśniowski for Shiber Consult/INCO, Site C, Sabah Al Salem, 1982, floor plans, drawing. K. Wiśniowski archive, Kuwait City.

In contrast to other neighbourhoods in Sabah Al-Salem and the AIG Al-Qurain district (Bohdanowicz, R. Singh and Wiśniowski for INCO, 1988), Site C was furnished with a network of pedestrian-only pathways. Inspired by the urban fabric of Sharkh, these pathways linked the houses to the local community centre with its mosque, kindergarten and shops, situated diagonally across the neighbourhood. Perpendicular to the pedestrian paths, a grid of roads was introduced for vehicle traffic, with parking spaces shaded by the overhangs resulting from the split-level section of the apartments [Figure 6].⁷⁵

The relationship between the pedestrian and the car had been recognized in Kuwait since the 1960s not only as a problem of urban planning and technology, but also as an architectural challenge. This recognition was, for instance, the starting point for a 1968 brief of the studies of urban development of Kuwait City, commissioned by Leslie Martin from BBPR, Candillis-Josic-Woods, Reima Pietilä, and Alison and Peter Smithson.⁷⁶ A typology that took hold was a reinterpretation of the suq, combining garages, shops, offices and cafes, and equipped with up-to-date air-conditioning systems, elevators and telecommunications facilities. Developing the typology of the suqs constructed since the 1960s along Fahad Al-Salam Street, the Suq Al-Kuwait (SOM with SSH, 1975) was divided by a double atrium, and the Suq Al-Wataniya (TAC with PACE, 1979) included a 'village' of duplex courtyard houses on the roof.⁷⁷ Architects of the Wrocław group designed the Suq Dawliyah, combining a multi-storey parking garage with an atrium and an office block (Daczkowski



Krzysztof Wiśniowski.

Figure 6: A. Bohdanowicz, W. Jarzabek, K. Wiśniowski for Shiber Consult/INCO, Site C, Sabah Al Salem, 1982, general plan. K. Wiśniowski archive, Kuwait City.



Edward Lach.

Figure 7: Z. Daczkowski, E. Lach for GEO, Suq Dawliyah during construction, Kuwait City, 1978. Photograph, E. Lach archive, Wrocław.

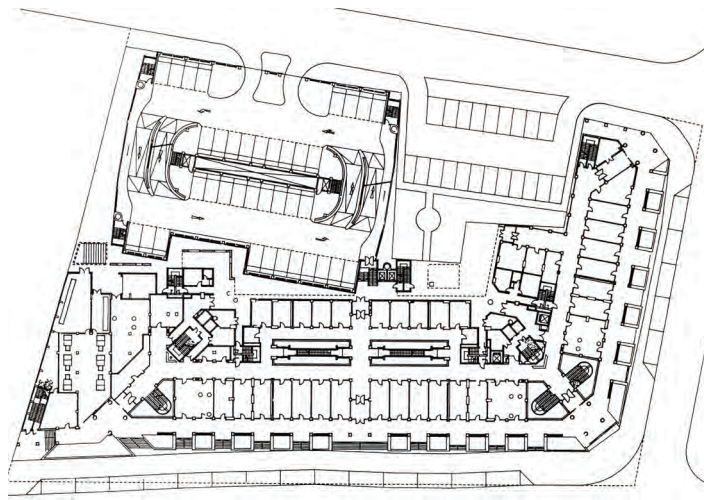
and Lach for GEO, 1978); it was imagined as a nodal point within the new pedestrian zones of the master plan for Kuwait City [Figure 7].⁷⁸

The tense relationship between the pedestrian and the car was captured in the design of the Al-Othman Center, a commercial and residential complex in Hawally. The centre consists of three floors of shopping and office areas, twin ten-floor residential towers and a multi-storey car park for 350 vehicles [Figure 8]. The foundations were ready before the Iraqi invasion, but the building was not finished until 1995, four years after liberation. The department store comprised a number of small shops located around a narrow central atrium with escalators. The building is located at a major intersection of Al-Othman and Ibn-Khaldoun Streets, and its arcaded entrances are located on the corners of the allotment. Yet in spite of the arcades, the building is introverted: the shops on the ground floor were designed not to open directly on to the streets, but rather to a passage shielded from the streets by a set of kiosks with stairs between them so as to accommodate the slope of Ibn-Khaldoun Street.⁷⁹ While these kiosks were eliminated in the realized building, the stairs were dimensioned according to the first design – narrow,



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Figure 8: E. Lach, W. Jarzabek for KEG, Al Othman Center, Hawally, 1995. Photograph by Ł. Stanek taken in 2014.



Edward Lach.

Figure 9: W. Jarzqbek, E. Lach for KEG, Al Othman Center, Hawally, 1995, ground floor plan, CAD drawing. E. Lach archive, Wroclaw.

sparingly distributed – and at odds with the image of the arcade. The long stretches from the street entrances to the atrium contrast with the short connection between the atrium and the car park at the point where the two buildings, designed on skewed construction grids, touch each other [Figure 9].

A similar hiatus between an image of urban space and its ways of use can be seen in three apartment buildings constructed in Salmiya in 1978, according to the design by Bohdanowicz for Shiber Consult. They are distinguished among the neighbouring structures by a careful sequence of transitional spaces sandwiched between the apartment buildings and the streets [Figure 10]. However, these shared spaces are hardly maintained, nor are the streets nearby, which often have no sidewalks. This poor level of maintenance reflects the fact that immigrants to whom these buildings are rented have few instruments for putting pressure on the authorities and landlords. According to the 1980 census, more than 59 per cent of the population in Kuwait and three-quarters of the labour force consisted of immigrants, which reflected both the skilled occupations and the semi- and unskilled occupations. At the same time, only citizens were entitled to housing provisions. As a result, housing districts in Kuwait have been divided into low-density villas, inhabited by citizens and set along landscaped avenues, and areas inhabited by Bidoons (stateless people) and immigrants. These latter areas range from upper-grade apartments for better paid professionals, to workers' apartment blocks, overpopulated and surrounded by poorly maintained streets.⁸⁰ While Kuwaitis expected the government to provide welfare services, non-citizens could, at best, associate in district neighbourhood councils in order to coordinate self-help and to petition the government.⁸¹

The design of spaces with an appearance at odds with their uses cannot be merely explained by the allegedly formalist approach of the Wrocław



Lukasz Stanek.

Figure 10: A. Bohdanowicz for Shiber Consult, residential building in Salmiya, 1978. Photograph by Ł. Stanek taken in 2014.



Lukasz Stanek.

Figure 11: L. Chyczewski, A. Wiśniowska, K. Wiśniowski for INCO, Baloush Bus Terminal, 1986. Photograph by Ł. Stanek taken in 2014.

architects, since the authorities explicitly demanded such spaces. A case in point is the Baloush bus station, resulting from a competition won by INCO (Leopold Chyczewski, A. Wiśniowska and K. Wiśniowski, 1986) [Figure 11]. After the competition, the Kuwait Public Transport Company changed the programme and replaced the commercial spaces the architects had proposed with publicly accessible spaces with no commercial use.⁸² Yet the programme of a bus station implied that the building was to be frequented mainly by low-income, non-Kuwaiti residents, the primary users of public transportation in Kuwait.⁸³ In spite of the station's multiple gestures towards public space – pronounced eaves, two open-entrance pavilions, and the basilica section of the main hall – it could not have become a space where people of different backgrounds meet, as it was unable to fill the gap of such spaces left in a city centre that had been severely depleted during the process of post-oil urbanization.⁸⁴

These examples show that the Wrocław architects responded to the climate of opinion in Kuwait in the 1980s by re-imagining the pre-oil urban fabric (Sabah Al-Salem), by alluding to images acculturated in the Middle East by colonial urbanism (Al-Othman Center, the Baloush bus station), or by reinterpreting the 1960s suq (Suq Dawliyah). These buildings engaged the voices in Kuwait that demanded putting an end to the architectural and planning patterns of the two post-oil decades, patterns widely considered to be alien and alienating. However, it was against the background of these more



Lukasz Stanek.

Figure 12: A. Bohdanowicz, K. Wiśniowski for INCO, Port Authority Shuwaikh, 1984. Photograph by L. Stanek taken in 2014. In the background: E. Lach, W. Jarzqbek for KEG, KFMB Headquarters, 2001.

familiar images that the ‘other within’ appeared: the migrant, the non-citizen, the Bidoon. This is particularly visible in the Port Complex in Shuwaikh, another competition project that was won by Bohdanowicz and Wiśniowski for INCO (1984), one in which the designers wanted to see their scheme as being inspired by the courtyard-house typology in the region. When visiting today, in spite of the sophisticated landscape of stairs and ramps, the only pedestrians one meets around the Port Complex building are immigrant blue-collar workers trying to catch a minibus. They must wait for it on the artificially watered lawn next to the expressway, as there is no other place a bus can stop without disturbing the traffic of the private cars of white-collar employees [Figure 12].

Technologies of Context

The projects of the Wrocław group that are discussed above might appear to be a confirmation of the familiar narrative of architecture’s role as a cultural ‘mediator’ of modern technology, as postulated by a variety of post-war architectural idioms, from ‘tropical architecture’ to ‘critical regionalism’.⁸⁵ The technologies of the car, the escalator, the elevator, the highway and prefabricated construction systems appear to be integrated into floor plans inspired by courtyard houses, arranged according to morphologies derived from familiar urbanization patterns, and covered by details abstracted from pre-oil monuments in

Kuwait. In the final part of this article, however, I will argue that several of these imported expert systems themselves facilitated the re-contextualization of Kuwaiti architecture – and that these technologies found their subjective pendant in the portable, shared ‘profile’ of the Wrocław architects.

Much of the disappointment with 1950s and 1960s buildings in Kuwait stemmed from the rapid pace of their deterioration, and this concerned, in particular, the one material most strongly associated with the modern movement: reinforced concrete. While most buildings in Kuwait were less than 20 to 30 years old, concrete structures quickly deteriorated in the hot, humid, dust-laden climate of the Gulf [Figure 13]. Expatriate architects were accused of specifying building materials that often proved unsuitable, especially in light of the fact that maintenance protocols were rarely adhered to.⁸⁶ A 1987 study estimated the service life of a concrete building in the Gulf to be 10 to 15 years (in comparison with 60 to 80 years in less trying environments). This was soon challenged and another study extended this span to 27 years, which was hardly an optimistic estimation either, and meant that buildings constructed during the boom years would need to be demolished by the end of the century.⁸⁷ The oil boom brought about rising costs of land, construction and rents, followed by the shift among main investors in real estate from individuals to developers and governmental agencies. This shift contributed to the professionalization of the building industry and to tighter supervision. Yet the fast pace of construction during the boom period had an adverse



Lukasz Stanek.

Figure 13: Anwar Al-Sabah Complex at the Fahad Al-Salam street, early 1960s. Photograph by Ł. Stanek taken in 2014.

impact on the quality of construction.⁸⁸ Private investors and government agencies introduced a number of control measures and encouraged the use of prevention techniques (coated rebar, dense concrete and pulverized fuel ash as an alternative to cement, anti-chloride surface coating and prefabricated cladding with protective finishing for façades).⁸⁹ This was supported by the emerging Kuwaiti and Saudi building industries, which were increasingly able to supply materials produced with foreign licences that had been adapted to the requirements of the local market.⁹⁰ These adaptations included protective measures against the climate and also accounted for aesthetic proclivities by means of ornamental rubber moulding for prefabricated concrete elements, and cladding elements with openings in the shape of ogee arches.

More generally, the shift beyond the townscape of post-oil urbanization in Kuwait was facilitated by innovations in the building industry. These included the organization of building sites, and over the course of the 1970s the NHA argued against large housing projects, which proved to be too difficult to manage. The construction site of the Sabah Al-Salem neighbourhood proved to be a case in point in October 1980, when 3,500 workers went on strike because their employer, the National Construction Company, owned by the Pakistani government, had not paid their wages for two and a half months. This was a consequence of the company's inability to accommodate rising prices of building materials, which had been underestimated in the tender documentation submitted two years earlier.⁹¹ The NHA proposed that no single contractor was to be given more than 500 units to build and opted for increasing the share of contracts going to locally registered joint ventures. While the main aim was to support local contractors⁹² (in order to divert profits back to the country, to provide more efficient procedures of capacity control and risk management, and to enhance the knowledge and expertise of local firms)⁹³ this regulation brought to an end the large, uniform housing projects of the 1960s and early 1970s.

During the same period, the NHA introduced the requirement of computerization of the design and construction process. The aim was the acceleration of information flow between all actors involved, facilitation of communication between them, and ensuring their accountability.⁹⁴ For many Western firms, in particular from the United States and the United Kingdom, the Middle East became one of the first places to develop CAD on a commercial scale. CAD was particularly useful for managing commissions within the 'design and build' procedure that was increasingly favoured in the Middle East, when contractors were expected to submit design proposals together with building cost estimates.⁹⁵ For example, CAD was used in Kuwait by John S. Bonnington, the designer of the Stock Exchange (1984) and by Arup, the designer of the Salhia Complex (1979). Representatives of the latter stressed the necessity of CAD for exceptionally fast-moving contract programmes, and the use of dynamic databases allowed for a quick response time to contract programme updates and forecasts.⁹⁶

Salah Salama, the head engineer of KEG, recalled that the General Drafting System (GDS) was bought by the office in the early 1980s for the working drawings of the Fintas Center project in the Fintas area because of its size, complexity and the particularly short timing of the commission.⁹⁷ For this project, the conceptual design was delivered by Erickson and the execution drawings were worked on by a number of architects from Wrocław employed by KEG. In the wake of the unrealized Fintas



Lukasz Stanek.

Figure 14: W. Jarzabek, E. Lach for KEG, Audit Bureau Headquarters Building, 1996. Photograph by Ł. Stanek taken in 2014.

Center, CAD technology was used in other KEG projects,⁹⁸ including the Audit Bureau, designed by Jarzabek and Lach before the invasion, and then completed in 1996. The building is located at Ahmed Al-Jaber Street in the heart of Kuwait City and includes office spaces, a conference hall, a library, an emergency shelter and parking for 650 cars [Figure 14]. Within the narrative sensitivity developed in their Kuwaiti projects, Jarzabek and Lach took the punched computing card as a direct inspiration for the façade, combining this with complex, ornamental *mashrabiyyas*, themselves drawn in CAD [Figure 15]. This technology was also used in the design of the Al-Othman Center, which, as with the Audit Bureau, was only finished after the Iraqi invasion. The designer argued that the building's careful details, including the decorative geometry of the tiles, would not have been possible without CAD, and they appear exceptional within the decline of building expertise in Kuwait during the 1990s.⁹⁹

In this way, the implementation of CAD and other technologies in Kuwait through the 1980s displays the processes of de-territorialization and re-territorialization of expert systems across diverse social and cultural situations, which have been described by STS scholars in studies on global knowledge transfer. Accordingly, the Kuwaiti offices which implemented CAD in order to cooperate with Western architects and construction firms could be seen as 'technological zones', discussed by Andrew Barry as sites where differences between technical practices, procedures



COMPUTER GENERATED VIEW

منظر عام بالكمبيوتر

Wojciech Jarzqbek.

Figure 15: W. Jarzqbek, E. Lach for KEG, Audit Bureau Headquarters Building, 1996, CAD rendering, photograph. W. Jarzqbek archive, Wroclaw.

and forms are reduced, and common standards are established.¹⁰⁰ Similarly, the implementation of computerized management systems at construction sites in Kuwait could be analysed as unstable 'global assemblages', as studied by Stephen J. Collier and Aihwa Ong, in which impersonal forms of techno-science are assimilated and contested within specific, situated arrangements.¹⁰¹ Barry, Collier and Ong stress that such 'technological zones' and 'global assemblages' forge a separation between 'global/Western' and 'local' regimes (political, economic, social and ethical). By contrast, I argue that several of the expert systems discussed above bridged this separation and facilitated a 'contextual' response, in line with the new architectural climate of opinion in Kuwait in the 1980s. In particular, the prefabricated systems and CAD software accommodated the demand for a visual environment into which collective identities could be projected. This shift, from the self-assigned mediation between 'technology' and 'context' (as postulated by various regionalisms, 'critical' and otherwise) towards their conflation in what can be called 'technologies of context', testified to a reshuffling of architectural culture in the Gulf, to which architects from Wroclaw contributed.

At the same time, their professional approach displayed a similar dynamic of de-territorialization and re-territorialization. Their generational experience of disenchantment with post-war modern architecture in Poland, as well as the specific interest in architectural history shared by many of them, was an important resource for their practice in Kuwait. At least equally important for their employers, however, was a set of more generic attitudes: flexibility, professional ambition, the willingness and ability to learn and to implement innovations, whether in architectural culture, building technology or construction management.¹⁰² These attitudes were delineated in a collective 'profile' of 'specialists abroad' as specified by Polservice in a 1972 publication. Polservice stipulated the advantages of Polish specialists by their professional qualifications, efficiency and dedication, an ability to adapt to the environment, the 'selfless' transfer of know-how to local staff, and good knowledge of languages, while it explicitly prohibited their employees from 'getting involved in political or religious debates' in the host countries.¹⁰³ In Polservice's recruitment procedures during the final decades of the Cold War, a general profile such as this took precedence over specific experience with post-war reconstruction, such as the state-led rebuilding of Warsaw or the construction of new towns, which had legitimized earlier Polish master plans for cities in Algeria, Libya, Syria and Iraq.¹⁰⁴ Aspects of this profile had been provided by the typically Central European training of the Wrocław architects, straddling engineering, architecture and urban planning, which was valued in Kuwaiti offices, often headed by civil engineers – all the more so as it came with a modest price tag.¹⁰⁵ Such training furnished them with a broad set of portable rather than localized skills which were advantageous within the expanding global market of architectural services: a market which Polservice and state companies from other socialist countries, as this article demonstrates, not only took advantage of, but also helped to define.¹⁰⁶

Afterword: From Kuwait to Poland

The 1990 Iraqi invasion resulted in the destruction of many buildings in Kuwait, and also in the closure of several Kuwaiti architectural offices including Archicentre, and in foreign professionals leaving, some of whom moved to Dubai and Abu Dhabi in the years that followed.¹⁰⁷ The invasion coincided with the end of socialism in Eastern Europe, and most architects of the Wrocław group who were leaving Kuwait decided to return to Poland. Upon their arrivals there, they became known by the nickname 'Kuwaitis', and they helped shape the urban landscape of post-socialist Wrocław. Jarzabek used CAD technology, for example, which he had previously utilized in the Audit Bureau and Al-Othman Center projects, to design the Solpol department store (1993), the first in the Wrocław city centre after 1989. Lach was responsible for the Dominikańska department store alongside the medieval town (1999), among other projects.¹⁰⁸ In 1994, when the construction of the church in Popowice was completed, the cardinal who consecrated the building associated its interior with Islamic architecture – and went on to jokingly thank Jarzabek for designing 'such a beautiful mosque'.¹⁰⁹

Beyond anecdotal references, the experience of working in the Gulf, the Middle East and North Africa in the 1980s was a decisive career step that prepared many architects from Poland and other then-socialist countries for

practising architecture after the political transformations. They distinguished themselves by their professional knowledge and familiarity with programmes with which architects that had remained practising in state socialism had little experience, such as underground car parks, middle-class housing, office parks, shopping malls and modern department stores.¹¹⁰ They benefited from their experience with current building processes, from CAD through construction technologies and advanced materials, the organization of the office and the construction site, and contacts with international developers and construction firms. No less important was the acquaintance with postmodernism, embraced by investors and the public alike. While postmodern tendencies were present in Polish architecture since the 1970s, it was only after the end of socialism that they became mainstream, facilitated by imported programmes, materials, building technologies and capital. Yet while boosting individual careers, the work on 'export' contracts often came with a sympathetic association with developers and construction firms, reinforced by the experience of a 'public' deemed too fragmented and contingent to become an obligation for an architectural project, and an architectural culture valorizing the detachment of architectural images from broader processes of space production. These experiences dovetailed with the new professional habitus in 1990s Eastern Europe, which linked the conditions of labour for Polish architects back in the Middle East with those in post-socialist Poland.

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Contributor Details

Łukasz Stanek is Lecturer at the Manchester Architecture Research Centre, The University of Manchester. He authored *Henri Lefebvre on Space: Architecture, Urban Research, and the Production of Theory* (University of Minnesota Press, 2011) and edited Lefebvre's unpublished book about architecture, *Toward an Architecture of Enjoyment* (University of Minnesota Press, 2014). Stanek also studies the Cold War transfer of architecture from socialist countries to West Africa and the Middle East; he published the book *Postmodernism Is Almost All Right: Polish Architecture After Socialist Globalization* (Fundacja Bec Zmiana, 2012)

and edited an issue of *The Journal of Architecture* (2012) on this topic. Stanek taught at the ETH Zurich and at the Harvard Graduate School of Design.

Contact: Manchester Architecture Research Centre, School of Environment & Development, Room 1.12, Humanities Building, The University of Manchester, Oxford Road, Manchester, M139PL, UK.
E-mail: lukasz.stanek@manchester.ac.uk

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Endnotes

1. Neil Parkyn, 'Kuwait Revisited', *Middle East Construction* (hereafter *MEC*) 9 (1983): 39.
2. Stephen Gardiner, *Kuwait: The Making of a City* (London: Longman, 1983); Lawrence Vale, *Architecture, Power, and National Identity* (New Haven: Yale University Press, 1992), 248–78; Udo Kultermann, *Contemporary Architecture in the Arab States: Renaissance of a Region* (New York: McGraw-Hill, 1999), 167–78. Here and in what follows, unless otherwise specified, the dates indicate the construction year of the building in question.
3. For a rare notice, see Kultermann, *Contemporary Architecture*, 173–75; see also: Łukasz Stanek, 'Second World's Architecture and Planning in the Third World', *The Journal of Architecture* 17.3 (2012): 299–307; Łukasz Stanek, 'Miastoprojekt Goes Abroad: The Transfer of Architectural Labour from Socialist Poland to Iraq (1958–1989)', *The Journal of Architecture* 17.3 (2012): 361–86; Łukasz Stanek, *Postmodernism Is Almost All Right: Polish Architecture after Socialist Globalization* (Warsaw: Fundacja Bęc Zmiana, 2012).
4. Donald McNeill, *The Global Architect: Firms, Fame and Urban Form* (London and New York: Routledge, 2009); see also: Murray Fraser and Nasser Golzari eds., *Architecture and Globalisation in the Persian Gulf Region* (Farnham, Surrey: Ashgate, 2013); Yasser Elsheshtawy ed., *The Evolving Arab City: Tradition, Modernity and Urban Development* (London and New York: Routledge, 2008); Yasser Elsheshtawy, *Dubai: Behind an Urban Spectacle* (New York: Routledge, 2010).
5. McNeill, *Global Architect*, 1.
6. *Ibid.*
7. Steven Ward, 'Re-examining the International Diffusion of Planning', in *Critical Readings in Planning Theory*, eds. S. Fainstein and A. Scott (Chichester: Wiley-Blackwell, 2012), 479–98; see also: Fraser and Golzari, *Architecture and Globalisation*; Łukasz Stanek, 'Architects from Socialist Countries in Ghana (1957–1967): Modern Architecture and Mondialisation', forthcoming in *Journal of the Society of Architectural Historians* (December 2015).

8. The concept of mondialisation was developed by Henri Lefebvre and Jean-Luc Nancy, see, Stanek, 'Architects from Socialist Countries'.
9. Ibid.; for the concept of the Global Cold War, see: Odd Arne Westad, *The Global Cold War: Third World Interventions and the Making of Our Times* (Cambridge: Cambridge University Press, 2005).
10. Stanek, 'Architects from Socialist Countries'.
11. Yasser Mahgoub, 'Globalization and the Built Environment in Kuwait', *Habitat International* 28 (2004): 505–19.
12. Stephen J. Collier, Aihwa Ong, 'Global Assemblages, Anthropological Problems', in *Global Assemblages: Technology, Politics, and Ethics as Anthropological Problems*, ed. Collier and Ong (Malden, MA: Blackwell, 2005), 3–21; Andrew Barry, 'Technological Zones', *European Journal of Social Theory* 9.2 (2006): 239–53.
13. They included Krzysztof Wiśniewski, Andrzej Bohdanowicz and Ryszard Daczkowski.
14. Krzysztof Wiśniewski, Anna Wiśniewska, Magdalena Wiśniewska, Jan Wiśniewski: 1969–2006 (Wrocław: Muzeum Architektury, 2006).
15. Łukasz Stanek, ed., *Team 10 East: Revisionist Architecture in Real Existing Modernism* (Warsaw: Museum of Modern Art/Chicago: University of Chicago Press, 2014).
16. Interview with Edward Lach, Wrocław, April 2011.
17. Joe Nasr, 'Saba Shiber, "Mr. Arab Planner"'. *Parcours professionnel d'un urbaniste au Moyen-Orient*, *Géocarrefour* 80:3 (2005): 197–206; Saba George Shiber, *Kuwait Urbanization: Documentation, Analysis, Critique* (Kuwait: 1964).
18. Interview with Krzysztof Wiśniewski, Kuwait City, January 12, 2014; interview with Mohammad Al-Sanan, Kuwait City, January 13, 2014. The design for the National Theatre by Bohdanowicz and Wiśniewski was a finalist, together with that by Denys Lasdun.
19. See also, Stanek, 'Miastoprojekt'.
20. Interview with Stojan and Mirjana Maksimović, September 14, 2014, Nahant, MA.
21. See the following personal dossiers in SARP Archive, Warsaw: 279, 351, 353, 363, 480, 533, 983, 1091, 1138, 1218.
22. They included the Al-Fintas towers (Gleń, J. Damija, N. Fatteh for Arabi Engineer Office, 1984) and the Al-Qibla tower (Krawecki for Gulf Consult, 1988), SARP Archive, dossier 1091; Janusz Krawecki archive, Kraków.
23. See also, Jacek Wozniak, *Contemporary Architecture in Kuwait* (no date), 282–93.

24. Interview with Andrzej Bohdanowicz, Kuwait City, January 15, 2014.
25. Interview with Krzysztof Wiśniowski.
26. Tanis Hinchcliffe, 'British Architects in the Gulf, 1950–1980', in *Architecture and Globalisation*, 23–36.
27. Telephone interview with Janusz Krawecki, April 30, 2014.
28. The team working for Archicentre in Kuwait included Mirjana Maksimović, Sonja Živković, Branislav Jovin, Jovan Katarnic and Radomir Mihajlović; see, Zoran Manević, *Stojan Maksimović: Stvaralaštvo* (Belgrade: Centar VAM, 2006), 76–78.
29. Email exchange with Alexander Gjurič, March 2014.
30. 'Naselje 23 dvojne kuće za rentu šeika Duaj Ibrahim Al-Sabaha u Kuvajtu', 'Šest vila za Mr. Youset al Shaye u Kuvajtu', 'Kuće za izdavanje Mr. Abdulatif Al Touenija u Kuvajtu', *Arhitektura Urbanizam* 58 (1969): 46–47; Ljiljana Bakić, *Anatomija B&B arhitekture* (Belgrade: Ljiljana Bakić, 2012).
31. The designers were Tibor Hübner, Attila Emődy and László Szabados; 'KÖZTI Középülettervező Vállalat' (no date), KÖZTI Archive, Budapest; Attila Emődy archive, Budapest; 'Coastal Strip Development Project,' private archive of Kazimierz Bajer, Kraków.
32. Stanka Dundakova archive, Sofia; Dimitar Andreychin archive, Sofia.
33. 'Building and Construction Industry. Kuwait Times Special Supplement,' *Kuwait Times*, August 31, 1980, 5–10.
34. 'Building and Construction Industry'; Peter Kilner and Jonathan Wallace, *The Gulf Handbook* (London: Trade & Travel Publications, 1979), vol. 3, 360; Renata Holod and Darl Rastorfer, eds., *Architecture and Community: Building in the Islamic World Today* (Aga Khan Award for Architecture, 1983), 252.
35. M. Kwiecień, 'Trudny eksport usług budowlanych', *Rynki Zagraniczne* 31 (1986): 6.
36. 'Kuwait Is an Open Market,' *MEC* 4 (1983): 15.
37. Michael S. Casey, *The History of Kuwait* (Westport, CT: Greenwood Press, 2007).
38. 'East Bloc Managers Fail to Keep Up with Trends', *Kuwait Times*, April 4, 1982, 12; interview with Wiśniowski. On Cold War division of intellectual labour in architecture, see Stanek, 'Architects from Socialist Countries'.
39. Interview with Lach.

40. 'Kuwait Revisited', 42.
41. 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* 33.1 (2013): 7–25.
42. Gardiner, *Kuwait*.
43. Ministry of Transport (UK), *Traffic in Towns* (London: Penguin, 1964); Shankland/Cox Partnership, 'Master Plan of Kuwait: City Centre', Library of Congress, Geography and Map Reading Room, Washington, DC, G7604.K9G45 1977.S5.
44. Shiber, *Kuwait Urbanization*.
45. 'The Changing Suq', *MEC* 11 (1982): 14.
46. 'A Master Plan to Reshape the City Centre', *Kuwait Times*, November 8, 1981, 19.
47. 'Purposive Architecture for the Urban Development of Kuwait', *Kuwait Times*, May 10, 1978, 5.
48. 'An Architect from Kuwait', *Albanaa* 7.38 (1987/1988): 10–11.
49. 'Kuwait, Beit Al-Reihan', *Albanaa* 8.43 (1988): 10–11, 24–29.
50. Edward Lach archive, Wroclaw.
51. Jim Antoniou, 'The Challenge of Islamic Architecture', *MEC* 10 (1979): 16–17.
52. Ahmed Farid Moustapha, 'Islamic Values in Contemporary Urbanism (1)', *Albanaa* 7.41 (1988): 18–24, 26–33.
53. 'Islamic Architecture and Modernism', *Albanaa* 5.26 (1985/1986): 69–73.
54. 'Kuwait's Huge Housing Plans', *Kuwait Times*, March 23, 1978, 7; 'Building and Construction Industry'.
55. Nezar AlSayyad, *Cities and Caliphs: On the Genesis of Arab Muslim Urbanism* (New York: Greenwood Press, 1991).
56. For bibliography, see Stanek, 'Second World's Architecture'.
57. Kahtan Al-Madfai, 'Elements of Heritage', *MEC* 5 (1980): 58–59.
58. Moustapha, 'Islamic Values'; Ahmed Farid Moustapha, 'Islamic Values in Contemporary Urbanism (2)', *Albanaa* 7.42 (1988): 14–19, 16–23; Christa Udschi, 'International Symposium on Islamic Architecture and Urbanism', *Albanaa* 2.10 (1981): 2–6.

59. 'A Future for the Past', *MEC* 10 (1985): 31–33.
60. Charles Jencks, *The Language of Post-modern Architecture* (New York: Rizzoli, 1977); Huda Al-Bahar, 'Contemporary Kuwaiti Houses', *Mimar* 15 (1985): 63–72.
61. 'Urban Renaissance in Baghdad', *Albenaa* 4.21–22 (1985): 76–88; Stanek, 'Miastoprojekt'.
62. 'A Road Network Sized for the Products of Detroit', *Construction Today – Middle East* 3 (1979): 30; National Housing Authority (NHA, Kuwait), *National Housing Programme* (London: Buchanan, 1976), 5 vols.
63. SARP Archive, dossier 1138.
64. 'Household Interviews', *National Housing Programme*, vol. 4.
65. 'Sunshine and the Rule of Law: Kuwaiti Law Courts Scheme', *Building Design* 501 (June 20, 1980): 24; see also: Nezar AlSayyad, 'From Modernism to Globalization: The Middle East in Context', in *Modernism and the Middle East: Architecture and Politics in the Twentieth Century*, ed. Sandy Isenstadt and Kishwar Rizvi (Seattle, WA: University of Washington Press, 2008), 255–63.
66. 'Calling the Tune', *MEC* 8 (1985): 20–21.
67. 'Sunshine and the Rule of Law', 25.
68. Al-Bahar, 'Contemporary Kuwaiti Houses'.
69. 'Islamic Architecture and Modernism'.
70. Andrzej Bohdanowicz archive, Kuwait City.
71. 'Housing the Arab Population', *MEC* 1 (1983): 27–34; 'A Road Network,' 30–31.
72. Interview with Wiśniowski.
73. 'Household Interviews'.
74. Interview with Wiśniowski.
75. Krzysztof Wiśniowski archive, Kuwait City.
76. 'Proposals for Restructuring Kuwait', *Architectural Review* 156.931 (1974): 179–90.
77. Sara Saragoça Soares, 'Modernization or Change?', *YourAOK Pages* 1 (Summer 2013): 53–59.
78. SARP Archive, dossier 480.

79. Lach archive, Wrocław.
80. Abdulrasool A. Al-Moosa, 'Kuwait: Changing Environment in a Geographical Perspective', *British Society for Middle Eastern Studies: Bulletin* 11.1 (1984): 45–57; Farah Al-Nakib, 'The Bidoon and the City: A Historical Account of the Politics of Exclusion in Kuwait', *Al Manakh* 2, ed. Rem Koolhaas et al. (Amsterdam: Stichting Archis, 2010), 384–87.
81. For an overview of the history and typologies of Kuwaiti housing, see Asseel Al-Ragam, 'The Destruction of Modernist Heritage: The Myth of Al-Sawaber', *Journal of Architectural Education* 67.2 (2013): 243–52.
82. Interview with Wiśniowski.
83. Bruce G. Hutchinson and Galal M. Said, 'Spatial Differentiation, Transport Demands and Transport Model Design in Kuwait', *Transport Reviews: A Transnational Transdisciplinary Journal* 10.2 (1990): 91–110.
84. Farah Al-Nakib, 'Public Space and Public Protest in Kuwait, 1938–2012', *City: Analysis of Urban Trends, Culture, Theory, Policy, Action* 18.6 (2014): 723–34.
85. Jane Drew, Maxwell Fry, *Tropical Architecture in the Humid Zone* (New York, Reinhold: 1956); Kenneth Frampton, 'Towards a Critical Regionalism: Six Points for an Architecture of Resistance', in *The Anti-aesthetic: Essays on Postmodern Culture*, ed. Hal Foster (Port Townsend, WA: Bay Press, 1983), 16–30.
86. 'Facing Facts', *MEC* 3/4 (1987): 19–20.
87. 'As Solid as Concrete?', *MEC* 4/5 (1987): 20–21.
88. 'Building Maintenance in Kuwait', *MEC* 1 (1980): 51–53.
89. 'As Solid as Concrete?'.
90. 'Innovation: Computer Screen Printing', *MEC* 2 (1986): 17.
91. Simon Dunkley, 'Housing Project Runs into Difficulties', *MEC* 12 (1980): 11.
92. 'Fi Mutab'eh tahliliyeh men ra'ys al'etihad alKuwaiti litijarah wa sina'eh al'ensha' litusrihat wazeer al'eskan', *Al-Siyasah*, April 19, 1982, 7.
93. 'Ambitious Housing Projects Keep the Market Buoyant', *Kuwait Times*, November 8, 1981.
94. Ibid.
95. 'Design and Build', *MEC* 5 (1984): 29; 'Number One for Jubail', *MEC* 5 (1985): 21–23; 'Dynamic Management', *MEC* 4 (1986): 32–33.
96. John A. Davison, 'Computer Aids in Modern Architectural Practice', *Albena* 2.9 (1981): 52–54; 'Salhia Complex Kuwait', *Arup Journal* 14.2 (July 1979): 2–5.

97. Interview with Salah Salama, Kuwait City, January 16, 2014.
98. KEG Archive, Kuwait City.
99. Interview with Wojciech Jarząbek.
100. Barry, 'Technological Zones'.
101. Collier, Ong, 'Global Assemblages'.
102. Krzysztof Wiśniowski; Bohdanowicz archive; Andrzej Wyżykowski, 'Zagraniczna twórczość architektoniczna Janusza Kraweckiego', *Kwartalnik architektury i urbanistyki* XLI, no. 3–4 (1996): 339–42.
103. Stanisław Grzywnowicz and Jerzy Kiedrzyński, *Prawa i obowiązki specjalisty* (Warsaw: Wydawnictwa UW, 1972), 26, 49–50.
104. Stanek, 'Miastoprojekt'; Łukasz Stanek, 'PRL™ Export Architecture and Urbanism from Socialist Poland', *Piktogram. Talking Pictures Magazine* 15 (2011): 1–54.
105. Interview with Al-Sanan.
106. See also: Donna C. Mehos and Suzanne M. Moon, 'The Uses of Portability: Circulating Experts in the Technopolitics of Cold War and Decolonization', in *Entangled Geographies: Empire and Technopolitics in the Global Cold War*, ed. Gabrielle Hecht (Cambridge, MA: MIT Press, 2011), 43–74.
107. Muhannad A. Albaqshi, 'The Social Production of Space: Kuwait's Spatial History' (Ph.D. diss., IIT, 2010); Yasser Mahgoub, 'Kuwait: Learning from a Globalized City', in Elsheshtawy, *The Evolving Arab City*, 170.
108. Stanek, *Postmodernism*.
109. Ibid, 73.
110. Ibid.