

# Chapter 12

## Can Modern Heritage Construct A Sensible Cultural Identity? Iranian Oil Industries and the Practice of Place Making



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**Abstract** The processes of urban modernisation have frequently been vilified in developing countries, and for good reasons. They are generally seen as the results of top-down decision makings and a skin-deep, out of place political will to modernise communities without having its prerequisites in place. This kind of modernisation is prone to the risks of disrupting organically and historically developed settlements and alienating people from their physical context. They are likely, as they have often been in Iran, to prioritise efficiency, facilitated traffic flows and a modernised way of development in general, over the sustainability of communities and their well-being. The question is, however, what if there is no built environment tradition in place? What if a new community is shaping around emerging forms of production in places with no established traditions of built environment? Can such new developments create a sense of attachment rather than alienation among their dwellers—unlike what is usually expected from these developments to do? This chapter looks at some of the new developments built by oil industries in their heyday in Abadan, a scarcely populated area with little recent histories of urbanism. Built to create a community from an assortment of immigrant workers, they are generally believed to defy the consensus that such top-down developments with their design ideas imported from elsewhere are incapable of creating a sense of place. Focusing on Abadan’s Braim and Boverdeh, the chapter examines how, standing the test of time and still sought-after places, these developments have achieved what many of their counterparts have failed to achieve. The generally acknowledged achievements of these developments give strength to the argument that it is perhaps not so much urban modernisation per se than is the way they are viewed and implemented that results in the alienation which comes with them. In this sense, urban modernisation is not so much obstacles than are vulnerable drivers for creating cultural identities and the sense of place.

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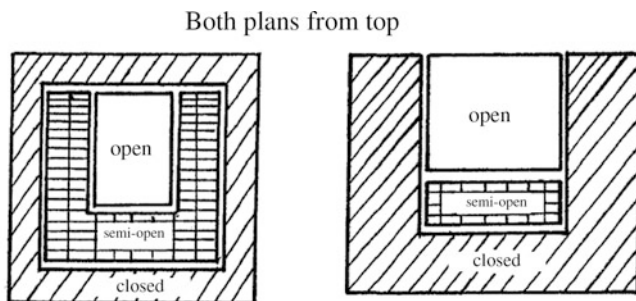
## 12.1 Introduction

The neglected ... Abadan was selected as the centre of Iranian oil operations, creating a paradise in the middle of a desert by the way of residences in British style: A first experience with a new style class society formed with unified houses with small yards and red pitched roofs and new types of streets separating houses through a number only. People were supposed to assimilate into British [immigrant worker] society and their values. ... Everyone in town was willing to have the experience of living in this kind of place. (Adoptions from Haghghi 2015: 32)

The story of indigenous people welcoming colonial lifestyles and its built environments is perhaps not unheard of. Nor is, however, the development of these environments into rundown areas struggling to cope with deep-rooted traditions of local life. This has been the case for Abadan's oil industry labourers' districts, where the post-war decline in local oil industries resulted in selling-off those houses and the subsequent replacement of them with new developments based on property market logics. The story goes a different way, nevertheless, with the town's 'staff' quarters, notably Braim and Bovardeh: quarters kept under the industry's control. Despite their age, they are considered by many as unmatched achievements in place making and well adaptable environments for the present-day user in Abadan. This is at odds with the common perception about such out of place developments being doomed to failure. Based on an ongoing research on the area, the present chapter is an overview of these quarters' inception, development, and their rather oblique connections with their context, followed by an investigation of how these developments have managed to work and last.

## 12.2 Roots: The Local Vernacular Architecture

The built environments made by tribes living in the area are not well documented. A review of better preserved built environments of other towns in Khuzestan, however, indicate well-developed building traditions. In her survey of Ahwaz and Khorramshahr, for instance, Ahari (1992) mentions the heavy masonry structures used with loadbearing walls on two sides only, with roofs mainly built with timber covered with wicker and thatch. She also mentions high-level openings in walls to facilitate ventilation. Ahari and Kasmai (1990) give a picture of a local building typology which is not fundamentally different from buildings in central Iran:



**Fig. 12.1** General spatial organisation patterns in Khorramshahr and Abadan (Ahari 1992)

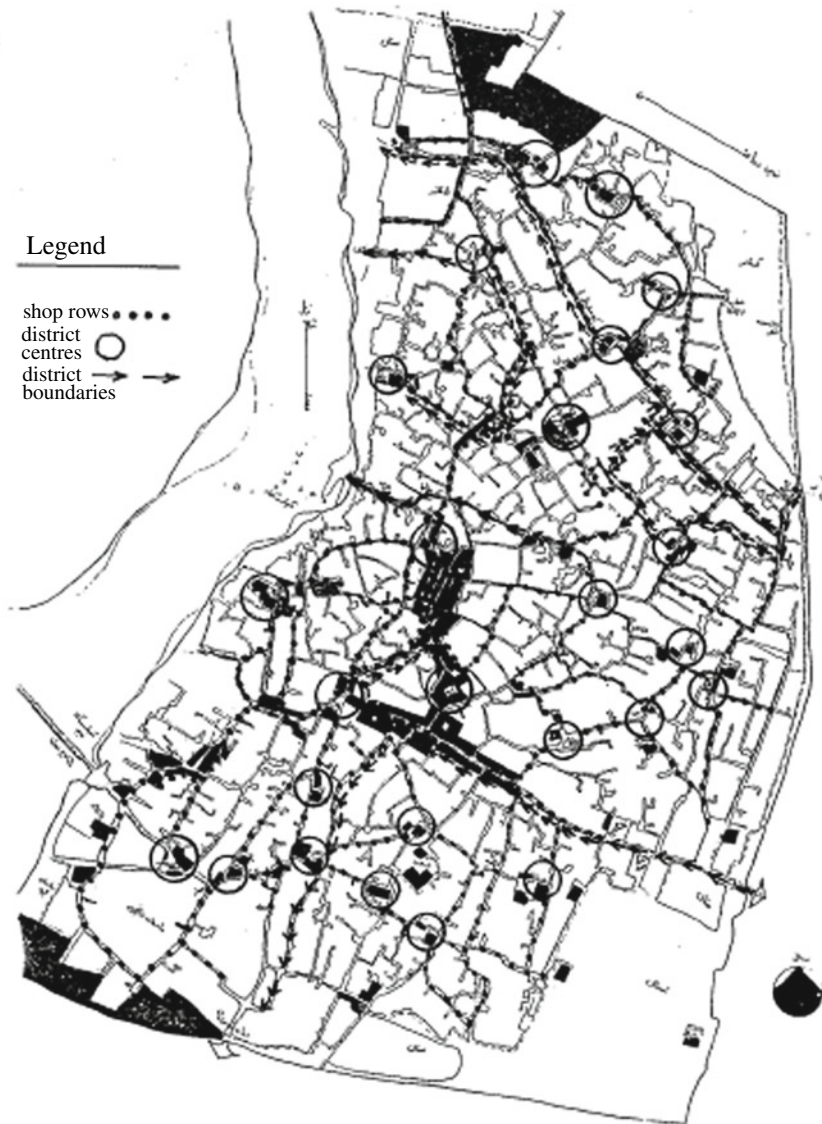
introvert buildings with enclosed or occasionally semi-enclosed courtyards. There are, however, differences including the extent of shaded semi-open spaces, and habitable roofs protected with lattices (Fig. 12.1).

### 12.3 Roots: The English Garden City

Imported by British designers, the designs of many early urban areas and residential districts for Iranian oil industries are said to be influenced by the English Garden City concepts, notably for their low density and the significant amount of greenery. With many mismatches between socio-geographical contexts of the birthplace of the concept and that of Iranian oil-rich areas, it would not be unexpected to find such imports unworkable. Many of the factors mentioned as those invoking interest in the idea elsewhere, for example ‘the progressive rejection of the big city, the desire for small town living and working, the search for real involvement on common affairs, and ... the adherence to a new “green” life style’ (Ward 1992: 1) can be said to have played no direct role in Iranian oil towns. A desire for casting new forms of social life, however, might be seen as shared between the two contexts, with the original society seeking it as an alternative to rapidly industrialising cities and the Iranian oil town a starting point from scratch shaping previously non-existent communities out of an assortment of immigrant workers from a wide range of backgrounds and skills. Among features Aalen (1992: 29–30) mentions about Howard’s Garden City are those of small, thoroughly planned towns with each town balanced both socially and economically, ‘accommodating all classes and providing a range of employment in primary, secondary and tertiary activities’:

The city is conceived, like many utopias, on a circular basis and there is a clear zoning system within it. Service buildings and public buildings are at the centre with a belt of residential land around them and the railway and factories are on the perimeter. Public gardens, parks and tree-lined avenues are prominent features. (30)

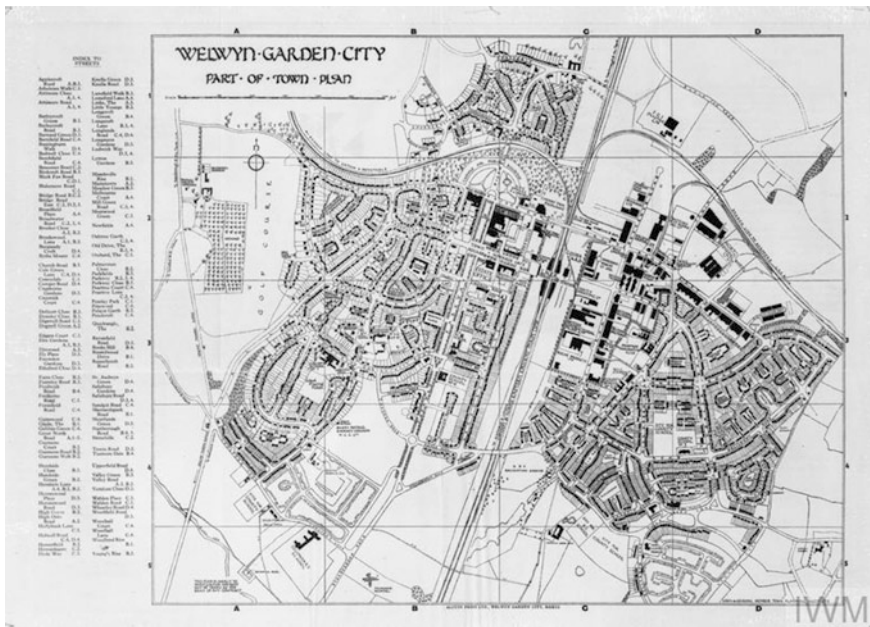
This is, on one hand, a far cry from local traditions of built environments in Khuzestan, but it also corresponds with the emerging communities in the area's oil industry workers' districts: the coming together of modern-day workers settled close to their workplaces in places with no remarkable histories of built environment (Fig. 12.2).



**Fig. 12.2** A typical traditional town in Khuzestan (Rahimieh and Roboobi 1974, adopted here from Ahari 1992)

## 12.4 Roots: The Emergence of Oil Industries in Iran

The history of oil industry settlements in Abadan goes back to early twentieth century, when a new town was formed on a sparsely populated island on the estuary between Karun and Euphrates-Tigris. It consisted of the main refinery area, complete with ancillary buildings, and early bungalows built using local construction techniques and materials. The early houses, however, soon gave way to new ones closer in design to British style bungalows and semi-detached houses. There was, from the beginning clear separation between different workers' socio-economic classes and ethnicities, which resulted in having boundary lines between different quarters of the town then and even today. In the case of senior and intermediate staff quarters, namely Braim and Bovardeh (Bawarda), not only have the boundary lines continued to be recognisable until today, but also significant proportions of original buildings have survived and still used by the workers' classes they had originally been designed for (Fig. 12.3).

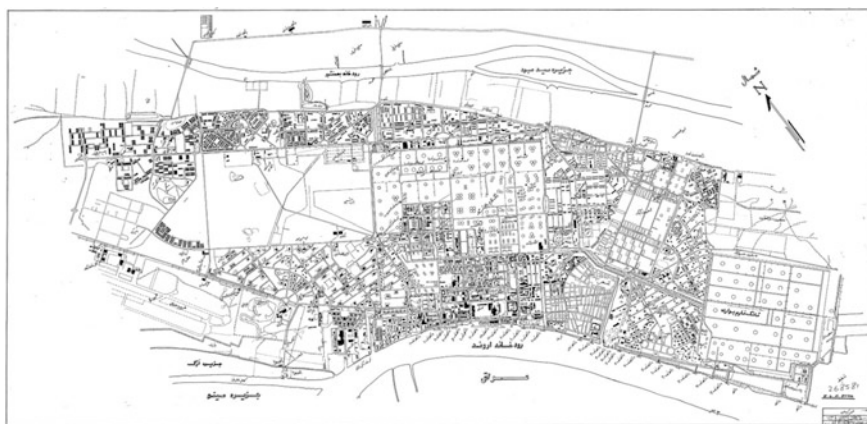


**Fig. 12.3** Welwyn Garden City. Source <http://www.iwm.org.uk/collections/item/object/205133059>

## 12.5 Abadan: The Structure of the Master Plan and Its Subsequent Developments

In his chapter on the social aspects of Abadan's inception and development, Haghighi (2015) offers a rather grim view of the town's development strategies, pointing, inter alia, to the above mentioned segregationist approach which draws unsurpassable boundaries not only between British, non-British and Iranian workers but also between senior staff and plain labourers. This, in his view, goes so far as to completely ignoring climatic control considerations in labourers' houses. There is in his work also a criticism of enforcing a modern lifestyle of nuclear, isolated families who lose their connection with their roots both through their inability to form extended family settings, and to have at least domestic-scale in-house farming. The divide between quarters is also criticised for being motivated by crowd control and therefore possible rebellion containment strategies imposed to safeguard a trouble-free running of the industry. As he observes, there is a wealth of public amenities in senior staff quarters, but that they hardly form monuments to help reinforce a sense of place. Besides its thoroughly managed quarters, he observes, emerges quarters emerged more spontaneously which, substandard as they might have been, have enjoyed a vividness perhaps not seen in the quarters more directly developed by the industry (Fig. 12.4).

Relevant as the observations and criticisms like Haghighi's are, they represent a much recurring model for modern top-down urban developments, where colonial or other ideals of efficiency, modernisation and their associated social transformation are imposed on historically evolved communities ignoring genius loci and the



**Fig. 12.4** An old map of Abadan showing refinery and other clearly demarcate quarters (NIOC)

deep-rooted built environment insights on the way. In comes, as any developing country has experienced, vehicle-friendly networks of roads, commodification of properties and new standards of public services. Out goes, however, lifestyles in harmony with nature and community, the sense of place and consistent growth. In Khuzestan's case, even as considerate and sympathetic a scheme as Shushtar New Town by Kamran Diba has suffered incompleteness and damages to the original scheme due to changes in circumstances, turning it into a no-go zone for many (Shirazi 2016, pp. 135–137).

This is, however, not necessarily the case with Abadan, notably with Braim and Bovardeh as both quarters have more or less stood the test of time and are still under a similar management system—with this management consistency and the unchanged company ownership admittedly playing parts in their stability—and used by oil industry workers. What follows is a look into how these quarters have managed to buck the trend, and whether there are lessons to learn from their survival and thriving.

## 12.6 Abadan: The Architecture of Oil Industry Settlements

Throughout their ups and downs, Company-managed oil industry settlements appear to have kept their focus on inhabitation rather than mere housing, and thereby succeeding in place making. As early as 1909, states Crinson (1997), it was recognised that everything needs to be imported into Abadan in order to develop it. This was not, however, limited to building materials and technologies, but also expanded to building types and urban design. According to Rostampour the first Western building types made its way into the region, with the peripheral massing around a courtyard giving way to a central massing surrounded by greenery, and with sanitary services and the kitchen relocated into the building. These types were mainly for higher ranks of staff, but there was in turn a hierarchy between them, on top of their distinctions from manual labourers (2016: 87). Braim, for example, housed five zones roughly corresponding with the seniority of their inhabitants. The houses, particularly those of intermediate and senior staff, were divided into 'main' inhabitants' and servants' zones. According to Crinson (*ibid.*) electrical appliances such as fans were used for ventilation. More importantly, green spaces were introduced both to moderate the harsh climatic conditions of the region and to resemble the British atmosphere for expatriates. These settlements were initially designed to inhabit isolated communities of British and other Western workers enjoying their own exclusive facilities, and without much need to be in touch with local people (Rostampour 2016, p. 91).

This isolationist approach is in line with the zoning strategies in Abadan master plan which, according to Ardalan (2010/2016) is in turn in line with modernist urban design strategies. A key figure in this period is the British architect Wilson (Crinson 1997) who was behind the implementation of Garden City and zoning ideas. He also developed detached types into semi-detached types (Ardalan 2010/2016), which was established as one of the most widely used types. The type somehow corresponded with the region's climate by eliminating exposure to sun on one side of each unit (usually east and west facing sides). This was followed later by adding garages to the detached side and thereby eliminating sun exposure for another side. The variations in designs keeping settlements away from an imposed uniformity (Rostampour 2016: 95), and also an attempt by Wilson to make use of elements of vernacular architecture (Crinson) such as flat roofs, recessed clerestory windows and occasionally playful brickworks are among reasons cited for these settlements' success. According to Rostampour Wilson's 1934 design for Bovardeh, took a step further by paying more attention to site and open spaces—no longer merely leftover spaces—and designing as many as 27 types for the southern part only. The variations in typologies also indicate the presence of an experimentalist attitude in design. There are instances of both flat roofs and additional ventilated pitched roofs acting as shading devices to the main roof. There are also experiments with high-level ventilation, external window blinds, deep verandas, and regionalist references, particularly the use of brickworks and ceramics, not to mention experiments with solid-void organisations in plots. This degree of variety, however, was not followed in later developments (Ardalan), resulting in more uniform complexes within more rigid urban grids, and thereby losing urban design qualities associated with the likes of Braim and Bovardeh.

Another important development in architectural design, though not unparalleled elsewhere in Iran, is the new houses' ability to accommodate modern appliances and furniture (Rostampour 2016, p. 97) something with profound implications on local inhabitants' ways of organising interiors, and thereby moving towards more functionally determined laying out of spaces. Also important was the introduction of piped water services (*ibid.*) which, again, contributed in another important aspect of these houses, namely, creation and maintenance of green spaces.

In terms of urban design Braim and Bovardeh are both low density quarters with plenty of open spaces and wide streets. This does not help shaping communities other than in community centres such as clubs and sports facilities. The streets, however, are carefully designed with sizeable drainage canals, and designated pedestrian and greenery lanes on both sides. Generously sized open spaces and alleyways providing access to service parts of houses are also in abundance. Many of the houses located on street corners or urban nodes enjoy special design, notably the houses designed with 'towers' at one of Bovardeh's entryways (Figs. 12.5, 12.6 and 12.7).





a. A street in Braim; the curved lines, the greenery, and designated pavements are among important features



b. Braim: Most houses are well hidden behind hedges



c. Braim: communal open spaces



d. Braim: open front gardens in semi-detached houses



e. Braim: designated service blocks' access streets



f. Braim: semi-detached servants' blocks

**Fig. 12.5** a, b, c, d, e, f Present spatial characteristics of open spaces and houses in Braim and Bovardeh, Photos by authors



a. Braim: deep verandas



b. Braim: an architecture of brick ornaments and lattices, verandas and ceiling-level ventilation



c. Braim; external blinds and ventilated secondary pitched roof



d. Bovardeh; feature tower, deep shading device and ornmented fa ade, one of the entryways



e. Braim; ventilated secondary pitched roof



f. Bovardeh; row houses with service blocks facing back street

**Fig. 12.6** a, b, c, d, e, f Present design elements of housing typologies in Braim and Bovardeh. Photos by authors



Fig. 12.7 Boverdeh; roundabout building type, Photo by authors

### 12.7 Braim, Boverdeh and the Rest

Figure 12.8 shows the master plan of Braim. Originally designed to house the Oil Company’s senior British staff, it is comprised of detached and semi-detached houses with a variety of sizes and massing, as well as communal open spaces and amenities. Whilst many units are facing north and south the flexibility of the access

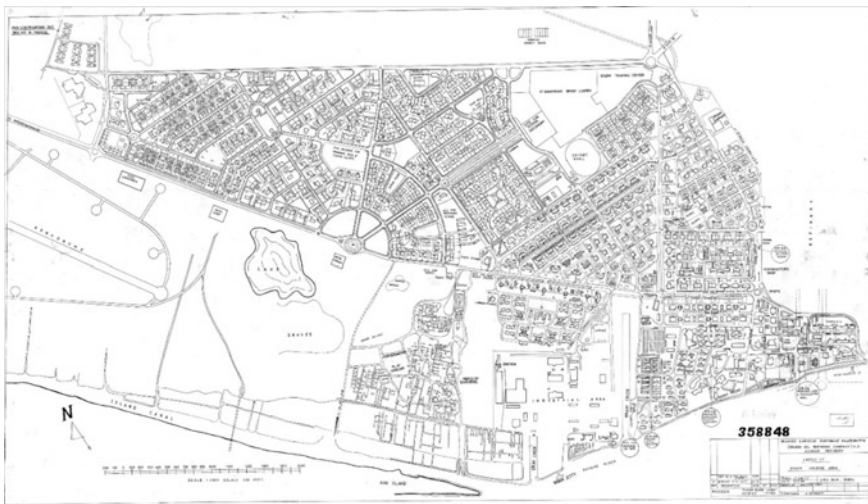
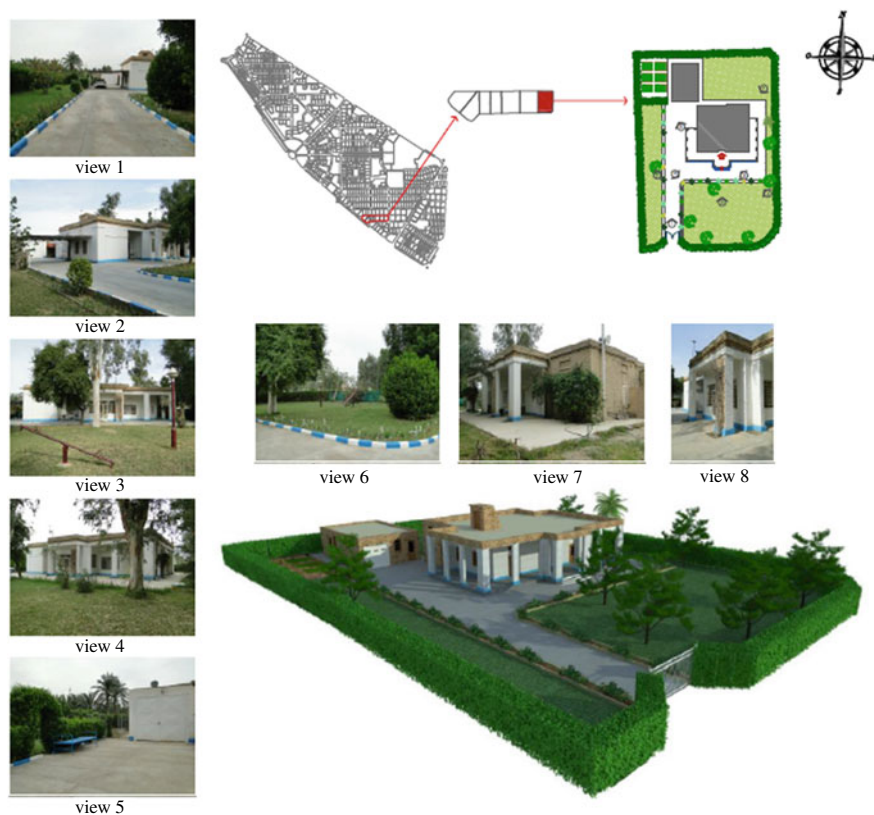


Fig. 12.8 Site plan of Braim quarter. Source NIOC



**Fig. 12.9** A detached house in Braim with a separate service block. *Source* Authors

network places the quarter far from rigid and closer to those of Garden Cities. As mentioned earlier, and despite being built in a relatively short period of time between 1925 and 1940, there is a wide range of varieties, but most types are single storey brick buildings with flat roofs, means of ventilation through ceiling and verandas.

Built for medium rank staff Bovardeh (Fig. 12.9) is divided into two parts with less greenery and relatively higher density. But the spacing between units still leaves plenty of open space, and there is still a wide variety of types, notably types designed in urban nodes. The references to regional architecture are visible in bands of ceramic ornaments on top of ornamental brickwork (Figs. 12.10, 12.11 and 12.12).

There are other quarters made by the Oil Company for their staff and labourers, which have changed hands following the post-war decline in Abadan's oil



**Fig. 12.10** A semi-detached house in Braim with secondary ventilated pitched roof, garage and service block attached to the building. *Source* Authors

industries. Lacking the Company’s management, many of these houses have undergone profound alterations and substandard reconstruction, and left in a state of dilapidation. There are, however, some original elements left, which indicate parallels with senior staff housing design strategies. These include the presence of a front, open-to-street garden, controlled daylighting through feature windows with limited openings, and ceiling-level natural ventilation. The blocking of a thorough view to street through brick curtains as well as a direct rubbish disposal system which eliminates the need for residents to appear at the door to dispose rubbish, however, are among features not repeated in senior staff quarters (Fig. 12.13).



**Fig. 12.11** A semi-detached house in Bovardeh with ‘ventilation tower’ over flat roof: a common feature in houses with flat roofs. *Source* Authors

## 12.8 Conclusion: Modernisation Through Built Environment; A Natural Failure?

In his research on the problem of identity and identification in Khuzestan’s oil towns Rostampour (2016: 64) observes that like many other instances the new settlements created by, or resulted from developing oil industries were based on entirely different modes of economic productivity: ‘modern towns based on social engineering and new economic relations based on industrial economy’. Ehsani (1999/2016: 25) states that the Oil Company architecture aimed not only at mass production of cheap, durable housing, but also at a modernisation of the traditional family structure. According to Rostampour (80):



**Fig. 12.12** Site plan of Bovardeh quarter. *Source* NIOC

This architecture neither provided adequate space to accommodate extended families—the local norm—nor allowed a productive, economic use of home. Instead, it offered new forms of sanitary services such as kitchens and bathrooms, as well as semi-fixed elements such as beds and desks ... leading to the formation of a different identity to that of families' previous identities.

Interestingly, he also observes that the success of these oil industry settlements in constructing new identities remained unmatched by others in the province, including the architecturally important New Shushtar by Kamran Diba built for sugarcane industries (84). In his attempt to investigate the reasons for this success, he points (93–95) to items such as the gradual shift of their design, particularly in their middle period (1934–1939) towards some kind of regionalist sensitivity—for example in the use of local materials and labour, an attention to the location, the use of ornaments and brickworks akin to local architecture, the provision of new alternatives for community relations through clubs, swimming pools, cinemas and schools, and also a sense of satisfaction and pride which, he argues, precedes the quality of facilities. To those, one must add other reasons discussed less explicitly by Rostampour. For example, although there is evidence of a deep history of settlements in what is now Abadan, it appears to be, at the time of the emergence of oil industries, more the site of some tribal settlements, and nothing in scale and development like, say, Dezful. This led to the formation of a new community almost entirely formed by migrants, albeit from very different backgrounds, with no recognised *genius loci* or consensus about modes of life. A *tabula rasa*, something modern architecture and urbanism is usually accused of assuming, is probably not as out of place here as it might have been in more historic contexts. The



a. Interventions in labourers' housing types



b. Labourers' type with secondary ventilated roof



c. Lattice parapet in labourers' houses providing night time habitable space at roof



d. Brick screens in labourers' quarters blocking direct view into streets



e. Built-in rubbish disposal boxes in labourers' quarters



f. Secondary ventilated roof and feature windows in labourers' quarters



g. Rundown streets in labourers' quarters

**Fig. 12.13** a, b, c, d, e, f, g Present design characteristics of labourers' quarter. *Source* Photos by authors



philanthropic ideas of Garden Cities could thus be implied with minimal risks of failure caused by its mismatch with local historic, if not climatic paradigms. These settlements actually appear to have gone further by moderating the harsh local climate through introducing significant greeneries, as well as preserving the locally desirable sense of privacy, not through impenetrable walls—as done in labourers' quarters—but through defining softer, more climate-friendly green boundaries. Furthermore, controversial as it might be, the segregationist strategies used in master planning, created communities of people who find more in common with their neighbours carrier-wise despite their possibly different ethnic backgrounds.

The successful examples of oil industry settlements such as Braim and Bovardeh belies the claim that the move away from local built environment traditions is doomed to fail, and that the capability of built environments to transform societies will always result in uprooting people and maligned communities. They have been shaped at the time of profound changes in models of economic productivity and community formation, and have at least corresponded to these emerging forms, if not engineered it towards new directions. Moreover, there have been a range of experiments to 'regionalise' buildings through climatic solutions and construction and ornamental reference, which have managed to maintain a sense of place despite entirely overhauling lifestyles and community formations. These are, of course, helped by having a functioning, consistent system of ownership and management to, by and large stop the quarters from turning into rundown areas. One might argue that such subsidised systems are no longer viable. Nor, it can be argued, are the generous open and green spaces affordable any longer in a world quickly running out of resources. There are, however, many lessons in Abadan's oil industries built environment achievements as to how to create a sense of place away from the ruthless logics of market-laden built environments, in a context of politically charged, top-down decision makings in a modernising society.

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