

The Opportunistic House for Tehran: A Design Prototype

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ABSTRACT

This article is an advocacy research for Tehran, promoting an implication of architectural design as a tool for citizen empowerment and positive environmental change. In the article, I am offering a fresh look at Tehran's housing problems by speculating an "opportunistic house" typology as a residential style that would serve much more than just shelter. I am making a case for a new house prototype that applies socially-equitable solutions in design. My study finds applications and significance beyond plain housing design and, mainly, onto the design of *ad hoc* urban public realm spaces. This is in accord with my overarching mission of supporting new way of thinking about, and ultimately offering, welcoming, safe, and energized places for Tehran's citizens. These will additionally have important implications for inhospitable public spaces worldwide. This research is grounded in my prior, multidisciplinary doctoral studies. The article itself is an initial step in my ongoing research design, of helping to build and revitalize a wide range of urban communities by nurturing their relationship to their built and natural environments. The article is a discussion around the following questions. How can housing design inventions empower citizens? In what manner can design offer progressive living place options whose services go beyond shelter needs? Particularly, in what ways can domestic spaces be designed to also embody other-than-living capacities, for example, for new kinds of public spaces? And eventually, what could a prototype of the

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opportunistic house look like in the context of a city like Tehran? The article is structured to first present a brief survey of how Tehran house forms and functions have developed historically, with more emphasis on their current state. It will then offer examples of opportunistic uses of domestic spaces in Tehran. This notion is communicated through narrative analysis and photographic vignettes from a few Iranian films. Through the selection, I show, for example, how and where informal economies are shaping inside Tehran apartments. Next, the article will identify possibilities and spaces in current houses that are and have the potentials to be used in resourceful ways. Based on the steps indicated, analyzing people needs and artifact interpretations, I will conclude with a design proposal of a new infill apartment house. The final proposal will include theoretical statements about possible design interventions and a visual prototypical elaboration through imageries and conceptual renderings. The resultant prototype becomes one example of possible houses that could serve as catalysts for informative, inspiring, and state-of-the-art practices, a precedent in Tehran for others to build upon.

Keywords: Tehran, Housing, Design Prototype, Informal Economy, Architecture in Film.

INTRODUCTION

In the fall of 1995, after resigning from my last academic post, I decided to indulge myself and fulfill a dream. I chose seven of my best and most committed students and invited them to come to my home every Thursday morning to discuss literature.... We gathered in my living room.... Here they come. First I hear the bell, a pause, and the closing of the street door. Then I hear footsteps coming up the winding staircase and past my mother's apartment. Each girl, as soon as she reaches the door, takes off her robe and scarf, sometimes shaking her head from side to side... That room... has gained a different status in my mind's eye now that it has become the precious object of memory.... That room, for all of us, became a place of transgression. What a wonderland it was! Sitting around the large coffee table covered with bouquets of flowers, we moved in and out of the novels we read. We were, to borrow from Nabokov, to experience how the ordinary pebble of ordinary life could be transformed into a jewel through the magic eye of fiction.

Reading Lolita in Tehran (Nafisi, 2003)

Everyone deserves to live, work, and socialize in buildings and sites that engage good and just environmental design. Essentially, everyone deserves living in a house that serves as more than shelter. I call this an “opportunistic house,” a residential typology that every city should offer within the means of its average citizens. In many cities, large and small, public and private spaces could embed hostilities towards users. Tehran is not an exception. Tehran needs safer, more, and further innovative housing options. Safer homes are needed as, according to the International Institute of Earthquake Engineering and Seismology, Tehran is on major active fault lines and is highly vulnerable to earthquakes. Evidenced by personal lived-experience and fieldworks in the context, space for new housing is limited, housing is very expensive, and new housing is banal and poorly adapted to the needs of diverse residents. In addition, the city lacks accessible and welcoming public spaces, and they are especially restrictive for women due to threats of being stopped by the moral police. Also, streets and sidewalks lack some of the most basic standards of safety and access. In such a context, a further creative and adaptable house can offer unconventional spaces for new types of uses, similar to those at the Nafisi’s ordinary living-room space. Through place-making efforts of users, a modest private room became an empowering place, a space turned into a rare social place for emancipation. This became a place away from existing public space constraints where the girls of the story could come together at ease in Tehran to read *Lolita*.

Future Tehran has definite needs for basic living options as well as for innovative housing typologies that expand beyond such minimums¹. In advocacy for all Tehrani citizens, the article concludes with a house design prototype that, beyond a roof to live under, serves as public space likewise. This type is more than a utilitarian architecture to frame what is worthy of human dwelling, a place for satisfying wishes and housing dreams. The general idea of the prototype is to insert and espouse ancillary, semi-private spaces with domestic spaces to serve social purposes. The most common residential building types that exist today in Tehran are banal and non-descript flat apartments. Housed within three-to-five story edifices on limited grounds, these flats offer just a little more than shelter. The prototype is an idea to programmatically, spatially, and socially activate those non-descript architectures. In addition to being stable, efficient, reasonably-priced, healthy, comfortable and secure, the prototype embeds healing and nurturing, creates productive spaces, and embody new spatial capacities for novel sociability in Tehran. These are spaces for activities that support individual, social, and economic growth by fostering the creation of places for entrepreneurship, impromptu gathering and small business opportunities. The segments of Tehran population that perhaps would most benefit from creative uses of the design prototype’s domestic social spaces are entrepreneurs, especially female, as well as artist and avant-garde populations.

To entrepreneurs, the opportunistic house can offer spaces for informal economies that become places for generating goods and services. Iran embeds assets in terms of human capital, creative class, and global creativity (Figure 1). Evidenced by research in context, markets based at homes play a significant role in Iran’s economic access and diversification, aspects not well broadcasted about Iran. In the recent years, local and global media have partially reflected on some of the successes of Iran’s entrepreneurship². There are other, I would call,

low-tech entrepreneurial landscapes in Iran that are yet receiving little to no discussion. These are long-in-existence landscapes composed of tax-free businesses at homes, forging and making up for an integral part of the country’s post-revolution economies. In fact, semi-private spaces of such landscapes generate additional significance as especially important outlets for female entrepreneurs who were barred from and/or restricted in the workplace. The intrusion of female-led businesses in domestic spaces is a common theme that also at times becomes an urban issue in Tehran.

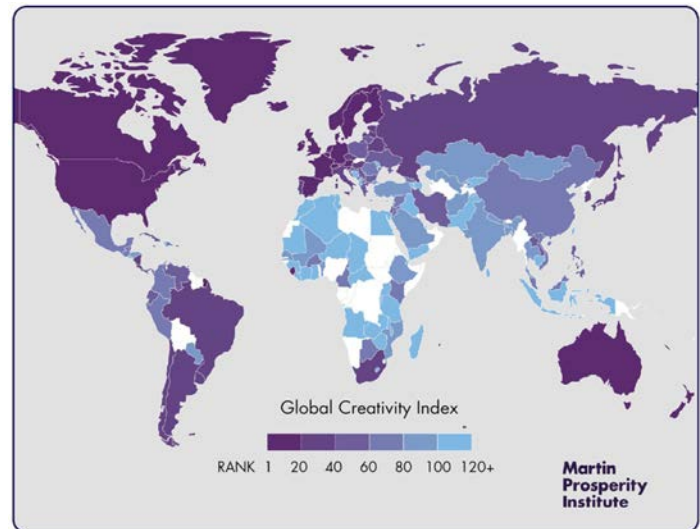


Exhibit 10: The Global Creativity Index map

Figure 1: In the Martin Wealth Institute’s 2015 report of creative economies, Iran ranks relatively high. This is relative to the country’s many faced challenges, to name a few: lengthy cycles of global isolation, world sanctions, resource shortage for its populations, and partial dysfunctionality of its internal politics. (Map Source: www.martinprosperity.org).

For female entrepreneurs, the house is not just a home, but the place for economic exchange and social opportunity. It is by far their most desired public space to *be*, *work* and *hangout*. Despite legal and cultural unfairness at many areas,³ Iranian women have made successful attempts to gain financial and social independence. For example, female entrepreneurs have started and run tax-free businesses in available spaces of their homes. They do so to earn income, access otherwise unattainable consumer goods, and, more important than that, to participate in relatively unrestricted social environments, although, such encroaching workspaces have imposed dilemmas at the neighborhood scale. In some apartments, the informal economies inside private properties have become a source of neighbor discontent. They are seen as invasive workspace due to public trespassers that shorten privacy and safety of residential properties. The other side of the story is that for some stay-at-home women these spaces are their only choice for financial and social independence.

Publicly-restricted activities, in addition to the entrepreneurial spaces, may also find their ways into the new domestic spaces envisioned in the

design prototype. An example of that are the experimental platforms for alternative art/culture venues used for avant-garde artistic productions, unofficial musical events (notably rock bands), and as hangout spots. Due to drastic socio-political shifts in the country after the Islamic revolution, mainly the creation of a religious state based on Islamic principles, a larger sector of Iran's 21st-century social spaces, particularly in Tehran, have gone underground. Going back in history and prior to the nineteenth century, the main Iranian public spaces were neighborhood centers, bazaars, and mosques (Kheirabadi 2000; & Tafahomi et al 2007). The early twentieth century changes under Reza Shah Pahlavi reversed the use of interior and exterior spaces, as a new urban grid reversed traditional house-street relations (Marefat 1988). Reza Shah Pahlavi's modernization plan in the 1920s to 1930s also changed attitudes towards domestic surroundings; the courtyard as a predominantly feminine social gathering place disappeared and new places offered more choices for men and women to meet outside the houses. Later, in the 1960s and 1970s under the rule of his son, Mohammad Reza Shah, the modernization continued to manifest itself in a changed urban scene. The Shah's wife, Farah Pahlavi played a significant role in those shifts. Avant-garde art and cultural venues started to appear as new places for socializing that since have opened many Iranians to urbane lifestyles in larger cities. At that time, public spaces for socializing further diversified in the capital, ranging from nightclubs and bars, to places where one could hear contemporary music, go to cultural events, and attend folkloric art exhibitions. The 1979 revolution reversed these social and cultural landscapes in larger Iranian cities. During the Pahlavi regime, men and women, who had taken social roles outside home, had become used to culturally diverse and mixed gender public spaces. When the new state banned some contemporary art and culture opportunities after 1979, creative Tehranis did not surrender. They have

since been exploiting the residual and forgotten spaces of their homes to create hand-made versions of those spaces, in basements, rooftops, and indeed any available space to explore, expand, and enhance their identity.

RESEARCH METHODOLOGY

The article is resulted from a design-research combining qualitative and interpretive-historical strategies, which at the end is coupled with conceptual modelling. Auto-ethnography is used to assemble thorough accounts of the social context. It is used over ethnography because I am a recent citizen of Tehran and as the researcher have had a relatively subjective and self-reflexive role. I traveled to Tehran two times, in 2011 and 2013 to complete fieldwork, each for approximately four months. While in Tehran, I observed urban spaces and conducted semi-structured interviews with a diverse range of citizens. In addition to studying in the context, I examined such other sources as: archival information, building codes, urban design guidelines, implemented/theoretical projects, published/not published materials, and urban artifacts such as films, novels, memoirs, and other media. Collected data was analyzed via interpretation and, for the ease of categorization and the final accounts were grouped under the three distinct made-up themes of tactile, abstract, and surreal. The "tactile" category included concrete accounts to explain spirits, manners, and actions of private and public selves and bodies. The "abstract" category contained concepts that helped explaining the qualities of spaces, such as linguistic tropes and metaphors. The "surreal" dimension as the most unique feature of the study offered deeper understandings of the context through the urban artifacts that are discussing the city. Those were mostly films, art, novels, memoirs, comics, media, and journalistic matters. Urban artifacts had

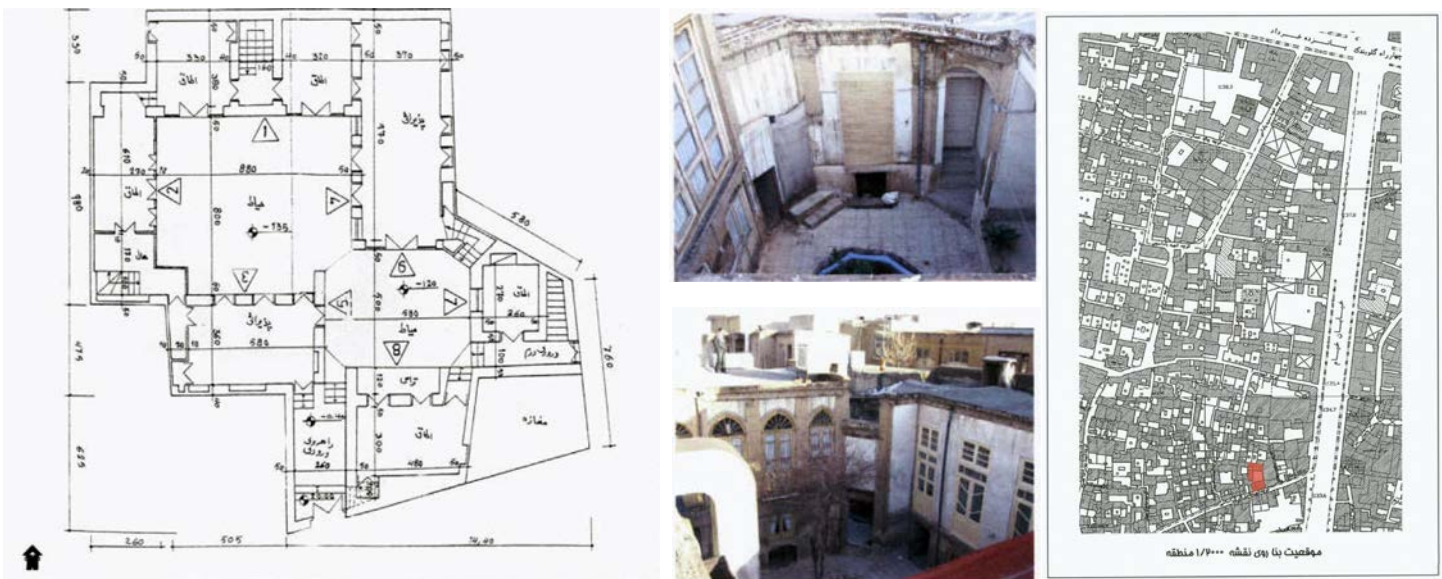


Figure 2: This early-20th-century courtyard house was built at the time of Qajars and is located on Khayam Street of Old Tehran. The house belonged to famous Iranian writer and philosopher Jalal Al-e-Ahmad. (Courtesy of the Archives of Iran's Organization for Cultural Heritage and Tourism).

much to offer that informed the presented design theory and the actual prototype. This was important because, while designers are the ones directly shaping urban forms of cities, there are also novelists, artists, journalists, philosophers and filmmakers who are constantly examining the designed products of such urban operations and processes. I looked more closely at Iranian films in line with my belief of films being an excellent medium for revealing urban experiences.

1. Tehran House Evolution

Tehran houses have historically ranged from ancient subterranean, to traditional courtyard, to frontage houses of which the current nondescript apartment houses are a descendant. Pre-11th century Tehran was a village of underground dwellings that protected residents from enemies and bandits. The Islamic cultures popularized courtyard houses that were introverted, secluded, and faceless in the outside (Figure 2). Such houses offered protection against weather conditions

Frontage houses developed a rather indistinct boundary between the private and public spaces in and around. This made the new houses more suitable for emerging modern families of the time whose lifestyle and culture were undergoing dramatic changes.

Pahlavi's urban renewal project in the 1920s -1930s was the significant force behind housing change from courtyard to frontage styles (Figure 3). The renewal resulted in the city's expansion on an open matrix of orthogonal grids with modern streets, boulevards, and infrastructures. Prior to the renewal, the city was not layered on regular street grids and courtyard houses formed on randomly divided land plots. The new structure reversed the traditional house-street connection. New houses had to follow regular land divisions based on a new grid and facing new streets. Founding of Iran's first architecture school created a second force of housing change. Early emerging Iranian modernist architects and returning alumni educated abroad promoted a new, mostly, experimental culture of housing design and construction, which

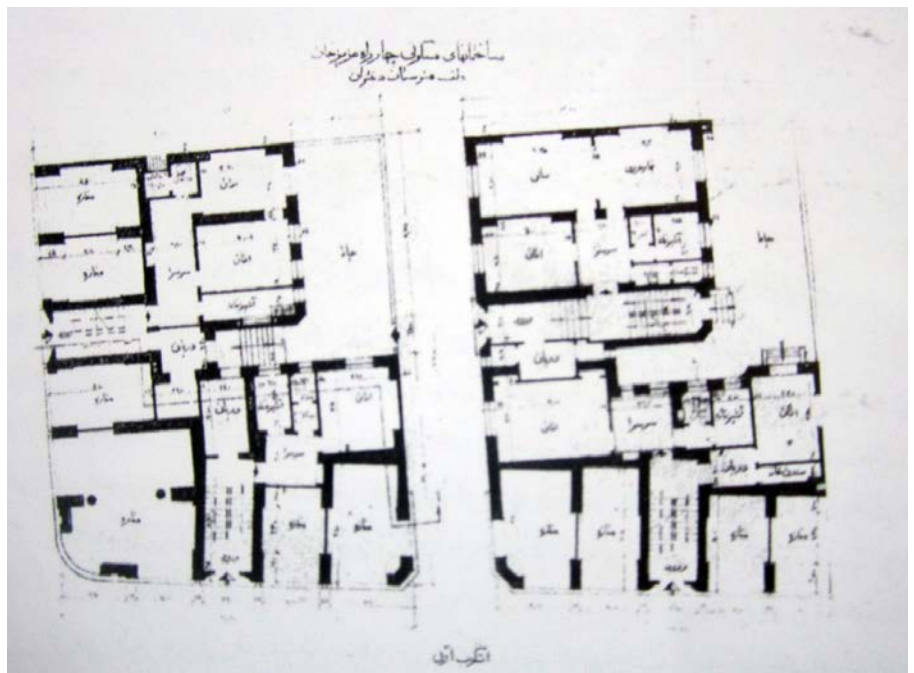


Figure 3: This mid-20th-century frontage house was built during the first Pahlavi period. Known as Jami House, this mixed-use commercial-residential building was designed by Vartan Havanesian with two buildings located at the corner of Hafez and Jami streets in Tehran (Source: Honar e Memari magazine, No. 25, p. 6).

and became suitable for the high privacy needs of conservatively-Muslim Iranian families of the time. Courtyard houses were self-sufficient; the kitchen was small, but the house offered a large underground storage space for storing non-perishable edibles such as rice, grains, and dried fruits (Marefat 1988). The courtyard was the central house feature, unifying the built and open spaces and making inner circulations legible. It was the heart and the social hub of the house and a naturally-ventilated light/air gateway. Towards the mid-twentieth century, frontage houses replaced the courtyard house, new housing types with faces, more apertures and exterior ornamentations (Marefat 1988).

had until then been the monopoly of craftsmen builders. A third force of housing change was the altering needs and roles of Iranian women inside and outside the home. In the courtyard houses, the most private courtyard space was designed to seclude a female socializing zone that, halfway through the twentieth century, became obsolete. Women no longer needed the courtyard as their only retreat, as Tehran was offering new social spaces outside home. In addition to that, western-style furnishings, home goods, and kitchen appliances were saving modern housewives' time at home.

As descendants of the 20th-century frontage houses, the majority of Tehran's urban landscape today is filled with dull and non-descript apartment buildings (Figure 4). Duplicate floorplans are shaped inside three-to-five-story, characterless buildings, mostly facing minor streets (Figure 5). Tightly attached with limited space between adjacent buildings, they sit in densely packed rows on regular land plots. These ordinary buildings have minimal open space either outside or within. A shared staircase and elevator on the front offers residents access to



Figure 4: The urban landscape of a typical contemporary middle-class neighborhood in Tehran.

A typical plan description of Tehran's ordinary flats is as followed. The kitchen is located near the entrance door. It gazes at the living room and/or guestroom through an open counter. The living room is more modest and the guestroom is more ceremonious. The guestroom is the finest and most spacious room of the house. The living room narrows into a tight corridor and lead to one, two, or at most three small bedrooms sharing one bathroom with a shower. Better bedrooms are those with unblocked walls that can have opening to the outside. Other bedrooms may have exterior faces that are blocked by neighboring properties, a common issue caused by tight building arrangements on the city block. In such cases, a building code requires a minimum of 2-3 square-meter void space called the reclusive yard. This is like an inserted cuboid that works as a light-well for air and daylight. A reclusive yard is only accessible from the ground level, and on the upper floors, it only has interior windows. Ordinary apartment houses have no courtyard, but a reclusive yard can be seen as their unusable version of a courtyard: impractically small, dark and dim. Generic masses locate at the north side of land plots, taking up no greater than sixty percent of the entire site. A code dictates the yard feature on either property ends. Having replaced the courtyard feature halfway through the twentieth century, the yard should take up at least forty percent of the entire site.

Non-descript Tehran houses are also a product of hasty housing markets of the 1970s caused by large urban-rural migrations and irregular population growth. The 1973's OPEC oil price increase also turned the Pahlavi dynasty's last six years into a building boom (Ardalan, 1986).



Figure 5: Characterless residential buildings facing minor streets.

upper floors. There are no spacious lobbies. They have no courtyard, spacious balconies, or any splendid gardens. Unlike some high-end North Tehran apartments featured in architectural magazines, ordinary buildings do not have remarkable design elements and distinguishing features. Despite complying with minimum codes, square footage, safety, light and air, access and egress, these buildings have poor tectonics and inferior interior qualities. They are constructed with low, at most, average construction materials, weak joineries, cheap furnaces, and poorly executed final finishing. They often adopt similar floor plan arrangements, space layouts, and interior connections, thus creating identical unexciting envelopes, distinguishable from their neighbors only by superficial and kitsch decorations.

As more people were migrating to the capital in search of new jobs, inexpensive housing became a state and professional concern. Building affordable housing has become a state challenge since the 1970s and an issue tackled by every candidate running for presidency after the revolution. To ease housing needs over the years, the state has been providing public funding and land subsidies to plan inexpensive housing for white and blue-collar workers such as the institutional housing schemes in the 1980s, satellite towns and Navab project in the 1990s, and more recent scheme of Mehr housing (Figure 6). All these state-sponsored programs have produced uncomfortable densities, incongruent communities, and poor-quality residential buildings that lacking effective infrastructural bases, architectural character, inside

amenities, and public spaces. Concurrent private construction has proved no better. Except for a few photogenic buildings featuring in architectural journals, most private construction is unattractive. Their quality has been negatively affected by building material shortages, high costs, and instabilities coupled with other uncertainties in Tehran’s housing market.

2. Tehran House in Film

As a means to illustrate some of the opportunistic uses of domestic spaces, this section of the article presents interpretive narratives on a selection of Iranian films. This is to show some of the specificities in such spaces, not from the researcher’s viewpoints, but, through the filmmakers’ accounts of them. The city and cinema have mutual connections where the spaces that each generates support and enhance the experiences of the other. The examination of Iranian films in this article allows an idealized view into the opportunistic uses of Tehran’s domestic spaces. Iranian cinema is an excellent medium for revealing some of the most ephemeral urban experiences. It is capturing the mentalities of the modern Iranian society still in transition. Films reflect many of the inner operations of the city, mostly, the inner and outer lives of its people. The lens through which Iranian filmmakers look at the city

is unique, and from the most to the least fictive, there is an underlying exploration of reality.

The selected films embed documented moments of how design practices have shaped Tehran and influenced the cultural landscape of its private and public spaces. Iran is unique in terms of its socio-political constraints. The state has imposed regulations in terms of public rights to freedom of expression. As a result, cinema has become the most poetic, enlightening, and powerful tool to uncover some of the unspoken issues such as the interwoven power relations within the city’s spaces. The selected films are examples to reveal that, despite unpromising aspects associated with most of the non-descript apartment houses, they still are filled with potentials. These are opportunities discovered by the people in their current residual or unused spaces within and around Tehran’s contemporary residential architecture. Any space in Tehran basements, rooftops, or even ordinary rooms in apartment flats today serves many purposes: venues for concerts, theater, fashion shows, even wedding receptions and parties, and in some houses as informal businesses. In basements, of course the original, authorized—indeed code mandated—function is parking. Typical apartment houses must offer a minimum of one parking space per tenant, but this clearly functional space exists also in the realm of the imagination; the basement is where the private



Figure 7: *The Tenants* (Extracted film shots courtesy of the filmmaker).

and public boundaries blur; as Nooshin (2005) notes, a “liminal space” where young and novice artists and musicians often start their careers.

2.1 *The Tenants (1986)*

The Tenants, a social comedy by Dariush Mehrjui, looks into substandard housing constructions emerging in the post-revolutionary housing market chaos and the kinds of practices engaged in their production. The plot is timed in the decade followed by 1979 Iranian revolution. The main cinematic location is a substandard apartment building with typical housing units inside. In the entire dull building location, the rooftop and the small, cubic-like room on the rooftop that is called a “kharposhteh” are the only exceptional and nurturing places. The building is constructed with a kitsch shoebox-like architectural character, punched-hole windows, and a naive eclecticism in the façade expression. The entrance is decorated with two mock-Corinthian columns and a random blue-brick ribbon running throughout the exterior. The entire building is in a run-down condition. Housing units are crumbling; their features and furnaces are falling apart due to wrong engineering, weak foundation, and poor construction. The kharposhteh is rented and appropriated by a creative and romantic opera-singer who creates a delightful roof garden that becomes the sole memorable image of the cinematic setting. He invents a drip irrigation system for his rooftop greenery that, overtime, undermines the building’s structure. The city is a filmic background. The film shows 1980s Tehran on much undeveloped land. Low-rise, characterless apartment houses surround the main location and the neighborhood appears dull and empty on screen. The film opens up with a few emerging higher-density modern constructions dating from the 1970s. The building is a metaphor for all that is rotten, greed-driven, and fake in society. The one bright spot is the roof where the creative resident creates the small and lovely garden. It is this small gesture that undermines all that is bad in society. A small leak brings down the whole thing (Figure 7).

Line 1 – The film setting is a typical, poorly constructed building with rentals units inside and an atypically delightful roof space at the top.

Line 2 – The film represents Tehran in the 1980s with much undeveloped land and mostly low-rise constructions. The City-established new regulations of the time increase density.

Line 3 – The film setting is a battleground between different agents against the house. The building has no current owner. The actual owner, an ex-regime supporter, fled the country after the revolution and got killed with his family in a train accident abroad. The building has an in-house manager. He poorly maintains the units. He knows the truth about the former owner’s sudden death, but hides it from the tenants. He lives at the building, but intentionally refuses repairs to help accelerating the building’s demolition. He colludes with a corrupted local agency in forging a new property title deed in his name. They want to force the tenants to leave the building, topple the existing structure, and collaborate on a profitable high-rise apartment development on the land. The architect, a long-time student of architecture also living at the building, denies responsibility for any building malfunction. The building malfunctions and gradual decay bring about constant tenant-tenant and tenants-manager clashes. Tenants are constantly asking and doing while the manager is resisting repairs to force them to leave the building.

Line 4 - The rooftop leakage, manager’s intentional neglect for repairs, and tenants’ amateurish patches contribute to the building’s failure. A dramatic flattening ends the film.

2.2 *Tambourine (2008)*

Tambourine, a satirical movie directed by Parisa Bakhtavar, brings to the surface how cultural differences between sharing neighbors make incongruent communities in an average Tehran apartment. This film uses the semi-private space of an apartment rooftop as a main mise-en-scène to expose clashes over the rights to control this shared space. The film collages multiple narratives in a North Tehran middle-class apartment setting: cultural class disparities, fuzzy public-private boundaries, right to the house shared-space, and unresolved apartment living relations. The rooftop is a domestic semi-public domain where some of these issues play out. Here sophisticated North Tehran residents now must confront newly rich and religiously orthodox residents who formerly lived in South Tehran. The apartment building is a microcosm of the culturally divided larger society. The rooftop is the dramatic location where disparate classes mingle and shape new identities. Since the 1990s, rooftops became the optimal location for satellite dishes, which also became a source of clash between neighbors. By the film’s end, the



Figure 8: *Tambourine* (Extracted film shots courtesy of the filmmaker).

rooftop has become a collective place, a domestic site, and a common ground of discourse and reconciliation where neighbors find consensus through exchange of ideas and the acceptance of the other (Figure 8).

Line 1 – In most Tehran apartments, rooftops accommodate satellite dishes. In the film, the rooftop is a domestic site of culture-war clashes between neighbors. By the film’s end, the rooftop has also become a collective place of reconciliation, self-expression, and democratic discourse, all leading to a better acceptance of the other. Except for one neighbor who is orthodox, all others have dishes on the roof. The atypical neighbor is a nouveau-riche family newly arrived from poorer South Tehran. The family is not used to the social life of a shared apartment house, and sees the rooftop as their private domain. The wife hangs clothes on the rooftop while her husband fumes about his neighbors’ satellite dishes as immoral and anti-religious.

Line 2 – A young, unsophisticated South Tehran satellite-installer enters the North Tehran apartment to reinstall dislocated satellites flipped the previous night due to windy weather. He is educated but underemployed, and installing dishes is his second job and informal economic source. A state law forbids any household possession of satellite dishes. Since the 1990s’ introduction of satellites to Iran, the moral police force has randomly raided many homes and their semi-public domain of the rooftop, collected the dishes, and fined their possessors.

2.3 Fireworks Wednesday (2006)

Fireworks Wednesday, an urban drama directed by Asghar Farhadi, reveals the unremitting grimness of an average apartment house in Tehran and how over-crowding, uncomfortable next-door interactions, and workspace intrusion become everyday challenges. The film is a drama of location. It digs into a day in the life of a typical poorly built 1990s’ apartment where uncomfortable densities, thin walls, and intrusive informal workspaces make privacy impossible. The film is a close-up at how such issues can impact personal behaviors and interpersonal relations. The poorly constructed building is also overcrowded, where thin partitions offer little privacy and neighbors have to encounter each other in a manner that their daily affairs meddle to a greater extent. The film brings to the surface a common urban issue in Tehran, female-led business intrusion in domestic spaces. Some women attempt to gain financial and social independence by starting businesses in their homes. In many apartments, informal economies inside private properties become a source of neighbor discontent. This is mostly due to public trespassers that lessen privacy and safety. Although an invasive workspace can diminish an apartment building’s safety and privacy, this may be the only choice of a stay-at-home woman for financial and social independence (Figure 9).

Line 1 – The film begins with Roohangiz entering Mojdeh’s apartment



Figure 9: *Fireworks Wednesday* (Extracted film shots courtesy of the filmmaker).

unit to help in spring-cleaning. Roohangiz, a commuter living in Tehran outskirts, travels to the city everyday for work.

Line 2 – Mojdeh is a sad housewife who is entrapped in her everyday-life monotony. She, despite her education, stays at home. Her house is not a nurturing place, a dismal and overcrowded apartment unit with dull exteriors and thin walls.

Line 3 – Simin is a neighbor at the building, a single-mom divorcee who is in a hidden love affair with Mojdeh's husband. She is a tenant who also runs an unauthorized beauty salon at her rental unit. Simin should soon move out of the unit as the owner receives much complain about her intrusive business.

they want. The film's mise-en-scene is emerging interstice spatiality, the rousing underground semi-public spaces that break the normative differences between public and private spaces that people are used to in the West. *My Tehran for Sale* digs out this *other* intermediate zone inside the houses that is an unclear middle layer of space that people are trying to form, which is placed between the public and personal private spaces. Social networking often facilitates the space formation where people get together at clandestinely-advertised gatherings hidden from the moral police (Figure 10).

The story mostly engages a main female character, her friends and partner, and the underground mime theater group she is associated with



Figure 10: *My Tehran for Sale* (Extracted film shots courtesy of the filmmaker).

Line 4 – Mojdeh sends Roohangiz to Simin's home-salon to discover more about the secret affair.

2.4 *My Tehran for Sale* (2009)

My Tehran for Sale by Granaz Moussavi is an independent film that mostly takes residual or unused spaces within and around Tehran's residential architecture as its locations and shows how they serve other purposes. For example, the camera moves us through Tehran basements, a mostly soundproof zone and hidden from the state oversight. The film brings to surface a fascinating close-up picture of the vibrant and clandestine, and precarious underground cultural landscape of Tehran. It shows that despite their many struggles young talented Tehranis find home-based outlets for their creative expression. Iranian public space is strictly restricted for all kinds of people in terms of what can and cannot be expressed as words and behaviors, and what men and women, young and old, can wear and do on the streets. Yet, behind closed doors inside houses are different where Iranians have a lot of freedom to do what

who are not allowed to perform in public. The background architecture of the film is a series of locations the characters use to stage their performances and house social events. The spaces range from ordinary apartment basements [where they act], to leftovers of undeveloped land on the Alborz Mountain top [where they sing], to a stinky stable of the city outskirts private villa [where they hold get-together rave parties].

2.5 *No One Knows about Persian Cats* (2009)

Similar to the previous film, *No One Knows about Persian Cats* by Bahman Ghobadi is another independent film that provides cinematic documentations of Tehran's grass-roots counter-cultures and subversive landscape of artistic productions. The film is a brave venture against cultural repression, a true tale of young Iranian musicians, real underground bands as film characters. Considered by the state as hooligans whose performance is banned, they are on a journey to relocate their band to Europe, but also on a dangerous mission to play their last piece in Tehran (Figure 11).

In the stills from, the basement is an active location, coupled with others such as the rooftop and the barn, where the unauthorized indie-rock bands practice and perform secretive concerts. New music genres develop that merge local and global tastes.

3. Tehran House Possibilities

As the examined cinematic probes have revealed, despite many unpromising aspects associated with non-descript apartment houses, the citizens have creatively seized and opportunistically consumed in them any bit of possible space that could be found. This section of the article looks at the tacit knowledge generated through such uses,

but they could, instead, focus on them as opportunities to inform design thinking.

The informal economy is one of the user-driven opportunistic uses of Tehran's domestic spaces. As the concept of the house and housewife have been interconnected, understanding women's roles and practices in domestic spaces can offer clues to improving residential environments. For many Tehrani women, the house is not just a home but also a place of business. As such, the home may also be the locus of female economic and social exchange. As revealed in *Fireworks Wednesday*, these home businesses can lead to safety and privacy issues among the



Figure 11: *No One Knows about Persian Cats* (Extracted film shots courtesy of the filmmaker).

as didactic possibilities for designers to take cues from in adaptive reuse or for integration into new house design prototypes. People's adaptable ways of using those spaces present capacities to be learned from for creating novel spaces in Tehran houses capable in offering unconventional opportunities for social interaction. Public/semi-public spaces outside Tehran houses are often not very accessible to everyone due to state regulations and/or relatively expensive admissions. Compared to those, these domestic residual spaces are accessible, easily reused and repurposed that Tehranis appropriate and turn into productive places. These possibilities appear below, within, and between typical apartments: in obsolete swimming pools, clandestine basements, balconies, reclusive yards, and imperceptible rooftops. The residents are animating house basements and rooftops as art, music, and party venues and run entrepreneurial and tax-free, home-based businesses. Such adaptations are especially valuable for younger residents and women. Iran is a country where rampant inflation has put home ownership beyond the reach of most young Tehranis and the women's activities outside the home are severely circumscribed. By creatively using these residual spaces, even the most non-descript apartment houses can take in inexpensive living options, informal places of human contact, and integrative alternatives for in-house work and socializing. Design professionals often overlook these mundane spaces,

residents and certainly can strain relations among neighbors. However, these unauthorized businesses are many stay-at-home women's only source of emancipation and inspiration, and their only chance for financial independence. These women use the house not just as a place where they live, the "first place" in Ray Oldenburg (1989) terminology, but also as their "second place," where they work, and "third place," where they hangout, one used as a place for leisure time purposes. The home-based beauty salon is a popular female-led business type in Tehran apartments, which *Firework Wednesday* helps revealing. Many Tehrani women choose going to such local beauty salons over other more famous and pricey urban salons in order to avoid commuting in Tehran's traffic.

In addition to the salons, Mezones, art/music/theatre venues, fashion runway, and public kitchen are some other typical examples of home-based female-led businesses. Adapted from the French term *maison* (house), *mezon* refers to a place that is not a store, but accommodates fashion garment businesses. Tehran *mezones* mostly form interior residential settings. Women traveling to neighboring countries such as Turkey and Dubai bring back items to sell at their home *mezones*. My discussions with research participants in Tehran revealed that these women sometimes pass the excess items through airport customs via

smugglers and hire working-class female tailors from South Tehran to replicate the imported items. Creative venues are other types that women use their houses for. After the revolution, state laws forbid women singing in public unless in a choir. Although the state has been silencing the voices of many talented women, several of them have creatively reclaimed their domestic spaces to hold classes, rehearsals, and concerts. Using the house as a creative venue does not just affect women; restrictions have forced both male and female avant-garde to seek alternative venues. Clandestine Tehran fashion shows go underground at Tehran houses. The exhibits feature outfits forbidden by Islamic dress codes and, particularly, the parading of them before mixed audiences. While I was in Tehran in 2013, I had a conversation with a founder of the Zarir Fashion Design. This firm is one of the most successful entrepreneurial home-based businesses that had bloomed in an ordinary North Tehran residential apartment basement (Figure 12).

Established in 2002, Zarir is well known for its luxury brand mantos. A manto is the most common long-sleeved, knee-length everyday apparel that, based on the state's dress codes, is the minimum form of body

coverage for the Iranian women in public. Zarir was founded by three young and talented textile-engineering graduates in a basement in Tehran's Velenjak neighborhood. Simple space makeovers were made to accommodate seasonal manto shows. The company helps the low-income South Tehran women and their families by paying them for tailoring services. Zarir has exports overseas and is a choice of Iranian artists, musicians, and TV stars.

Left: The simple basement interior held Zarir's fall 2011 collection. The company made simple changes to the basement's interior space. The space is minimal. Clothing racks are efficiently placed against the walls to accommodate Zarir's seasonal fashion shows. The collection theme on Russian nesting dolls celebrated womanhood, fertility and creation. (Photo by Author).

Right: The fabrics apply novelty in their use of colors, merging of modern and traditional patterns, and tailoring and printing production. In its first-ever fashion shots from Iran, FSHN Magazine featured the works of Zarir Design in October 2013. (Photo Courtesy of Afra Pourdad).

3.1 Obsolete Perforations: Abandoned Swimming Pools

Tehran's abandoned swimming pools are adaptive reuse opportunity sites. These blue holes punching the landscape are left behind from the revolution. Among the analyzed mid-twentieth century changes, from introvert vernacular to extrovert modern house, swimming pools were added in middle and upper class Tehran houses and, later in the 1970s, in the lofty apartment buildings. Swimming pools replaced the middle fountain of the courtyards predominantly used for rinsing dishes and washing clothes. After the Islamic revolution, however, many of these outdoor pools lost their actual purpose. The pools became unusable due to issues of privacy and control. As adjacent buildings became taller, pools and their users became more visible. Many eyes—male



Figure 12: Zarir Design (Photo Courtesy of Afra Pourdad).

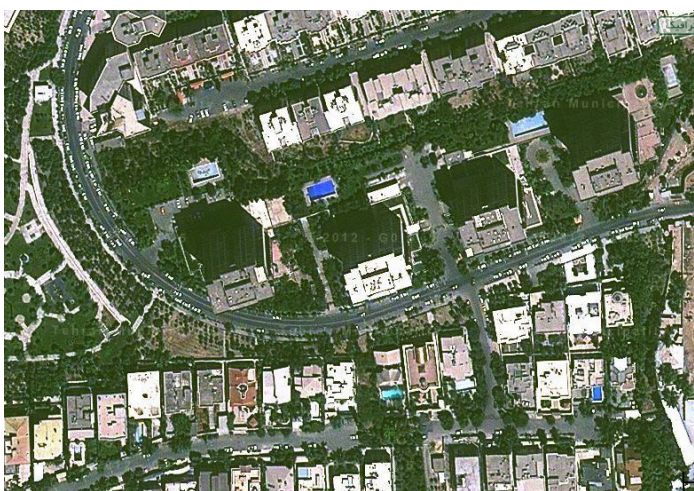


Figure 13: Left: Blue rectangles in the aerial are abandoned swimming pools in a block (Source: Google Map) Right: Ave Furniture Gallery (Courtesy of Fluid Motion Architects)

eyes—could gaze at the swimmers. Such a situation violated the state’s privacy and dress codes. The pools were emptied. Yet, as the aerial view reveals (Figure 13), the pools still exist. Often the abandoned pool is merely filled with soil then sodden for greenspace or paved for parking. One creative exception is the Ave Furniture Gallery, an adaptive reuse project by architect Reza Daneshmir (Figure 13). The adjacent multi-story residential building made the private pool visible and unusable, so the client, an artist, hired the architect to turn his private villa-house pool into an art gallery. The project has repurposed this 2,000sf perforation as a unique art venue. The design took advantage of the pool’s existing physical attributes: its sloped bottom, rising depth, and open surrounding. A simple and effective supporting structure is designed where a slanted truss holds a lightweight roof and the same truss supports the art gallery’s hovering interior staircase (www.fma-co.com).

3.2 Ubiquitous Camouflages: Basements

Tehran’s soundproof basements are protean domestic sites with many unique opportunities for design interventions. They have been uncanny sites of resistance that people are appropriating as art and culture venues, and hangout spots. Such publicly-restricted or discouraged activities are finding their way into Tehran’s basements. Throughout Tehran’s history, basements have held symbolic meanings filled with pleasant and unpleasant associations. The name “Tehran,” in some beliefs, meant a place of under-grounders: the city core, its ancient and primitive village built homes in subterranean levels to protect against enemies and bandits. Cool, dry basements traditionally offered important storage areas spaces for rice, dried fruit, and water. During the revolution, the basement became a podium for the protesters who planned revolutionary actions. Many used to gather in basements to

listen to the Ayatollah Khomeini’s speeches. Later, during the eight-year Iran-Iraq war, the basement became the safest zone of the house during Iraqi air attacks. In the 1990s, under President Khatami, Iran’s politics became less restrictive and the basement became an alternative arena for unauthorized youthful musical events (notably rock bands) and an experimental platform for avant-garde artistic productions.

3.3 Indoor-Outdoor Projections: Balconies

Apartment balconies are possibilities that, though small scale, also have potential for adaptive reuse. Public facing balconies in Tehran began to appear in the 1930s with the introduction of frontage apartments. Historically, courtyard houses had a semi-open feature similar to a balcony, called the “mahtabi” (also known as “baharkhab”), which faced the courtyard. Mahtabis were often used as summer sleeping porches. Pioneer modernist Vartan Havanesian was among the first architects whose residential designs featured modern balconies. These were spacious, semi-circular street-facing terraces grandly adorned with columns and Art Nouveau ornamentation. Average balconies today are much smaller but their limited space still offers residents an outdoor space. Balconies may be accessed via bedrooms, living rooms, kitchens, or guestrooms. Some project from the façade while others are recessed. Some balconies are concealed on three sides. The more boarded up a balcony gets, the more likely it becomes a storage space. Future housing should create balconies with more potential for integrating interior space and providing varied outdoor activities (Figure 14).

3.4 Inserted Cuboids: Reclusive Yards

A reclusive yard, also known as *pasio*, is like a cuboid-like container inserted in infill apartment houses where attachment to adjacent

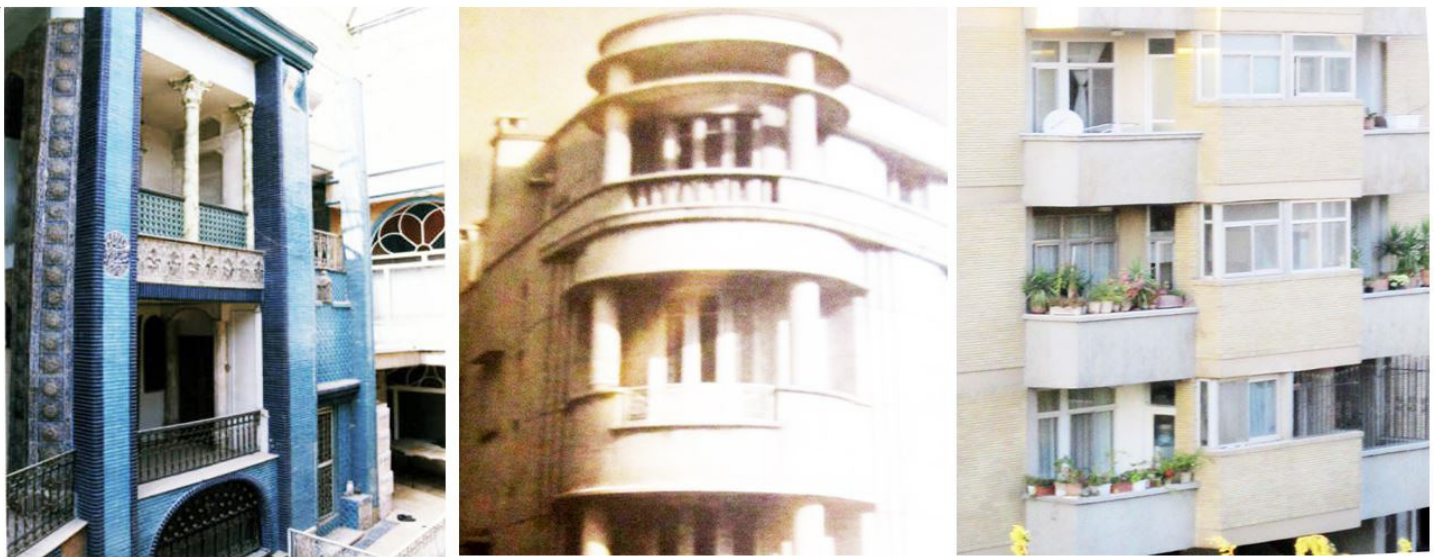


Figure 14: From Left: A 19th-century courtyard-facing balcony, known at the time as *mahtabi* (Courtesy of the Archives of the Organization for Cultural Heritage), the early-20th-century semi-circular balcony in Vartan Havanesian’s architecture (Source: Bani Masud, 2012, p. 243), and a contemporary ordinary apartment balcony (Photo by Author).

buildings and/or proximity to them would not allow the positioning of direct apertures on the building facades. Reclusive yards often become dark and gloomy spaces in Tehran apartments (Figure 15). Pirnia (1974) relates the origins of reclusive yards to the Persian architectural feature of *padiav* or *padiab*. This was a small, cloistered quad with rectangular or circular water elements at the center and bordered by arcades. Today, a reclusive yard is a minimum six to ten square feet light-shaft. Dictated by the architectural code, it is meant to allow light into rooms otherwise blocked by neighboring buildings. The shaft, which can be accessed from the ground floor, is typically an inefficiently used space. In some, it houses air coolers, furnaces, or storage. Reclusive yards are missed opportunities in Tehran houses. At best, these overlooked spaces may have vegetation, planters, and small water features.

3.5 Imperceptible Surfaces: Rooftops

Semi-private rooftops are collective sites with many design opportunities. Empty land is rare in Tehran, and the city has doubled its size and tripled its density since the 1979 revolution. The rooftop, we recall, is the site of culture wars in *Tambourine* and the illicit garden that imperils the real (and metaphoric) structure in *Tenants*. As revealed in those films, the rooftop and its shed-like *kharposhteh* are often contested spaces as well as places of reconciliation. The rooftop is a place, as well, for unauthorized events and self-expression. During and after the 1979 revolution, Tehranis appropriated their rooftops to renounce the Shah's regime. Again, after the controversial June 2009 election, the



Figure 15: The dark and blank space of a reclusive yard in a typical housing unit (photos by author).

rooftops were a stage for public discontent. Many protesters, who had been evicted from the streets, climbed to their rooftops and chanted anti-regime slogans. In many residential buildings, the shared rooftop space may also challenge what can be public versus what should be private, causing between-neighbor interactions. Since the 1990s, rooftops became the optimal location for satellite dishes. Today, Tehran rooftops, more than anything, are serving as experimental fields for counterculture and avant-garde productions. In addition to basements and the city's outskirts, as revealed in *No One Knows about Persian Cats* and *My Tehran for Sale*, young artists and musicians have used rooftops for practicing, recording, and performing. Women are only allowed to sing in choirs or in singing groups where no single voice is discernible. As the State rules prevent women from performing in public and for

mixed audiences, female vocalists have been reclaiming rooftops as unauthorized music venues. Vocalists Mahsa and Marjan Vahdat have upended the underground music trope by videotaping their song "Twinklings of Hope" on a Tehran rooftop (Figure 16).



Figure 16: Underground music is in the sky: Vahdat sisters sing "Twinklings of hope" on a rooftop (Courtesy of the Vocalists, snapshots from the video: <https://www.youtube.com/watch?v=sp8rUW9vXmc>).

4. An Opportunistic House Design Prototype

The article concludes with possible opportunistic design concepts, which are integrated substantially in a proposal for an infill apartment prototype. The design is inspired by how inventive Tehranis have turned residential spaces below, within, and between typical apartments into business incubators, inexpensive living, and informal places for social interactions. The prototype is an innovative solution to reinvent nondescript apartment houses into sociable units that can better respond to the socio-economic needs and aspirations of people on the ground. Below are some of the possible design concepts that embed live-work-socializing options in future Tehran houses:

4.1 Autonomous Platforms

Tehran apartments own the basements and rooftops as their relatively larger surface areas, compared to the balconies, for example, that people are creatively using and turning into *ad hoc* places for social interaction. With a rooftop on every house, their reuse possibilities are many. With the city's increasing densities, rooftops may become the future city's rare designable spaces left. For people's better use, the design envisions new concepts to maximize surfaces and enhance uses of Tehran rooftops, and to give rooftops more access seclusion by partially liberating their surfaces from the rest of the house spaces. At an urban-scale design solution, future houses may include new levels for a second basement/rooftop with separate entry admissions. This is to make an independent creative city with more floors under and/or above Tehran's existing houses to make more spaces for the art and culture. These autonomous platforms above and below form constructed and interconnected continuous surfaces hidden at the larger urban landscape scales.

The prototype integrates a second rooftop with separate entry admissions and circulation connections. The merger of second rooftops throughout the adjacencies makes one large independent platform at the scale of the entire city. All independent aboveground levels merged at the city scale would make continuous surfaces projected onto the



Figure 18

sky. Often, a basement level of Tehran apartments are used as parking, accessed via the main staircase and elevator. The prototype envisions a second basement level liberated from the apartment flats. This second level is accessed through a separate entry down to the hollowed place recess in the yard ground surface. At the macro scale of the city, second basements combined and connected would form a covert city. This underground city would be where initial seeds for diverse artistic and cultural productions would be planted and new urban cultures would emerge. (Prototype design in collaboration with Payman Sadeghi).

4.2 Retractable Nooks

A Tehran ordinary house needs a heart: a retreat alcove or a portable social hub that at times can be physically separable from the rest of house spaces. Design professionals can reuse current house possibilities areas, for example, the existing reclusive yards and balconies, to make a heart for the house. Future houses may include portable hubs sliding in and out the house areas. A sliding portable hub floating in a reclusive yard allows its evening use as a social space. Future houses may include a more mobile retreat zone fragment that can also roll in and out into other domestic locations such as the shared staircase zone, balcony territory, and ceremonious guestroom. Some Tehran balconies are currently taken over by female-led beauty hair salons. If repurposed through creative new uses, balconies in general can become other possible places for

more and other informal economies to flourish. A future Tehran balcony may be designed further flexibly as a retractable, folding, and/or mobile social space fragment. The balcony as a portable social hub may roll in and out of the house and simultaneously be masked and exposed to the outside. Reclusive yards could become protean spaces if they were better integrated into the surrounding apartment buildings, made more accessible and more visible to residents. The space, originally designed to bring daylight into housing units, could be used as well in the evening as a social space. With innovative design, for example, the addition of a floating portable alcove inside, a reclusive yard has the possibility of becoming the heart of the ordinary Tehran house. This fragment can also be flexible, being temporarily masked or exposed via the retractable sides. With the exception of doors and windows, most house exteriors are fixed climate barriers. But such exteriors could be more mutable. Folding balconies appended on the building facade can make another retractable retreat zone for the house. With a quake-resistant lightweight, cubic, steel beam structure, the fragment may also function as a room that will be safe to be in at the time of an earthquake.

4.3 Simple Sheds

The house areas, inside obsolete swimming pools and over rooftops, for instance, have space possibilities for minimal structures. Design professionals may look into ideas that people can manage themselves,



Figure 19: Diagram of possible use program (Prototype design in collaboration with Payman Sadeghi).

for example, simple sheds or raised platforms that people can easily build on their own. With so many abandoned pools the possibilities of adaptive re-use are many. Each may become a plaza in a house that, together with the rest, can make an urban network of active, retreat spaces for young, avant-garde, and female entrepreneurs. Design solutions can raise the pools' inner platforms for ground access and insert simple shed structures inside to make inhabitable containers in pools. Design processes can establish ways to engage users in the creation and fabrication of platforms and shed structures.

The prototype entails a multi-level alcove space carved in the ground surface of the yard. Inspired by adaptive re-use possibilities seen from abandoned swimming pools. This common space is to be used by all residents. Visible structures remain minimal at the ground level and the alcove also acts as the entry to the second independent basements.

4-4 Micro-Habitations

A way to respond to the city's housing crisis is developing rooftop micro-habitations as inexpensive living spaces where unconventional young and avant-garde Tehranis can dwell, work, and socialize. Reasonably priced, prefab cabin-like places atop rooftops would generate an autonomous city-in-the-sky. Continuous horizontal surfaces may run from one roof to the other to make the lofty city traversable. Additionally, interchangeable, modular and prefabricated micro-habitations could be efficient to build and easy to maintain.



Figure 20: Sociable nooks (Prototype design in collaboration with Payman Sadeghi).

EPILOGUE

The multidisciplinary research presented and its concluding prototype conception compose a beginning, an initial step in my ongoing design-research to inform urban revitalization through place making and building better structures for the inclusion of users and their needs. This rendered vision of an opportunistic house prototype for Tehran is a work-in-progress. It is an academic exercise, but more than that: I took the initiative for an unsolicited proposal for a city lived and loved. This endeavor is in accord with my trust in the necessity of proactive ways and creative solutions, through recycling the existing and creating new effective spaces, expected from design professionals and academicians alike.

The idea of this prototype reinvents the notion of Tehran house as a sociable unit that can respond to the needs of both private and social selves, enabling them in making more choices and

to apply various inhabitation tactics to appropriate spaces. In addition, by accelerating processes that lead to new or revised building codes, the prototype can have impacts on future house form and change. As Shayesteh and Steadman (2007) argue, codes have lasting morphological and aesthetic effects on architectural types and cultures. Municipality-sponsored pilot programs, such as competitions or request for proposals for new prototypes in Tehran, can also foster novel ideas to respond to the city's housing problems. Potential code changes resulting from prototypical ideas would help educating other professionals, thus addressing urban identity issues long term. Hypothetical design solutions such as one presented in this paper, although are at the scale of a single house, would help enhancing urban connectivity of public spaces at large. By linking domestic spaces at the city scale, the opportunistic housing can create a network of formal and informal urban protean spaces that are flexible, fostering social and cultural interactions as well as economic growth. Design is used in this study as a tool to communicate ideas that help gradually building up on Tehran's social vitality and economic sustainability. The envisioned domestic social spaces would offer spatial assets where Tehranis could practice economic independence, assets that would particularly be helpful for the city's vulnerable and financially-pressed residents.

The final prototype is a demonstration of a new and forward-looking living paradigm for Tehran. It is only one of the possible housing solutions to revitalize the future city. It is a way to reimagine a Next Tehran where prosaic landscapes of banal and characterless apartment buildings are in no existence. The new paradigm would help reinventing existing banal apartment flats into sociable units that offer people a lot more options. The prototype is materialized by directly emerging from the city's contextual needs. In conception, it took major cues from how the citizens have been using and manipulating forgotten and interstitial spaces of their current residences, in abandoned swimming pools, basements, balconies, reclusive yards, and rooftops. The design is not just inspired, but predominantly informed by how creative Tehranis have hitherto been turning those leftover spaces into inexpensive living spaces, informal workspaces, and places of social gathering. I anticipate the new social spaces at-home, those cleverly-ambiguous interstices between private and public, to become places to entail important improvements to the city's public spaces. The ultimate anticipation is to promote new cultures of affability, emerging lifestyles, and new ways of being in the city. Ultimately, at the city scale, the additions of such unconventional collective places inside private houses would increase the footprints for welcoming, safe, and energized public realm spaces.

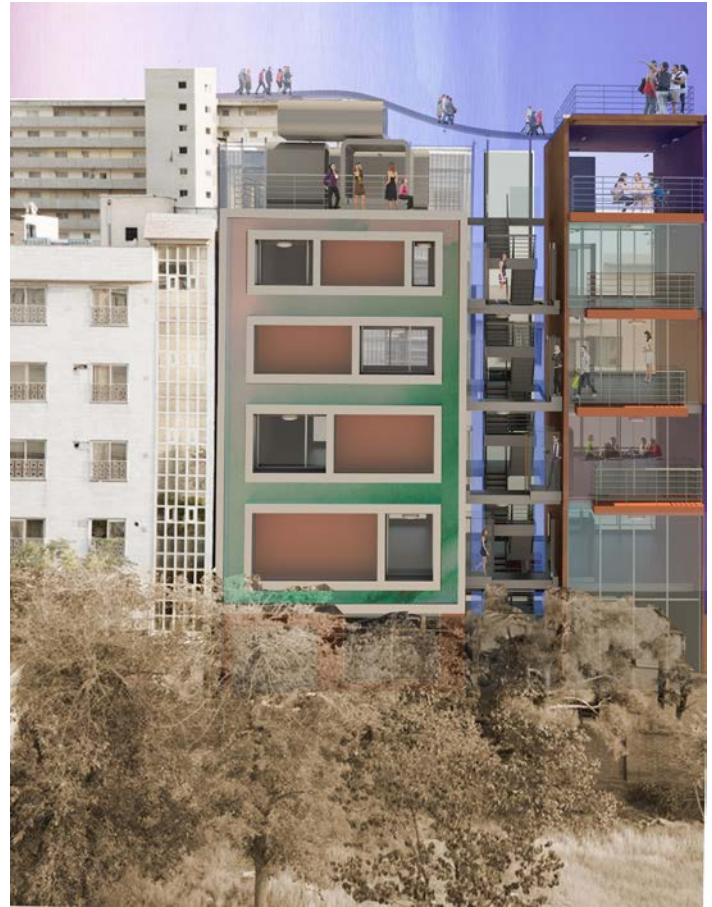


Figure 22

Living places atop rooftops would generate an autonomous city-in-the-sky. Continuous horizontal surfaces may run from one roof to the other to make the lofty city traversable. Additionally, interchangeable, modular and prefabricated micro-habitations could be efficient to build and easy to maintain. (Prototype design in collaboration with Payman Sadeghi).

ENDNOTES

¹ Research shows that, in the past fifty years in Iran, both government and private sectors have focused their maximum attention on issues of low-income/affordable housing (Keivani et al 2008; Ziari 2009; Sheykhi 2007; Ziari 2006; Keivani et al 2005; Moatazed-Keivani 1993; Zandi 1985; & Khavidi 1978). Yet, Contemporary architectural design should aim at creating innovative and adaptable houses that every Tehrani can have access to. These mean diverse housing options that offer more living-style choices for everyone to select from.

² Mainly, the 2015 Ibridges conference in Berlin is the most recent effort to bring together high-tech entrepreneurs and internet start-ups (www.ibridges.org).

³ Still in many places in the world, including Iran, women, despite their academic or professional competence, women are facing employment and domestic discriminations. Based on Iranian marital laws, a husband can legally prevent his wife from working outside home, and also those able to work outside the home often earn less than men for equivalent work. Iranian public spaces are particularly hostile to women; sidewalks lack accessibility and safety standards making it difficult for elderly wheelchair-bound and young mothers with strollers to safely navigate the city. The state mandates how women should appear and dress in public, with much criticism and even moral police arrests focusing on women's appearance, make-up, and ways of dressing. For non-orthodox women strict dress and behavior codes limit self-expression.

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