

#### DIPLOMARBEIT

## NEW INTERPRETATIONS OF TRADITION IN CONTEMPORARY RESIDENTIAL DESIGN AS PART OF A NEW ARCHITECTURAL MOVEMENT WITH FOCUS ON IRANIAN PROJECTS

ausgeführt zum Zwecke der Erlangung des akademischen Gradeseines Diplom-Ingenieurs unter der Leitung

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#### Abstract

The goal of this master thesis is to shed light on a contemporary architectural direction that evolves almost simultaneously around the globe and that works mainly with architecture through **atmospheres**, **feelings**, **emotions familiar to the future residents**. It is led by architects who are actively participating in building an **architectural awareness**, academically and in the field through internationally recognized building designs, **of the local**, **traditional**, **cultural** but at the same time unique and individual approach in (**residential**) **architecture**.

Residential architecture is the closest reflection of the culture and life values of a community. Traditional elements are more likely to be found in this type of architecture since the people are the ones who create and carry them together with other cultural habits within themselves and pass them on next generations. This new movement works with the traditional values of a specific culture, nation, geographical region, religion etc. and implements/integrates them in the modern spirit and complexity of the building possibilities, materials, and technologies the 21<sup>st</sup> century brings with. The results could remind us of our grandmother's house, revive a traditional passive design element, reuse a local material, reframe living habits, reclaim a valuable space concept.

Iran is a country with a very long, rich, unique tradition and diverse architectural history. Nowadays, **Iranian contemporary architectural scene** becomes very dominant and recognized internationally especially when it comes to **its perception of the traditional living values and living needs/customs of the people.** Therefore, I decided to present this topic through the prism of Iranian contemporary residential projects while comparing it to other international designs and the way they deal with the same challenges.

By doing so **I** aim to detect "an architectural movement" in different physical expressions under the same philosophical background – how to achieve an atmosphere, a feeling of home in a contemporary residential building with the implementation of certain cultural/traditional aspects into the new spaces.

#### Kurzfassung

Das Ziel dieser Masterarbeit ist es, eine zeitgenössische architektonische Richtung zu beleuchten, die sich fast gleichzeitig rund um den Globus entwickelt und die hauptsächlich mit Architektur durch Atmosphären, Gefühle und Emotionen arbeitet, die den zukünftigen Bewohnern vertraut sind. Dies wird von Architekten geleitet, die sich aktiv am Aufbau eines architektonischen Bewusstseins, akademisch und in der Praxis durch international anerkannte Gebäudeentwürfe, für den lokalen, traditionellen, kulturellen, aber gleichzeitig einzigartigen und individuellen Ansatz in der (Wohn–)Architektur beteiligen.

Die Wohnarchitektur spiegelt die Kultur und die Lebenswerte einer Gemeinschaft am ehesten wider. Traditionelle Elemente befinden sich eher in dieser Art von Architektur, da es die Menschen sind, die sie zusammen mit anderen kulturellen Gewohnheiten erschaffen und in sich tragen und an die nächsten Generationen weitergeben. Diese neue Bewegung arbeitet mit den traditionellen Werten einer bestimmten Kultur, Nation, geografischen Region, Religion usw. und implementiert/integriert sie in den modernen Geist und die Komplexität der Baumöglichkeiten, Materialien und Technologien, die das 21. Jahrhundert mit sich bringt. Die Ergebnisse könnten uns an das Haus unserer Großmutter erinnern, ein traditionelles passives Designelement wiederbeleben, ein lokales Material wiederverwenden, Lebensgewohnheiten neugestalten, ein wertvolles Raumkonzept zurückgewinnen.

Der Iran ist ein Land mit einer sehr langen, reichen, einzigartigen Tradition und einer vielfältigen Architekturgeschichte. Die iranische zeitgenössische Architekturszene wird sehr dominant und international anerkannt, insbesondere wenn es um ihre Wahrnehmung der traditionellen Wohnwerte und Lebensbedürfnisse / –bräuche der Menschen geht. Daher habe ich mich entschieden, dieses Thema durch das Prisma iranischer zeitgenössischer Wohnprojekte zu präsentieren und es mit anderen internationalen Entwürfen und der Art und Weise zu vergleichen, wie sie mit denselben Herausforderungen umgehen.

Auf diese Weise möchte ich "eine architektonische Bewegung" in verschiedenen physischen Ausdrucksformen vor demselben philosophischen Hintergrund erkennen – wie man eine Atmosphäre, ein Gefühl von Heimat in einem zeitgenössischen Wohngebäude erreicht, indem man bestimmte kulturelle/traditionelle Aspekte in die neuen Räume einbezieht.

### The idea

As part of my master's degree in architecture at the TU Vienna, right before the beginning of the master thesis, I completed a module named "Cultural space" where one of the seminar courses was "Comparative research in architecture - Cultural Spaces and Identity in Architecture". I had the opportunity together with a colleague of mine Linda Fresku, under the supervision of Univ. Ass. Mag. Dr.phil. Negar Hakim, to take a look into the present Iranian architectural scene and analyse contemporary house designs in Yazd and Isfahan. By doing so we aimed to track and detect traditional building elements, which contemporary architecture and architects use and implement in their projects – taken from their traditional shape and developed through new ways of perception and implementation. The research paper born out of it, "The influence of the traditional elements and their implementation in the contemporary house design" triggered a curiosity to dig deeper into the topic of contemporary tendencies in residential (house) architecture and its relationship to the cultural identity in this so-called era of globalisation and internationalism.

The selected Iranian projects were (as expected) different from the contemporary house design that we are used to see in the European architectural scene. Starting from the visual impression, the materiality, the urban placement and the surrounding itself, the space division and room connections, all the way to the simple requirements of the residents and their way of using a house. However, the thinking behind the concepts, the approach of the architects, as they also confirmed it in the talk-interviews we conducted with them, brought up an intriguing (not that expected) twist to the whole research. Namely, the way they referenced and "transferred" traditional (local) architectural elements into contemporary design showed a great similarity to what we can experience and witness in Europe, if not in the whole world as well. Nowadays worldwide challenges such as building environmentally friendly and reuse rather than produce seem to be igniting an international response in the contemporary, especially the residential, house architecture as it is naturally more connected to the traditional, local, sustainable.

Since this is my last work of my studies, I tried to connect and include my whole experience I gained over the years regarding architecture: personal, academical and professional. As a student, I had the opportunity to experience living in four different European countries<sup>1</sup>, which differ not only geographically but as well culturally, socioeconomically, and therefore architecturally. All of them are so unique starting from the people and how they perform daily life activities, how they use private and public spaces, how they communicate, what are the life values, the habits, the traditions... Moreover, I could learn directly about how they perceive architecture and deal with the challenges they locally face, not only in the class but as well in the very present place, space, city. Therefore, I decided to include a part in the research and compare the Iranian contemporary architectural residential (house) scene with the one in Europe, or at least in some parts of it where I happen to personally experience and witness the contemporary scene either through academic and field architects, lectures, seminars, design studios, competitions, or direct contact with the buildings themselves.

The idea behind is to examine the possibility of "an architectural movement" that although represented by different physical expressions mainly depending on their geographical location, comes from the same philosophical background. The interpretation of the researched architectural movement is rather essayistic than scientific, rather open-ended than closed so that it serves as a starting point for a debate, a reassessment on our values in architecture as architects as well as residents.

<sup>&</sup>lt;sup>1</sup> Skopje, Bratislava, Lisbon, Vienna

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### Architecture - movement vs style

Architecture, as a profession, could be considered as a field of endless expressions, constantly evolving ideas, a complex reflection of our society and the way we perceive space, comfort, beauty, quality of life in all its aspects in different periods of history of humanity. These rapid changes over time, closing an "old" period and beginning with a new modern one, become a repeatedly periodical changes, which create certain eras of a historically identifiable features that represent people's values, culture, views on politics, beliefs and religions, civilisation's progress, society changes, new technological break-through ideas, emergence of artistic and scientific answers to current environmental, economic, and social issues and challenges.

As history has showed us, we tend to get innovative and at least try to do better than the previous generation's achievements and push boundaries towards a "no same as yesterday" daily habits and in a way experiment and prepared or not, face the consequences of our today's decisions. I like to think of it as a human gift to experiment and even if not always get the wanted/needed results, we cannot help but not to risk and get out of the ordinary, of the normal, out of what we than tend to call comfort. We have never made a mistake if we understand that we have always learned a lesson although sometimes not in the most pleasant way or the least undesirable consequences. Ideas, visions, revolutionary thoughts, and perceptions of the new tomorrow on every aspect of humanity (architecture as inseparable projection of it) are the first steps into creating a new architectural movement/direction. It is the moment when architects start to "write" scenarios about the future as their designs cocreate or at least impact the bigger picture of our life, where and how we live, work, travel, consume, perceive, value, feel... These new philosophies try to solve not only a problem that the current situation and the way of creating architectural pieces would inevitably face but at the same time they give the possibility to have an alternative outcome - another way of conceiving and projecting the space design and space usage.

It starts with a theory, research, a drawing, a material, a physical space ... a building. When this proves to be the "right" and architects around the globe start adopting it, it can be seen later in the far future as an **architectural style** – part of something bigger than a theory, a representation of an art form in a building.<sup>2</sup>

That is how we have something called **architectural history**, a branch that emerged from the styles we can clearly see in the past. We can track architectural styles and their development, how and why were they born, how they spread, who accepted them as such and who tried and/or succeeded to change them and make an own unique twist. This, of course, depends again on series of factors that are nothing else but a clear picture of what a specific nation, in most cases a geographical region, could accomplish and/or a self – representation in that very moment in terms of form, methods of construction, technological advance of building materials and regional character. Impressively, even today we can witness remains of architectural styles/movements considered by some of humanity's greatest architecture mysteries/wonders and yet they bring us more than 11 Millenia back to the prehistoric times.<sup>3</sup> We can still visit, feel, study, and try to understand great number of buildings since ancient times all the way to the so-called contemporary architecture of the 21<sup>st</sup> century. The timeline of the architectural history states clearly that the architectural styles cannot be put into very exact time boundaries, many of them overlapped, some coexisted and others existed only as revivals.4

Architecture has a highly visual association and studying the history of architecture is mainly supported by drawings, plans, images, and other visual media that show us the physical part of it that people interacted with. However, exactly that is the limitation of most books that teach history of architecture through "buildings" because architecture in its essence is a much broader and complex phenomena. For instance, the book "Graphic History of architecture" by John Mansbridge marks the begin of architecture with the first human civilisation<sup>5</sup>.

<sup>&</sup>lt;sup>2</sup> Inspired from "The Evolution of Style in Modern Architecture", Thomas Hastings

<sup>&</sup>lt;sup>3</sup> Gobekli Tepe in Turkey circa 9600 BC - 8200 BC

<sup>&</sup>lt;sup>4</sup> Inspired from "History of architecture", Alfred D. Hamlin, 2010

<sup>&</sup>lt;sup>5</sup> Mesopotamia, 4000–3500 B.C. Meaning "between two rivers" in Greek, Mesopotamia (located in modern-day Iraq, Kuwait and Syria) is considered the birthplace of civilization.

Another well-known book on the matter is "A world history of architecture" by Michael Fazio & Co-authors followed by 2 more Editions, which again although speaking about architecture beyond its visual side, states: *"Architectural building begins with buildings."* 

What I personally want to shed light on, is the beginning of architecture when people did not have the ability to build but had the ability to imagine (architecture). Architecture's purest form of its early beginning has more of cognitive character, the ability to learn how nature and other living organisms "designed" for themselves and to use that knowledge to imagine something similar or even something totally new. This goes further than the period when people abandoned the caves and started "building" their homes from scratch because were they not "reshaping", expending, adopting, and dealing with the given space already before (while) living in the caves? Therefore, the beginning of **"architecture" is the actual seeking for a shelter and the ability to imagine spaces based on experiences**, almost as an intuitive human need to change the existing, to adopt it, to create something new, to build, to "design".

Only with the progress of the civilization, did architecture stopped being just a necessity to fulfil, on the contrary it became a way to express some of the greatest achievements of humanity as well. Urban planning, courtyard house, ziggurats, noble construction etc. was drafted and managed although architecture was not yet a profession. This progress represents ideologies of the societies throughout the history and connects design, art, architecture. It is an ongoing experiment that somehow responds to some current, usually worldwide situations of a few generations and then moves to the next ones.

But how did architecture changed its appearance and role and how much did architects get inspired from what was already before them? As innovative as architects can be, they still **design** from a mixture of consciously and subconsciously use of **imagination** – what they personally prefer and learned and **memories** – what they have experienced and felt.

To imagine is to form experiences in the mind. These can be recreations of past experiences as they happened such as vivid memories with imagined changes, or they can be completely invited and possible fantastic scenes (Stefan Szczelkun, 2018).

Those memories serve as an inspiration from architectural expression in the past, sometimes from architecture that we have only seen in books, sometimes from the city we live in. For instance, one of the most influential architectural styles comes from ancient Greece and throughout the history we can architecture by renowned architects carrying ancient classical beauty and even nowadays same column representation system/method used in the ancient Greece but in a new, contemporary space-material concept. Many of them architectural monumental pieces from the past centuries such as the British museum from the 17<sup>th</sup> century, US Capitol from the 18<sup>th</sup> century, Brisbane City Hall from the 19<sup>th</sup> century but also David Chipperfield's "Museum of modern literature" from the 21<sup>st</sup> century – very direct quote of a Greek temple, form the formal use of columns to the colonnade around the perimeter.

Contemporary architecture is a whole movement of the 21<sup>st</sup> century where no single style is most dominant or at least we do not see that still since we are part of it. People get inspired from previous architectural styles, seeking the same beauty in the new context, bringing atmospheres and feelings of elegancy, power, comfortless, aesthetics, grandiosity as well as geometrical patterns, characteristics, elements, design concepts. This "rule" applies to us today as well. What are the elements that define the contemporary and how can we include, interpret the inspiration behind? What is that makes various projects stand out in the contemporary scene of today and is there something that is common for all of them?

## Architectural directions of today and their relationship to tradition

The diversity of architectural styles increases and expands into bigger complexity as the time passes by, as a result to the possibility to experiment more but also because of the possibility to express ourselves with a greater freedom as an individual, as an architect, nowadays more than ever. Rem Koolhaas has defined architecture as a chaotic adventure. Nothing could be more true than that of the last two decades. Never has architecture been so unbridled and so extraordinary: the architectural cast has never been so wide and their works so diverse. (Puglisi, 2008) Nevertheless, as an architect, it is of a great importance to be able to have a feeling of what era of architectural design we are living in and what are the influences from the past that shape so many opinions on what is and what is not a good architecture and at the same time be actively aware of the worldwide situation, challenges, and responsibilities our profession carries with itself. (Luna, Yim, 2023) But what are the right criteria to judge a building in the 3<sup>rd</sup> decade of the 21<sup>st</sup> century or better said, what are the right criteria to evaluate a building and classify it as part of an architectural movement?

What we for sure have as a firm beginning is the history and most importantly the recent history of architecture in the 20th century that somehow smuggles into the very beginning of the 21<sup>st</sup> century. However, we are witnesses of the incredibly rapid change of "modernisation" on many fields that are closely connected to the development of the physical and imaginative reality of the building as such. For instance, the Building Information Modelling (an intelligent 3D model), the Virtual and Augmented reality as new level of visualisation media, the use of drones on construction sites, 3D Printing and many more are part of the 21st century's construction technology. It is not a wonder that there are so many different, sometimes contradicting opinions, definitions about the current architectural style and what exactly constitutes. On the other hand, we see every day buildings erecting that look profoundly different from each other and in many cases very new compared to what we have seen until now. And this is happening on every possible scale ranging from huge projects serving some public function to small residential units just because the possibility to interfere, play and design has become more available.

Contemporary architecture: alterations of the post-postmodernism, high-tech architecture, metamodernism, new romanticism, new interpretations of traditional architecture? Majority of the architecture created in the 21<sup>st</sup> century is still in close relation to the post-modernism and even to some extent to the modernism. To understand the new movements, I would first briefly introduce the concepts and the impact of the modern and postmodern architecture as most of the architects that are in the peak of their careers have been in touch at least academically with both styles. I must say that big architectural names from those eras are/were still resonating while my architectural studies and that only confirms the direct and quite strong influence that they have on the next generation of practising architects.

Modernism although started in the early 20<sup>th</sup> century, it only became internationally popular after the second world war as a response to basic social needs, a way to solve one of many social problems of the decade as a solution to the poor living areas. "Form follows function" – is how modernists presented the simplifying of the architectural design. (Weston Richard, 1996)

According to Paul Greenhalgh<sup>6</sup>, the **principles that marked the main characteristics of the modern movement are function, progress, anti-historicism, and social morality.** Le Corbusier, as a peer of modernism architecture, set an example with his famous Villa Savoye; without any historical reference, no ornament, clear form-function structure, open plan as an ideal of social interaction. Moreover, he and some other peers of the modernism compared the functionality of the house design to the pure form of a well-designed machine, neglecting the resident's background, lifestyle, or any feeling of belongingness to something/somewhere. Some modernist designs would also include the pure modernist aesthetic in the interior of the house and thus trying to create a house for anyone instead of a home for someone.

<sup>&</sup>lt;sup>6</sup> Author of the book "The Modern Ideal: The Rise and Collapse of Idealism in the Visual Arts, From the Enlightenment to Postmodernism", 2005

Modernism is famous for its social housing projects that accommodate residents even today, however, despite some quite successful projects such as Lubetkin's Highpoint I apartments or Maxwell Fry's Kensal House, many others were demolished due to social problems residents of public housing usually face.

And then the modernistic famous "less is more"7 in the middle of the second half of the 20<sup>th</sup> century became "less is bore"<sup>8</sup>. The postmodern movement responded to the practical and boring design that did not include history or tradition but instead did only reference with the society in general. (Owen Hopkins, 2020) Therefore, it began a revival of some historic styles but incorporated in the modern construction methods and materials from that time, escaping from the pure design and clean straight lines of the international style.<sup>9</sup> This evoked an architectural playfulness of forms, asymmetrical designs but also postmodernist interpretation of the heritage and the history. The so-called **return to the traditional was mainly by taking** elements, ornaments and other characteristics and generally exaggerating in such a way that it was rather considered as a misuse or an illogical way of mixing different historic forms so that the result looks more like they were trying to make fun of it. They created a platform which did not balance the use of modern technologies and historic features and it resulted into forcing variety of "neo" styles.

I would consequently add that one of the greatest "mistakes" of the postmodernism was the physical approach rather than the philosophical. Trying to reclaim lost traditional values in the architecture due to the modernism is one thing but choosing the right method to do so is the crucial one. However, the postmodern style, referencing history, geography, pop culture and social issues of the late 20<sup>th</sup> century, gave freedom of expression that some believe it is still among the 21<sup>st</sup> century's architectural movements. (Owen Hopkins, 2020)

<sup>&</sup>lt;sup>7</sup> The phrase "less is more" was first popularized by the modernist architect Ludwig Mies van der Rohe <sup>8</sup> Less is a bore is a term coined by Robert Venturi, one of the major postmodern architectural figures of the twentieth century.

<sup>&</sup>lt;sup>9</sup> One of the follow up styles of the modernism.

Looking back into these two very influential architectural styles/movements but also thinking about many others before them, we can notice that they all share many things in common when it comes to creating an architectural style. An architectural style is usually defined by its philosophy and then by the physical manifestation of it- that is how we can nowadays most of the time be able to put a specific building in a time category representing an architectural style.<sup>10</sup> The common or uncommon thing modernism and postmodernism is their attitudes towards culture, tradition. As previously mentioned, the modernism excluded tradition, the postmodern included in its own way but the question is how does contemporary architecture deal with it and can we somehow a certain way of treating tradition in the contemporary design?

"The postmodern years of plenty, pastiche, and parataxis are over. In fact, if we are to believe the many academics, critics, and pundits whose books and essays describe the decline and demise of the postmodern, they have been over for quite a while now. But if these commentators agree the postmodern condition has been abandoned, they appear less in accord as to what to make of the state it has been abandoned for." (Notes on metamodernism, Journal of Aesthetics & Culture Vol. 2, 2010)

T. Vermeulen and R. van den Akker<sup>11</sup> have dedicated years of research about present worldwide trends and tendencies in topics mainly concerning contemporary expressions that do not fit under the postmodern philosophy. As one of many tools they set up is a blog they started in 2009 as a platform where over 30 writers from across the globe document and share knowledge on matters from politics, critical theory to art and architecture. They cover the contemporary issues of the global society as climate crisis, financial crisis and geopolitical crisis that have a great impact on everything that architecture represents.

<sup>&</sup>lt;sup>10</sup> Inspired from "A Language of Contemporary Architecture, an Index of Topology and Typology ", Rafael Luna, Dongwoo Yim, 2023,

<sup>&</sup>lt;sup>11</sup> From the Department of Cultural Studies, Radboud Universiteit Nijmegen, the Netherlands and Department of Philosophy, Erasmus Universiteit, Rotterdam, the Netherlands consequently

Climate crisis is a global matter that requires more than a desire for change and architecture as one of main energy consumers has a responsibility to rethink its methods and way of producing and using materials, buildings, cities. With 36% of global energy devoted to buildings and 8% of global emissions caused by cement alone, the architectural community is deeply entwined with the flows of materials, energy, and ideas that relate to climate *change, both causes, and solutions.*<sup>12</sup> As new architect generations we face directly with the problematic during our studies beginning with courses on green design and eco-friendly concepts all the way to constructional laws that regulate the energy efficiency of the building and use of sustainable materials. In that sense, architecture of the new generation rather expresses a (often guarded) hopefulness and (at times feigned) sincerity that hint at another of feeling<sup>13</sup>, intimating another discourse. structure (Notes on metamodernism, Journal of Aesthetics & Culture Vol. 2, 2010)

"The financial crisis, for one, is evidently inaugurating an era of austerity that doesn't quite match with the frivolity, playfulness, and exuberance of postmodern architecture. Within this context the recent interest – or plea – for a New Seriousness in architecture, associated with the likes of Caruso St. John, David Chipperfield and, indeed, veteran builder Peter Zumthor should not come as a surprise [...] For they share a preference for **rather restrained**, if not solemn designs (as opposed to flashy lcons), a **respect for tradition** (as opposed to pastiche) and **an emphasis on craftsmanship** (as opposed to starchitecture) [...]"<sup>14</sup>

This preference and respect for tradition, although present in the postmodernism, now has a different approach in the design as the emphasis is not directly on the physical traditional element but rather on the feeling and in a more restrained way. But how does tradition find its way into architecture or is this play between them a mutual simultaneous cocreation?

<sup>&</sup>lt;sup>12</sup> The facts about architecture and climate change, ArchDaily, 2021 (Accessed in March 2022)

<sup>&</sup>lt;sup>13</sup> This term has been used with some frequency in literature studies in order to describe a postmodern alternative to postmodernism as presented in the works of authors as far apart as, amongst others, Blake and Guy Davenport.

<sup>&</sup>lt;sup>14</sup> Metamodern architecture, Notes on Metamodernism 2011 (Accessed in January 2022)

### Tradition and architecture

The connection between architecture and culture evolved simultaneously since/before the time these two terms started to exit and one reflecting the other is one of the fundamental concepts of the humanity. On the other hand, **tradition as a medium of communications between generations plays a vital role in transfer and preservation of knowledge and cultural values.** To understand the closer connection between all of them it is important to characterize and/or define each one separately; to find out where they overlap and how they supplement one another.

# Culture and Tradition

*Culture represents a way of life, especially the general customs and beliefs, of a particular group of people at a particular time.*<sup>15</sup> There are many definitions out there to explain this term but all of them aim to encompass almost every possible aspect of a human being beginning with language, region, religion, cuisine, social habits and norms to music, literature, fashion, dance, art, architecture. Tradition, sometimes referred directly to culture, is handing down these cultural traits from one generation to the next one. Societies have always looked upon it for a feeling of belongingness, pride, social unity, and identity. As society changes by facing new socioeconomic challenges, tradition evolves subsequently and its physical manifestations as well. Architecture is one of the most representative of those manifestations and residential architecture as being the closest one to the source – the creators and the users, the people. <sup>16</sup>

<sup>&</sup>lt;sup>15</sup> Cambridge Dictionary (Accessed June 2022)

<sup>&</sup>lt;sup>16</sup> Inspired from "The Role of Culture in Promoting Architectural Identity" by S. Ettehad, A. Azeri, G. Kari, 2014

### Architecture (residential)

Architecture as such existed way before architect became a profession. In its very basic form, it was an essential part of the people's lives and needs and became a follower, a molding material in the evolutionary path from building a shelter, a space to fulfil certain living functions all the way to consciously designing a purposeful space only for the sake of recognizing and praising the art in it. Architecture first was a manifestation of the human's basic needs and their activities which defined their habits, their customs over certain period. Their places to sleep, to eat, to interact, to play, to love, simply to be, became their homes – something we call products of residential architecture.<sup>17</sup>

Architecture having an art connotation in its core as a profession is predefined to transcend the actual physical form and that is what history has proven to be the goal to strive for. The creativity and freedom that come with it allow us to get inspired by already successfully proven concepts, functional plans, existing buildings, activists, artist, architects etc. Nevertheless, not everything that works at one place suites people from other place, mainly when daily living habits are part of the design. We live in an era of world's globalisation and popularisation of one culture and tradition over another and that makes people want to try out different lifestyles, architectural user experience. However, architects are the ones to respond to the trends by looking at the bigger picture and the consequences before they blindly satisfy the wishes of the clients. The fact that we as architects know how to draw a house plan doesn't make us good in our work, as that is a basic tool that many can learn, but on the contrary, the ability to foresee the outcome and the "real" needs of the clients.

<sup>&</sup>lt;sup>17</sup> Inspired from "Introduction to Architecture" by Francis D. K. Ching, James F. Eckler, 2012

When talking about residential architecture, the responsibility of the architect increases just because his/her task is not only to fulfil some living standards and norms but to give a meaning to the space where people will spend most of the time in their lives. A place which can/will serve as an interaction point between family members, friends, partners, neighbours; a place where the residents could cook, eat, sleep, relax, feel free and safe, be sad or happy. All those and many more factors come into play, and it is important to understand and be able to combine the demands of the residents and the knowledge of an architect that sees the bigger picture and "predicts", more or less, the consequences of the layout of the new dwellings. For instance, if we investigate the two very different concepts of living such as polygamous and monogamous communities, we see that privacy can have quite a distinct connotation.<sup>18</sup> Some East African ethnic communities have two levels of privacy; first is the separation from the other social groups by defined boundaries by creating a so-called semi public/private space and second is a single room building separation either according to family connection but also sex and age<sup>19</sup>. Whereas, in Western Europe the social interaction is regulated first in the family level and second in the family unit more separate rooms.

Although this is an example which compares two very different lifestyles, it gives an insight in the complexity of life values/habits of certain group of people. Consequently, the designing for new residential spaces for both communities, it has two different starting points (necessary knowledge backgrounds) that strive for the same result – a better version including as much as possible positive old aspects and excluding as much as possible negative ones. So instead of accepting a designing method (a style) and trying to "copy" it because somewhere it has proven its functionality, it should be tailored as a design response to a specific environment, targeted users and their lifestyles, and thus creating an architectural meaning/value. In this way the architecture touched by the tradition and regionalism can become a symbol of an identity.

<sup>&</sup>lt;sup>18</sup> Inspired from "How Culture Can Turn Your Space into a Place" by Charlie Grantham, 2017

<sup>&</sup>lt;sup>19</sup> Derived from "East African Societies" by Aylward Shorter, 2013

### The relationship between architecture (residential) and tradition

As mentioned before there are many factors influencing how a piece of architecture can possibly look like although serving the same function. Starting from the economic situation, building science and technology, available materials, climatic and environmental conditions, to people's unique signature: tradition, creative and innovative skills.<sup>20</sup> The first step into the revealing of the complexity of this connection is **the relationship that culture and tradition have with space creation**. Space as a primary unit of architecture has firmly established a social understanding on how we perceive ourselves, how we project our inner–selves and our mental imaginations. Thus, the creation of this unit, as a self–designed (artificial) environment, is directly connected to our culture and therefore becomes a tradition of the (building) practice. This building tradition along with people's space awareness consequently becomes their identity.

According to Shayan, in his book "Criteria for defining architectural identity" there are two categories on which culture as a factor or way of human's relation with an artificial environment implies:

a) Standardized behaviours, thoughts, and feelings.

*b) Products that are the result or a continuation of the behaviour and thinking of people in a given society.* 

Moreover, Shayan distinguishes the impact of culture on the formation of architectural spaces in two ways:

a) Through the creation of behavioural laws and rules that lead to functional organization and spatial hierarchy.

b) Through the creation of memories, beliefs, and physical symptoms in the form of symbols, archetypes and metaphors that lead to creating meaning in the architectural space.

<sup>&</sup>lt;sup>20</sup>Inspired from "Inspiration and interpretation from basic concepts of Iranian architecture". Diba Darab, 1999

So, interpreting his statements through the prism of a daily life situation: people would build their homes, consciously or not materialize "themselves" (their customs, beliefs, perceptions) and inhabit it. What follows is a process in which they experience the space, use it, and accordingly transform it by changing a standardized habit or finding out a better way to build, connect, improve something, and repeat this process again. So even those behavioural laws and rules for a functional spatial organization are rooted in the very culture that people come from or chose to live by.

But in a civilized society of today we have developed a profession that can approach the whole process mentioned above in a more sophisticated way. Architecture analyses and tries to understand the way of inhabiting a space, uses knowledge from the history, from our ancestors and accordingly designs a space, a house, a building. And this goes a step further when we grasp the fact that the architects using knowledge from a certain cultural and building tradition to create space also come from a certain cultural background. Since they are also users, they are directly or indirectly influenced by its own cultural, aesthetical perspective as well.

To wrap up, the relationship between architecture and culture is the user, the creator, the builder, the architect... **Culture shapes the space, but the space user experience influences the culture – a symbiotic process of co–creation.** This co–creation has produced many architectural approaches and specific building components that became traditional design elements for certain nation, geographical region or culture especially in the residential category where people could build directly for themselves. <sup>21</sup>

<sup>&</sup>lt;sup>21</sup> Inspired from "The relationship (tradition of Iranian architecture) between identity and modernism and modernity", Naghizadeh Mostafa, 2000

# Why "traditional design" in contemporary(residential) architecture?

Residential architecture is the closest reflection of the culture and traditional life values of a community. Traditional elements are more likely to be found in this type of architecture since the people are the ones who create and carry them together with other cultural habits within themselves and pass them on.<sup>22</sup> This is one of the main reasons I decided to focus my thesis on examples from contemporary residential architecture that define new atmospheres and feelings of home by the implementation of certain cultural/traditional aspects.

Residential in comparison with other types of architecture even nowadays, is still being actively created directly by the residents in many parts of the world. Some societies have been passing on traditional methods, craftsmanship and elements that have evolved more than thousands of years. These methods have created tradition in the way of building but most importantly a specific sense of space, use of space and relationship with the space called home. Parallelly, among the high economic societies a concept of globalisation and internationalism has been developing by sharing and accepting similar life habits, greater freedom, and possibilities of experimenting and therefore sometimes purposely neglecting regionalism and cultural influences. On the other hand, the freedom of building itself is getting narrower and narrower when it comes to the impact a building has on the environment and the consequences it leaves behind. We are getting more aware of the fact that architecture must respond to certain prescribed norms coming from the outside of the architectural branch but that doesn't mean we as architects should not respond to unregulated but much needed considerations of how to create home instead of just a house.

<sup>&</sup>lt;sup>22</sup> Inspired from "House in culture and nature of Iran, information and research centre of architecture and urbanism", Haeri, Mohamad Reza, 2010

This is where the concept of bringing back architectural elements arises creating buildings based on the actual situation, using locally accessible materials to not only satisfy some living standards but to bring a feeling of being home, a feeling of being closer to the roots and originality of the living concept as such. Although traditional architectural techniques appear to have been lost in contemporary architecture, some architects continue to advocate for the **embrace of regionalism in design just by combing the new technological advances with the shape, form, connection of spaces, play of materials, living habits according to a specific region, culture, or style.** This kind of a romantic approach of design uses atmospheres that evoke specifically targeted emotions inside the habitants.

But what are the positive side-effects of such a design attitude? It is evident from traditional architecture that there is a connection between community and design and the overall socio-economic development of a region. By understanding the resources and materials available to designers and builders they can be more effective in how they can utilize and manipulate regional **resource abstraction.** This added gain of utilization allows resources to go further in quantity and in addition to be used in new applications which ultimately creates new requirements in skills. Especially as the applications of design is all done with keeping community at the centre. This eventually boosts job creation and helps bring communities together aided by the growing development of urbanization. However, still great part of contemporary architecture rather focuses on development that rewards spatial management and can be argued as a style that ignores the fundamental anthropological requirements of structure. This generic use is cost effective and saves time but removes the unique ethos carried in traditional architecture.23

<sup>&</sup>lt;sup>23</sup> Inspired from "Vernacular Architecture and the 21st Century", Sarah Edwards, 2011 (Accessed in August 2022)

Architecture that mimics the typology of a region in its environment, spatial surroundings and is connected to the culture affords to be more harmonious aiding to it being identified to those people and their region. The actors of what materials are used, the palette of colours and the style of architecture are all collectively observed in denoting the framework of how the urban structures are aligned to the sociology of a place meaning people's culture creates the architecture, and the architecture creates the culture. Modern architecture uses a global practice that dilutes the systematic version of the people's design which therefore removes any connection to that community. This use of traditional architecture has other benefits beyond just the cultural manifestation of a location. As mentioned, the use of local resources and materials requires knowledge that is embedded within these people keeping jobs within the community. It also adheres to a using more materials and concepts that are green, self-sustainable and energy efficient which has a better effect on the environment locally and globally. This consideration to use such natural materials doesn't only reduce carbon emissions but has a positive effect on the mental health of residents where long-term dwelling is at play making residents overall happier.<sup>24</sup>

The distinguishable focal point of traditional architecture is that it allows humans to **re-establish not only with a connection to themselves but towards a more natural way of living that promotes survivability and coexisting in its most natural order.** Therefore, it requires natural structures that are conceptualized on solutions that are conscious of how it not only draws from its natural surroundings but how it affects and uses them. It places an importance on the natural architecture that already existed before architects learnt to expand on them, reasserting a natural merge with the ecosystem of a region. These benefits that were used by architects of the past are becoming more evidently adopted by architects that promote a re-emergence of becoming greener and eco-friendlier.

<sup>&</sup>lt;sup>24</sup> Inspired from "World Environment Day: Vernacular architecture and its therapeutic effect on dwellers", Aditi Maheshwari, 2021

In order to create this it is therefore needed to take into consideration all of nature in traditional architects designs such as; the solar aspects (direction of sun, solar pathways, direction of light and positioning), the topography of the land (how it will affect natural light, the angle of the ground, shadowing, water run off), weather (rain, wind cycles, wind direction, seasons and climatic data), geography (Soil grade, erosion and horticulture). <sup>25</sup> It requires to think about the all-encompassing natural phenomena of an area through skilled professional guidance who can use this for creating and sustaining energy (renewable energy, natural insolation, plant propagation) and promoting infrastructure that lies in conjunction with the land itself to mitigate the implications it may have on the environment.

Traditions undergo gradual transference in a very diligent and yet rather subjective manner. Nowadays, they have evolved given the ever so growing modernization where some societies can still pride themselves with effectively nurturing and prioritizing traditions, whilst other societies have prioritized more contemporary lifestyles and with that lost touch of their traditions. **Contemporary art and architecture are undeniably affected by this phenomenon, "new movement" that has a big responsibility to choose the right method and proportion of the traditional and the contemporary side.** 

The goal of this master thesis is to shed light on this contemporary architectural movement/direction that evolves almost simultaneously around the globe and that works mainly with architecture through **atmospheres**, **feelings**, **emotions familiar to the future residents**. It is led by architects who are actively participating in building an **architectural awareness**, academically and in the field through internationally recognized building designs, **of the local, traditional, cultural** but at the same time unique and individual approach in **(residential) architecture**. Its main role is not to present society's ideology, mental ideas through a concrete form or building achievements but to remind those who use it, those who live there or visit, of themselves, of who they are and what they stand for and embrace the cultural differences in most positive way.

<sup>&</sup>lt;sup>25</sup> Inspired from "World Environment Day: Vernacular architecture and its therapeutic effect on dwellers", Abhishek Guha, 2021

### Peter Zumthor - emotions, tradition, regionalisms, atmospheres

"Ich beginne zu spüren was in der Landschaft, im Ort gespeichert ist aus der Geschichte… und ich spüre vielleicht 8000 Jahre oder doch mehr und das ist meine Faszination…" (Sternstunde Philosophie – Peter Zumthor – Architektur und Atmosphäre, Interview 19.06.2017, accessed in March 2022)

"I start to feel the history that is saved/preserved in the landscape, in the place... and I feel maybe 8000 years and even more and that is my fascination..."

This is how the Swiss, Pritzker award winning architect Peter Zumthor responds not only verbally to the question what his approach to every design task is but most importantly he has proven it through his designs, books, teachings about architecture. Whenever he finds himself in front of a new challenge, new possibility to create a building he gets reminded what architecture for him means:

"Das emotionale Empfinden, das genaue Hinschauen, das Beobachten, das steht für mich im Zentrum. Es gibt Dinge in der Architektur, die mich berühren und sie berühren mich nicht im Hirn, sondern im Herz, in der Seele oder im ganzen Körper. Nachher frage ich mich was war denn da. Das ist für mich die bessere Methode in die Tiefe zu kommen, weil meine Emotion, wie bei allen anderen Menschen, das zeichnet uns wohl aus, dass wir viel in uns tragen und gespeichert haben. Von dem, wissen wir vermutlich nicht immer, dass wir das alles tragen aber genau das ist mein Material und das versuche ich abzurufen und so arbeite ich auch mit." (Sternstunde Philosophie – Peter Zumthor – Architektur und Atmosphäre, Interview 19.06.2017, accessed in March 2022) "The emotional perception, the close look, the observation, that is the focus for me. There are things in architecture that touch me, and they don't touch me in the brain, but in the heart, in the soul or in the whole body. Afterwards I wonder what was really that there. For me, this is the best method to get deeper, because my emotion, as by all other people, is the most significant to us, is what we carry and store a lot within us. We probably don't always know about it, but that's exactly my material and that is what I try to access and that's how I work with it." (Sternstunde Philosophie – Peter Zumthor – Architektur und Atmosphäre, Interview 19.06.2017, accessed in March 2022)

The architect of silence, as many would call him due to his unique approach to architecture through the feeling, is an internationally recognized architect as one of the most influential names in the contemporary architecture. Beside the Pritzker award or Preamium Imperiale, world's most prestigious architectural award, he also received the Big BDA Prize whose previous winners are great names in the history of architecture such as Ludwig Mies van der Rohe, Günter Behnisch and Oswald Mathias Ungers. It is an award from architects to architects and such a significant professional honour is more of a validation how much he is respected by his fellow peers.<sup>26</sup>

The very beginnings of his career do not reflect only architectural experiences but as a son of a master carpenter, rather his passion for craftmanship and materials. He started learning the detail, the "little things" that when put together can create the bigger picture. His next step was somehow predictable to start studying interior architecture and design at the School of Design in Basel, his hometown. With this knowledge, he continues his education closer to the field of architecture as he moves to New York so later to come back to Switzerland again but with a Diploma from the renowned Pratt Institute for architecture and industrial design. His already diverse educational background as carpenter, designer and architect takes direction into the art of preserving and valuing the cultural heritage that architecture offers.<sup>27</sup>

 $<sup>^{\</sup>rm 26}$  From the official site of the Pritzker architecture prize

<sup>&</sup>lt;sup>27</sup> Derived from Magali Robathan – Peter Zumthor on the role of emotions in his work, Interview 2017

His over 10 years professional and work practice gets another connotation as he broadens his understandings about the importance of the uniqueness of a geographical location of a place, various local building material, traditional handcraft processes. He founds his office in 1979 in Haldenstein and soon after that he starts celebrating his initial successes followed by several important and internationally acclaimed buildings: the Chapel Sogn Benedetg in Sumvitg/Graubünden (1985–1988), the thermal bath Vals/Graubünden (1990–1996) and the Kunsthaus Bregenz/Vorarlberg (1990–1997), the Brother Klaus Field Chapel (1999–2007), Kolumba Museum (2007), as well as theoretical writings: Thinking Architecture (1998), Atmospheres (2006) and countless awards.

His practical work is located somewhere between poetry and pragmatism, something which do not reflect a fast-paced building trend but on the contrary, a well-thought, theoretically and conceptually backgrounded realizations. He doesn't only draw them, he talks and writes about them, about the processes of designing, about the intensive planning phases and the necessary time to assure a result standing for quality, client's satisfaction, personal criteria fulfilment. His office stays in a "measurable size" of as many people as he could personally work with, and his projects concentrated out of the world's fame and general building production. His opus body might be relatively small, but his influence is huge. An example of this, worth to mention in the context of the previous sentence, is he keeping no secret of refusing construction contracts if it is to be played by someone else's rules.<sup>28</sup>

One of the biggest virtues that Peter Zumthor and his office have in comparison with other practising architectural studios is his **representation of a coherent and clear imagination of a special architectural aesthetics**, typical and distinguishable from the rest – kind of an architectural digress in the minimalistic contemporary style. **His approach towards building tradition and local appreciation** is what helps to create a special timelessness in the field of the erected buildings and in people's minds– a sparkle of inspiration, as someone great to look up to, for the new generation of architects. <sup>29</sup>

<sup>&</sup>lt;sup>28</sup> Derived from Magali Robathan – Peter Zumthor on the role of emotions in his work, Interview 2017
<sup>29</sup> In 1997, the weekly newspaper DIE ZEIT praised his "always locally inspired, expressly contemporary architecture of idiosyncratic beauty and naturalness".

"When an architectural design draws solely from tradition and only repeats the dictates of its site, I sense a lack of a genuine concern with the world and the emanations of contemporary life. If a work of architecture speaks only of contemporary trends and sophisticated visions without triggering vibrations in its place, this work is not anchored in its site, and I miss the specific gravity of the ground it stands on."

Peter Zumthor

# Architectural work of atmosphere - The Therme Vals

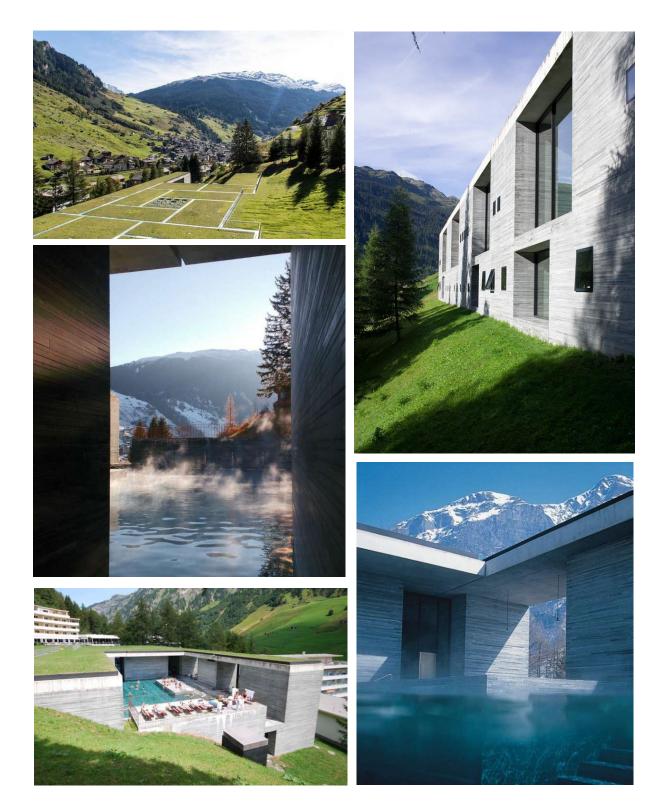


Fig. 1-5. Therme Vals

His most famous project The Therme Vals are a trivial example of an architectural wonder when "tradition and regionalism" is threated the right way, when the atmospheres and the emotions evoked by the new spaces are the centre of the design and yet the impact of the building is covered with a contemporary coat. This architectural piece among many others marks his work and name as one of the prominent ones in the architectural field.

*Intellect is a line; emotion is a space!* – Zumthor's Therme Vals are the perfect example of it; a building evoking the emotion through the well-thought atmospheres that are abstract and yet much wanted and captured by the people occupying the space. It is impressive how the whole concept is thought through – a complexity and yet a beauty of the simplicity.

In the Swiss Alps, Zumthor created the Therme Vals Spa complex, where he was very particular in the choice of the materials. *"When I start, my first idea for a building is with the material. I believe architecture is about that.* It's not about paper, it's not about forms. It's about space and material"- P. Zumthor

For the exterior and the inner premises, the author used concrete and Valser Quarzite slabs which is a **material from the local area**. This building is a work of art, with its structure made of massive blocks that let the light inside through the designed gaps, the natural surroundings transform its appearance but the same story drifts within it. The water is the element that connects the inner and external spaces, making the balance between them. Zumthor's idea to create ambiences for all the senses is dignified in this building, standing up from the mountains. Lights, shadows, authentic topography, pleasure seeking, all of those make the whole picture for the appreciation of the bathing and the supernatural atmosphere.<sup>30</sup>

The exact stone that is admirably incorporated in the Spa is a **material with a long history in housing in the vicinity, that has proved to the locals its defiance against the extreme temperatures changing during the year**. The landscape and the local scenery are strongly linked in Vals Therme Spa to the code of the region and anyone can **feel the tradition and the soul of the area**.

<sup>&</sup>lt;sup>30</sup> Derived from "Thermal Baths Vals", Architectuul, (Accessed in September 2022)

### A quasi-romantic architect

Peter Zumthor is among those architects who consider more than just the visual aspects of a project. For him, it is not only important how a floor, stair, wall, room or façade look, but also how they feel when one touches them with his or her fingertips, how they smell, how they resonate and sound, and what kind of associations, mental images, expectations and memories they evoke. (Philip Ursprung, 2009 Laureate Peter Zumthor. Essay — Earthworks: The Architecture of Peter Zumthor)

This kind of memory, a so-called "spatial memory" is a crucial component of the architectural experience that Zumthor offers. The author of the Essay "Earthworks: The Architecture of Peter Zumthor" devoted to his Laureate, Philip Ursprung - an art historian and professor of modern and contemporary Art at the University of Zurich, keeps on writing about his admiration and much respect for the beauty and the atmospheric effects of the buildings. He also stresses out that due to Zumthor's romantic impulse he is considered as a quasi-romantic architect. Moreover, two professors, Prof. G. De Bruyn and Dr. M. Willand, from the Institute for Principle of Modern Architecture (Design and Theory) in Stuttgart, would compare the work of Zumthor to Goethe's romantic approach in his writings in two essays "From German Architecture" (1772-1773) and "Architecture" (1795)<sup>31</sup>. The goal was to find similarities in his attitudes and behaviours, as well his thoughts on his own contemporary architecture and in the views of architecture from the Romantic period. They used his very popular writings that he collected from November 1988 until September 1996 and published in 1998 under the name of "Thinking architecture".

The book is divided into 5 subtitles: A View of Things, The Hard Core of Beauty, From Passions to Things, The Body of Nature and Teaching Architecture, Learning Architecture. Memories, spatial perceptions, images of situations, sensual experiences, atmospheres, physical touch of specific materialized objects – are among the foundation of his architectural inspiration.

<sup>&</sup>lt;sup>31</sup> Original titles: "Von deutscher "Baukunst" and "Baukunst"

He mentions artists that work with **material in the actual essence of it and that these poetic abilities** help him go beyond temporality and composition. He is fascinated by Carlos Williams's focus on the perception of the material world as well as Leopardi's search after beauty in the vague. Zumthor then asks himself if he can transfer these to architecture while being concerned which **emotions he is going to allow with his buildings**.

For him the purpose of the representation of architecture is to create curiosity, not too much realism but for sure quality. He compares his work to a piece of music, a whole made of many details and good material joining. He quotes the Arte Povera group: "Every touch, every connection, every joint is there to serve the idea of the whole." Criticizing the complexity of the modern world full of incomprehensible signs, he proposes to observe and gain knowledge from the elements in the nature that seem to create a calm, harmonic atmosphere while referring to Edward Hopper's pictures. And this **atmosphere is achieved when the building is able to "absorb the traces of human life"**, when the wholeness of the architectural object is achieved. With Handke's thesis that no ingredient should happen and that the struggle lies in the overcoming the artificiality towards the everyday natural, he draws the conclusion that **the pursuit of the wholeness triumphs when things are given a "natural" presence**.

In the chapter "Places" he revolves around the question if the place where he works influences his job. According to his observations, there are many places that colour his work – and that he can use in the design. He also counts places that come from art, which are more like "the epitome of certain moods and qualities". However, to understand the place is to understand the human relationship with it and thus through the basic trait of being human – dwelling. For Zumthor, the superimposition of impressions creates a multi-layered "image of the local", which he considers the "designing painting ground".

In the last chapter "Architecture teaching; architecture learning" the author explains that there are no general answers in architecture teaching and that these must be always found anew for each design. He finds it very important to work with **personal architectural experiences while questioning images from the memories and thinking in images while designing**. This personal touch is what defines the architecture we create not only for us as architects but also for the ones using it.

In the comparison to Goethe's essays "From German architecture" and "Architecture", according to the Prof. G. De Bruyn and Dr. M. Willand, the first thing to point out is that all three texts have the same goal of presenting the author's respective view of architecture – architecture as art – one as a producer and the other as a recipient of it. However, **both of them begin with writing about memories from childhood while praising the talent to experience architecture even without knowing/thinking about it.** Zumthor as someone who always had the urge to make things and who through his architectural education and work, had the impression that he somehow knew the emotional core of what was newly discovered. Goethe on the other hand, describing he was born with gift of being active in architecture, with a keen eye for proportions, and ability to practice with ease on all shapes.

Another similarity between Goethe's first essay and Zumthor's writings is to see architecture in a so-called special wholeness of things. As this is typical for the Romantic period, Goethe uses nature to help in his earlier essay when he speaks of the harmony of the masses: "As in works of eternal nature, down to the smallest hesitation, everything is shaped, and everything is aimed at the whole". Zumthor believes in this "self-sufficient, physical wholeness of the architectural object (...) as a difficult but indispensable goal". Goethe's early writings wound describe architecture as an art where the master builder, who designs from his purpose, needs to consider the mental well-being of the visitor/user/viewer. (Mücke 2010, S.18)

And Zumthor aims to design buildings that behave sensitively towards people – buildings that "accommodate people, let them experience and live, not cajole them". (Zumthor, 2010, S.33)

"One should think of architecture as a beautiful art work solely for the eye; but it should work excellently, what people usually pay least attention to, for the meaning of the mechanical movement of the human body." (Bruyn and Dr. M. Willand, 2015, S.14) This statement by Goethe is also reflected in the following considerations in Zumthor's work: Derived from Heidegger's statement that people always stop by at things, and thus always relate to a place and thus to a space, this means: "The reality of architecture is the concrete, the form, the mass and the space, its body." (Zumthor 2010, S.36–37) This body, according to him, is the physical connection to Life. Furthermore, a slightly different connotation is given to the previously mentioned expression "spatial body". The author wonders whether in a film that shows people dancing in a hall, the dance hall with its atmospheric design is responsible for the special atmosphere or the people moving in it. The author's thesis is that a good building should be able to absorb the traces of everyday life in order to acquire a special feeling. "Architecture is exposed to life. If her body is sensitive enough, she can develop a quality that guarantees the reality of the past life." Goethe also has this "specific harmony of a concrete building" and he now argues on a very similar, particularly sensitive level from the perspective of the recipient: "we feel a pleasant sensation when we dance according to certain laws; we should be able to arouse a similar sensation in someone whom we lead blindfolded through a well-built house". (Bruyn and Dr. M. Willand, 2015, S.14)

Goethe's theory, based on the practical use of the material, distinguishes between three levels/purposes: the next (the necessary and useful), the higher (conditioned by the sensual-harmonic), and the highest (the over-satisfaction of the senses). When comparing Architecture Thinking (1998) and Architecture (1795), the reader can get the impression that the intuitive approach of Peter Zumthor can be explained in many places with Goethe's theory. As already mentioned, Goethe's theory is based on the "expedient" use of the material. According to Goethe, the master builder is either led by the properties of the material, for example using stone only vertically, for which common craftsmanship is sufficient, or he forces the material by creating arches and vaults, for which a certain knowledge is required. (Goethe 1795, S.35) These types of considerations regarding the use of the material also play an important role with Zumthor's opinion on how a material should be used. Congruent with Goethe, according to Zumthor, architecture arises when the art of joining is taken into account and things are manufactured using the knowledge of their cap/-ability. The challenge in designing architectural buildings is therefore to live up to this knowledge.

According to Goethe, the higher purpose, which is the prerequisite for art, requires the sensual-harmonic, which in every art depends on the material, the purpose and on the "nature of being, meaning the whole should be in harmony." (Bruyn and Dr. M. Willand, 2015, S. 16) When compared to Zumthor again, the material and the purpose as conditions for the sensual harmonic would have to be supplemented by the spirit of that period, the relationship to the place and the society: "Every house is built for a specific purpose, in a specific place and for a certain society.

At this point, the highest purpose, according to Goethe, begins, which "takes on the over-satisfaction of the senses and elevates an educated mind to astonishment and delight". Zumthor uses a similar diction. Things and works of art that touch him would have to be multi-layered, with a seemingly infinite number of levels of meaning (Goethe's theory of levels), which overlap and interlock and change in the "light of the different perspectives". (Zumthor 2010, S.30) In comparison to Goethe's almost ecstatic "oversatisfaction", Zumthor's buildings should not evoke emotions, "but allow emotions". (Bruyn and Dr. M. Willand, 2015, S.17) The authors conclude the comparison/research by concluding that there is a large overlap between Zumthor's contemporary theses and those of Goethe's writings from the Romantic period. This is reflected in the way of expression, the use of the same diction and metaphors and, last but not least, in a largely identical view of architecture. Moreover, they propose this comparison work to be a first step into a further deepening, to examine the 'whole work of Peter Zumthor' more precisely for similarities with views of the Romantic era.

While researching on the topic of the current architectural style, I came across many articles and research works that happen to mention the 'neo romantism as an exemplary expression of the current structure of feeling'<sup>32</sup> articulated through the metamodern style.

Metamodernism is a term that has gained traction in recent years as a means of articulating developments in contemporary culture, which, it is argued (and our generation appears to intuitively recognise) has seen a move beyond the postmodern mode of the late 20th century.<sup>33</sup> However, as mentioned before, it is almost impossible and maybe in this very moment not even totally necessary to divide, specify or somehow name certain contemporary styles since we are still in the period of experimenting with them. What for sure is easy to say is that we do have many architectural movements and the time will make remember those that are worth. That said, I would like to stress out that it is however important to be aware who do we set as an example to learn from. Peter Zumthor, a minimalist contemporary architect, or a practitioner of the metamodern with a neoromantic discourse, is someone to look upon especially when it comes to the treatment of traditional valuable aspects, the material itself being loyal to the regionality but also to the creation of a new (sometimes still kind of familiar) atmosphere.

<sup>&</sup>lt;sup>32</sup> Herzog & de Meuron, Notes on Metamodernism, 2010 (Accessed in March 2022)

<sup>&</sup>lt;sup>33</sup> Metamodernism a brief introduction, Notes on Metamodernism, 2015 (Accessed in March 2022)

## Iranian architectural development

When talking about great architecture, tradition, history and especially the very beginnings of all of them, we think about the world's major civilizations and their achievements. This nonstop evolution shaped and conditioned architecture in so many ways over the time leaving not only physically visible structures behind but mainly memories, experiences, knowledge that help us today understand better our past, our ancestors, ourselves. Moreover, architects, as individuals who not only experience architecture as every other human by using it on a daily basis but also getting involved directly in the process of creating it and understanding it before it gets its physical form, are influenced by studies of history of architecture, concepts of space–creation, possibilities of space perception, considerations of human background, appreciation of certain life habits and mentality, understanding social interactions.

Tracking the architectural origin of Iran (Persia) is a joyful trip and definitely a challenge for every scholar, architect, art historian not only because it takes you to the home of the one of world's oldest empires<sup>34</sup> but mainly because of **the rich and diverse cultural, religious and geographical variables that this country possesses over 7000 years**. The Persian empire once occupying 40% of the world population kept its name Persia throughout different historical and geo-political changes over until the 20<sup>th</sup> century when it was decided to be internationally known under the name Iran<sup>35</sup>.

As Iran (Persia) once upon a time, stretched over three different continents and therefore was a home of many cultural variations depending on religious beliefs, climatic and geographical factors, and therefore a source and combinations of craft skills and knowledge, it has an architectural record for some of the most incredible and detailed works we know today.

<sup>&</sup>lt;sup>34</sup> Iran is recognized by UNESCO as being one if the cradles of civilizations.

<sup>&</sup>lt;sup>35</sup> The name *Iran*, Land of the Aryans, derives from the people who immigrated to the Iranian plateau some 10,000 years ago. (Pope 1965; Pope and Ackerman 1938)

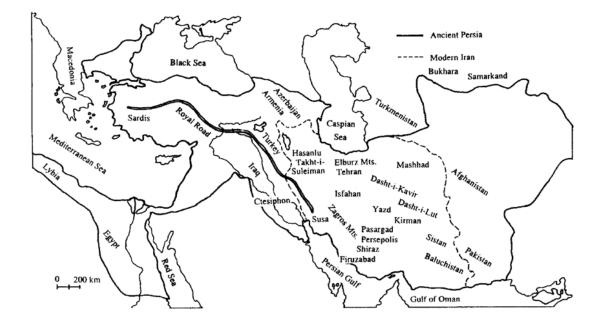


Fig. 6. Map of ancient Iran (Persia) and modern Iran

The architectural plateau of ancient Iran spread and left marks all the way from parts of the ancient Macedonia and some Mediterranean African regions to the Far East, Western Chinese lands. (Grant, 1971)

Luckily the architectural development of Iran has been quite often in the centre of many detailed research studies that have investigated the architectural aspects of the historical monuments and buildings, their relation to the people and their culture and tradition. Among many, the studies born around the mid-20<sup>th</sup> century, led by some famous experts on Iranian architecture such as Arthur Upham Pope who from 1920 until his death in 1969 presented Persian architecture through books, articles, publications, lectures etc., are a thorough collection of data that helps us understand the complexity of this tradition in building. It indicates that Iranian traditional building does not only has a profound engineering ability as many structures still witness it today but masters the concept of symmetry and beauty. Therefore, one could say, **it is a unique combination of the metaphysical and the physical aspect of space design, an unmistakable continuity in "style" that persisted throughout internal as well as external turbulations.**  Generally, the Iranian architectural styles<sup>36</sup> have almost the same division and naming in the literature as they are reflecting the society of most important dynasties that ruled with the Persian lands. M. Karim Pirnia in his book "Study of styles in Iranian architecture" pleases to firstly divide the architectural era into two bigger parts: Pre–Islamic or so–called Zoroastrian and Islamic times. Secondly, each era has a few styles that show how advance and ahead of time were the Persians when it comes to structural "technology" and architectural understanding.

1. Zoroastrian

The Zoroastrian or Pre-Islamic period is a predecessor to many great architectural styles after it as it is representing a time of "blooming" architecture for around 3-4 millennia under various civilizations and ruling periods: Elamites, Achaemenids, Parthians, Sassanids etc. The architectural remains that we can still visit today give us a distant but unique glimpse of what roles Persians played in the art of building.

The Persian style (up until the third century BC) including:

- Pre-Persian style (up until the 8<sup>th</sup> century BC)
- Median Style (from the 8<sup>th</sup> to the 6<sup>th</sup> century BC)
- Achaemenid style (from the 6<sup>th</sup> to the 4<sup>th</sup> century BC)

(Pirnia, 2005)

The earliest phase of the Persian style allows to have a look at the past literally by visiting some of the oldest preserved structures of the Pre-Persian style such as the Teppe Zagheh – human settlement and the Chogha Zanbil – ziggurat. Ending with the glorious reign of the Achaemenid dynasty for whose architectural style most common structures were temples, mausoleums, and other religious buildings but also an era of constructing "urban fabric", cities for governance and inhabitation: Persepolis, Susa etc.

<sup>&</sup>lt;sup>36</sup>So-called "Sabk"



Fig. 7. Pre-Persian style - Ziggurat at Chogha Zanbil (left) Fig. 8. Achaemenid style - Tomb of Czrus the Great (right)

#### The Parthian style including:

- Seleucid era (from the 4<sup>th</sup> until the 2<sup>nd</sup> century BC)
- Parthian era (from the 3<sup>rd</sup> century BC until 3<sup>rd</sup> century AC)
- Sassanid era (from the 3<sup>rd</sup> until the 7<sup>th</sup> century AC)

(Pirnia, 2005)

This style begins with the so-called Iranian renaissance during the Seleucid era and finishes up with the last Persian royal dynasty before the Islamic conquest - **the era of the brick monuments.** 

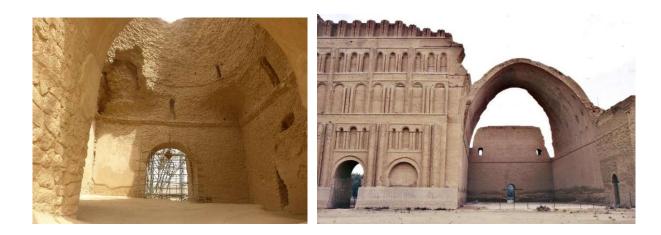


Fig. 9. Parthian era – Atashgah Castle, main chamber (left) Fig. 10. Sassanid era – Taq Kasra (the Arch of Ctesiphon) (right)

#### 2. Islamic

- The Khorasani style (from late 7<sup>th</sup> until the end of the 10<sup>th</sup> century AC)
- The Razi style (from the 11<sup>th</sup> century until the Mongol invasion period in the 13<sup>th</sup> century)
- The Azari style (from the late 13<sup>th</sup> century until the appearance of the Safavid Dynasty in the 16<sup>th</sup> century)
- The Isfahan style (from the 16<sup>th</sup> century until early 20<sup>th</sup> century

The Islamic architecture of Iran is the second big architectural phase that, however, somehow continued its predecessor especially when it comes to geometrical forms, repetitive patterns, tile decorations, unique brickwork etc. Therefore, the architecture of mosques in Persia (Iran) is very much inspired by the previous styles of architecture and art: Sassanid mosaics, calligraphy, stucco work and also Parthian's round-domed rooftops. (Pirnia, 2005)

However, I must mention a different matter when it comes to the similarity or the difference between those two great periods. The atmosphere, the emotion that the architecture evokes has a very specific uniqueness. As also this research paper argues, the communication between the architecture itself and the humans is far from just the impressions one can get by the physical appearance. Architecture carries within intentions and people carry within themselves experience and those are the main characters that can connect, speak to each other most sincerely and create a meaningful interaction.

Most of the still "living" forms of architecture from the Islamic architectural period such as bazaars, mosques etc. are usually dating back from 15<sup>th</sup> through 17<sup>th</sup> century. These forms represent an easy-to-notice application of order and harmony but also a well-thought-out geometrical pattern, ornament, space atmosphere and feeling that enabled a smooth aesthetic continuity from the pre-Islamic period onwards and stayed true to the Iranian traditional architectural expression by enriching it with the new religious symbolism. (Pirnia, 2005)



Fig. 11-14. Islamic period

This new touch of religious and cultural ingredient in the making of architecture influences mostly the buildings that are in indirect connection to the people, that become a reflection of the people's needs.

The last ruling dynasty from this period, the Qajar Dynasty (1779–1925), marked a great shift in the history of Iran as it happened to be the transitional era between a time when all areas of Iranians' lives reflected a continuous indigenous culture and a time when they gradually changed due to cultural exchange and architectural influence from neighbouring countries and mainly the West. Therefore, many would agree that an initial movement towards modernity started already during this era as a result of industrialism and exportation of home products and mainly as Iranians become more familiar with European political systems and social rights. The hopes for a new and better society in Iran became related to a new architectural perception especially in the form and decoration, however keeping an evident use of traditional principles and Iranian cultural layers. <sup>37</sup>

<sup>&</sup>lt;sup>37</sup> Derived from "Modern Movement and the Debates of Tradition and Modernity in Iran" by Hamid Aghaei Rad, 2014

#### 3. "Recent" architectural era

And then Iran enters the recent history of architectural era and by recent I am referring approximately to the last 100 years of political situations and significant changes that paves the way for the Iranian architecture of today. Although the author of the book "Contemporary architecture in Iran – from 1925 to the present", Amir Bani–Masoud uses the term contemporary for this architectural period<sup>38</sup>. In his book, addressed to this specific period and the architectural styles that developed due to certain political and socio–economical aspects, he discusses how *factors such as the development of new environment, the rise of the architectural profession, and the transformation of the building industry in Iran, all add to the emergence of a mature modernist architecture with political and social developments in Iran. (Amir Bani–Masoud. 2020, S. 1)* 

As previously mentioned, different nuances of modernisation were to be noticed already towards the end of the 19th century, however accelerated modernity took place under the first Pahlavi Era (1925–1941) and the second Pahlavi era (1941–1979). The first bigger factors were the vigorous urban renewal program and later the massive urbanisation and the rise of new cities. This urban modernisation was based on infrastructure design and development and focused entirely on physical planning. (Spatial discrimination in Tehran's modern urban planning 1906 – 1979. Vahdad Zad, *2012, S. 55)* With not much paying respect to the already existing fabric, major changes were made from demolishing buildings and making space for wider European-like boulevards to building new residential units espousing antihistoricism, anti-traditional spatial approach. All of these "reforms" happened under the so-called Iranian National style, which went through three subphases of experimentation and thus three directions. **Neoclassicism** was the first one and it was predominantly a western influence that stood behind architecture of representativity and power such as governmental buildings. Combining Neoclassical design principles with historical motifs primarily from the Islamic architecture and traditional materials such as brick, stone and wood with iron, steel and reinforced concrete led to the second tendency: Islamic revivalism.

<sup>&</sup>lt;sup>38</sup> for a clearer picture and division of styles in this research paper, I use the term modern and the term contemporary mainly for the architecture in the 21st century.

The third one, the **neo-Achaemenid** style, was born as a need to strengthen the nationalism as viewed by Iran's leader Reza Shah<sup>39</sup>, by digging deeper in history and using pre-Islamic period as the main, the true source of inspiration. It was a social reform along many other such as establishing numerous educational institutions, training architects and engineers, encouraging woman to seek education and employment outside of the home and therefore raising a new urban middle class. This triggered the need to solve architectural challenges when it comes to housing and residential architecture in general. The architects this time sought solutions more in functionality and new forms that came with the new lifestyle than they did in tradition and history. <sup>40</sup>

Many Iranian architectural pioneers designed many homes for the new middle class and espoused a deliberate anti-historicism in their search for the new means of expression. These architects sought to be current by adopting new programs, structural systems, materials, and compositions. They developed their most important architectural ideas through the design of the houses. These architects replaced traditional spatial divisions and gender-based sections of the house with functional rooms. (Karimi, 2013)

For instance, the architect Gabriel Guevrekian, is the first architect to use reinforced concrete in residential (house) architecture in Iran and therefore is widely believed that modernist residential architecture began with his works as Bani-Masoud implies in his book mentioned above. His works represent a pause in the traditional house design in Iran with no reference to past styles. His famous **villa Siyassi built in 1935** in Tehran is a great example of that. *The majority of the buildings designed by Guevrekian used the same structural system for the floor; a flat concrete slap with edge beams that were supported by a combination of load-bearing walls and concrete columns. This system was almost identical to Le Corbusier's typical floor construction. (Samuel, 2007)* 

<sup>&</sup>lt;sup>39</sup> A ruling monarch of the House of Pahlavi

<sup>&</sup>lt;sup>40</sup> Styles derived from "Amir Bani-Masoud", 2020

On the other hand, the well-known **International style** led by Le Corbusier and his peers came to great awareness in Iran, in the early 1950s but due to financial insufficiency, as Bani-Masoud argues in his book, it only got adopted as such in the **mid-1960s**. While this style was most be seen in public buildings, the residential (house) architecture developed a different tendency. The architects started to use regionalism as inspiration and to look again for some continuation of tradition, beliefs, and native cultural values in their works. *Modern regionalism* was rooted in deep-seated beliefs, including resistance against alien culture, respect for one's "genuine" and true ethnic identity, and the desire for returning to an "unsullied native cultural tradition". (Amir Bani-Masoud. 2020, S. 1)

This tendency is a fruitful outcome of the role the Tehran University's Faculty of Fine Art played as a response to the need for more professionally trained architects. Seyhoun, a prominent architect of this time who was also a dean of the faculty, had a remarkable influence in the idea of how to integrate the modern influences and keep the traditional spirit of local Iranian architecture. His romantic rather than structural approach to the past is apparent in the beautiful sketches he did of buildings and streets in Persian villages and towns. He used sketches and surveys as a means of better understanding architecture of the past. (Micara, Petruccioli, 1996) The academic aspect of working with architecture had a goal to teach young architects how to adapt styles and methods of buildings to local conditions and to the native sensibilities of Iranian culture and tradition. As Bani-Masoud implies, Seyhoun's most famous project was Dowlatabadi House in 1969. In his interview with the Seyhoun, he reveals that the architect's goal in designing this house was to create a feeling of spaciousness and a flow of movement that was deeply rooted in Persian tradition and sensibility. The house included an open courtyard with a pool, an open archway, a ventilation wind tower or wind catcher (bâdgir) and a family living room (sedari) that faced the courtyard. However, its design vocabulary was entirely modern. (Amir Bani-Masoud. 2020, S. 59)

The modern regionalism was eventually stopped by the Islamic revolution in the 1979 as well as the rest of the political, religious and social courses. *The revolutionaries were mainly critical of the western imperialist domination of Iran and the attempts to extirpate Islam. (Amir Bani–Masoud. 2020, S. 109)* 

The movement of the quest for identity that emerged in the late 1961s in the architecture retrieved new life by the occurrence of Islamic Revolution and the intellectual atmosphere of that time which was full of righteous demands such as the desire to rule over the country's political and economic destiny had profound impact on all parts of the society and consequently on the architecture. The quest for identity tendencies were directed towards the religious quest for identity and tried to revive the concept of Islamic Architecture and urbanization (Ansari, 2003).

The new situation created an absence of architects as many fled the country and others stop practicing architecture. One of the most famous architects from this period – period of **Post-Modern** form of architecture, was Seyyed Hadi Mirmiran who self said: "*I belong to a movement that aims to continue the evolution of architecture in this ancient land and to find its own place in the global context.*" (*Sayer, 2012, P. 81*) The post-modern architecture in Iran did get inspired by tradition but mostly in a physical way of incorporating elements on the facades and the overall volume of the building. It is a time when residential architecture as such did not blossom in a particular way but rather cultural centres, sport complexes, conference centres etc.

During the next four decades after the revolution, Iran was/is between the pressures of urbanisation, economic integration, globalisation, cultural exchange, and technological revolution. As Bani–Masoud also mentions in his own research, the 1990s was a time when second generation of post–modern architects departed from classical modernism but with an interest in historical motifs and in sharp contrast to them, a third generation of architects aimed in using new materials and technologies in new manner where form didn't follow function anymore.

The contemporary character is globally a 21<sup>st</sup> century topic that is still to be, if manageable, defined and categorized in all those directions of architecture that we witness today. One of them, as this paper suggest, is becoming dominant not only in Iran but worldwide as an approach to contemporary residential (house) projects that is universal but at the same time unique for different parts of the world, different cultures and traditions, different inhabitants. These new interpretations of the tradition in the contemporary design are products of the knowledge collected through times of great architectural success and times of big failures. The modernisation of Iran in the beginning of the 20<sup>th</sup> century was as immanent as globalisation is in the 21<sup>st</sup> century. The question is if the contemporary architects did learn from the "mistakes" or also from the examples of the modern architecture and how they deal with the globalisation nowadays through the architectural demands in the 21<sup>st</sup> century.

When it comes to residential (home) architecture, I tried to incorporate elected projects from some of the most prominent architectural studios based on national and international prizes and success. This generation of architects is generally a group of practising architects that had the chance to compare recent important movements in Iran as well as in the whole world and establish a new aspect of what and how architecture of tomorrow should be approached. In this research, I also included interviews with some of the architects that are potentially supporting the creation of the new movement especially when it comes to residential (house) architecture and the work with the local history, the traditional values but through the power of the atmosphere and emotional communication.

## Traditional Iranian architecture

To understand traditional Iranian architecture means to understand the connection between the people, the nature and the art of building-architecture itself. Moreover, Pope, as someone who invested long period of his life into understanding this bond, adds up the persistence in their unique perception of beauty, the beliefs (religion) and customs as key factors, basis of the Iranian traditional architecture. These aspects bring the emotional nature to it, the spiritual and conceptual background behind all those pieces of art and architecture that luckily, we can still encounter.

#### And where did this relationship between the nature and man started?

Since the pre-historic times, the very first bond between the people and architecture is the act of living, the need to feel safe, the seek to find better conditions, the pursue to create "home" in the given environment. This fundamental instinct knows many shapes and forms thanks to the geographical condition and socio-cultural factor. The ability to be create a space, inhabit it and use it has moved boundaries and expand the horizon of possibilities for the human and his lifestyle. This manifestation of the basic need, the own-built environment has revolutionized human's (architectural) development. People did build under various occupational conditions different housing concepts, patterns, realizations but all of them sharing the very first search for a roof, for a safety, for home. The so-called architectural phenomenon house is purely molded over the years, decades, millennials as a "natural" environment coming from people's needs, ideas, ideology, beliefs of certain periods in the history. In that sense, architecture is a direct manifestation of the daily life of the people once they started to "use" the nature and their ability to imagine, to be creative.

## Traditional Iranian building design elements

As already mentioned, every single style had its own unique architectural stamp and somehow contributed to the wholesome of the rich Persian/Iranian architectural history. Throughout its development, change of ruling parties and civilisation's progress each architectural style introduced something new, a material, a concept or a design element that became recognizable and marked a specific achievement in that period. Some of these building elements as a result of a long building experience and practice reached incredible technical accomplishments but at the same time moved the boundaries of beauty and became part of the people, a pattern, a value, a traditional component of the Iranian architecture. Many of them stayed dominant across different styles and some of them are even to be seen in contemporary designs in the 21<sup>st</sup> century. The traditional components/elements together with traditional building materials, traditional concepts of architectural approach have timelessness in the sense of how people, architects, artists have always found inspiration in them to recreate the old, reclaim the valuable, reshape it according to their very present time.

Therefore, I would like to elaborate on some design elements that "survived" for thousands of years and kept in helping in creating magnificent architectural masterpieces in and out of the Iranian land. They still carry the tradition of building, the tradition of the living–concept in these lands through the exact physical appearance of the elements evoking certain emotions of grandiosity, space dynamic, privacy, entrance, belongness, feeling of being home. These elements are related to public as to residential architecture, to urban planning as to house design as well – space design of everyday life is what makes the whole concept of living not only for one person but to the whole nation. And talking about emotion of grandiosity and pride of being part of something bigger, Iran luckily has to offer so much and on such level that humanity in general could feel the greatness people have achieved in past times.

These traditional elements were born once a **building technique due to a specific traditional building material** was mastered and this is **the case of the brick and the vault.** The most famous monument from the Sassanid era directly connected **to the brick and the builder's knowledge** is the Ayvān-e Kesrā<sup>41</sup> monument in the ancient city of Ctesiphon. *The ayvān<sup>42</sup>, as an indigenous Persian traditional component, finds its way throughout the whole history of architecture of Iran. One of the most amazing applications of it could be seen even today as part of the Jameh Mosque in Isfahan whose construction, reconstruction and renovations lasted circa 12 centuries. (Keall, 1987)* 

Along the ayvān, there is one more element that is to be noticed on the first sight, which proudly reveals to us that the building is from an Iranian origin – **the bâdgir** or the so-called, **the wind catcher**<sup>43</sup>. *The bâdgir is a traditional element that was born due to the very specific weather and the need to create living conditions by inventing a passive system of cross ventilation to cool down the building. (A'zami, A.,2005) The function of the wind catcher is to cool the house and create natural ventilation (Malone, 2012).* It means this element not only allows an exchange of air but also causes the air to flow/circulate crating a habitable atmosphere in the hot summers.

The Iranians combined it sometimes with a qanat<sup>44</sup> under the building to get even cooler air directly into the rooms, mostly a traditional space called yachchâl. Three types of wind catchers are found in traditional houses: one sided, four sided, or eight sided. *The type of wind catcher used in a specific area is dependent on airflow and air direction. If the wind blows in from just one side in the space, an opening at the top of the wind catcher forces the wind into the shaft (Ghobadian, 2007). The combination of wind catchers with courtyards and domes pro duces far more effective ventilation. Used in unison, these elements create better airflow and heat management (Fathy, 1986).* 

<sup>&</sup>lt;sup>41</sup> According to Keall (1987) was the largest barrel vault ever constructed.

<sup>&</sup>lt;sup>42</sup> Graber (1887): It is a single large, vaulted hall on three sides and opening directly to the outside of the fourth.

<sup>&</sup>lt;sup>43</sup> bâd "wind" + gir "catcher" (Persian: بادگیر)

<sup>&</sup>lt;sup>44</sup> A qanat or kanat is a traditional form of pumping fresh water, mostly in the deserts, to obtain drinking and service water from the higher regions.

According to research conducted by Ahmadreza Foruzanmehr and Marcel Vellinga, the main building materials for the wind catchers were **clay, wood or bricks**, which shows again a **direct connection between the traditional materials and the traditional elements**. However, despite the availability of the local materials, only a specific class of families were able to incorporate these instruments into their household design due to the big amount of needed materials and therefore the cost and difficulty of construction.

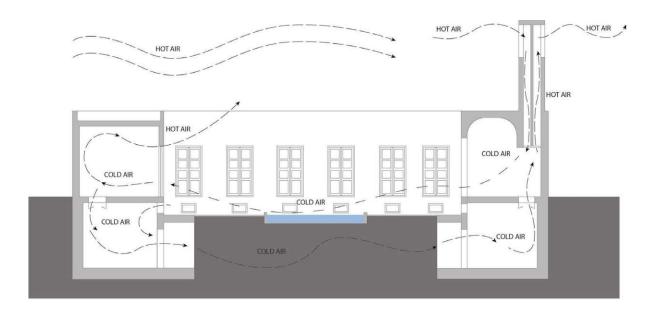


Fig. 15. Windcatcher diagram

That is one of the reasons why it is more difficult to track such applications in residential architecture as the investment was always limited to the well-being of the families. Moreover, their lifetime is shorter than a public building's lifetime due to not having a public interest of preserving the building itself. However, even if we cannot see many of earliest and oldest indigenous traditional components in their full shape, we can for sure notice/excavate the materials they were built with.

When talking about the traditional materials, it is important to mention that due to the geographically diverse and sometime extremely different climate, the nature as a living environment differs itself quite a lot all around the country. *The abundance of specific materials in one region has great effects in usage of those materials and as a result plenty of usage of specific structural systems in that region. (M. Golabchi & M. Khorramirouz .,2009)* 

Despite the great variety of traditional materials in Iran, one of the first associations of Iran and its architecture is *the brick as the main building material in most dominant structural forms in Iranian vernacular architecture.* (Alireza Behnejad, 2012) Moreover, the approximate ratio of traditional constructional materials typically used for Iranian dwellings (Kasmai, 1980; Ghobadian, 1998) shows the dominancy of the brick also in combination with other local materials in more then 50% of the researched cases.

Professor Philip E.L. Smith, the writer of the first volume on important excavations near Ganj Dareh, on the Palaeolithic Archaeology in Iran, writes about the first recorded use of sun-dried bricks around late 9<sup>th</sup> or early 8<sup>th</sup> millennium BC.

In western Iran can be also found remains of houses built around 6000 BC and those are already significantly bigger in size as they were starting to use a more easily manageable building material, the **mudbrick**. *Mudbrick along with wood was very popular in central Iran as well as there are also remains of huts and houses dating from 5000 BC. Starting from the famous Persepolis, mainly built from stone and wood to the the Bam citadel, the largest mudbrick building in the world located in central Iran, they are some of the still able to visit places dating back from the 515 BC and as such are under the protection of UNESCO as part of the World Heritage. (Hejazi, 2015)* 

Brick<sup>45</sup> was the most popular building material during the Sassanid era and it is fascinating that kept its dominance until the very today, always finding its "excuse" to be part of the architecture – starting back then as the most abundant building material as an only choice to being a first choice in plenty of projects among many other building materials nowadays.

The brick has customarily been made from a mixture of water-soaked earth (gel-čāl), straw, and chaff (kāh) and formed in wooden molds, which in the 20th century are standardized at about 20 x 20 x 4.5 cm. (P. E. L. Smith, "Ganj Dareh Tepe," Iran 13, 1975, pp. 178–80) The brick as such has been the longest companion of Iran's history of architecture and continuous to be part of many contemporary projects nowadays. Although the brick was already well-known building material in Mesopotamian architecture, Iranian monumental structures from the 2<sup>nd</sup> millennium BC gave it a different connotation – a representativeness and with that an appreciation.

A considerable advance in brick technology occurred in Elam in about the 13th century b.c., when blocks intended for decorative purposes were molded from siliceous earth mixed with lime and fired. These bricks were relatively lightweight, porous, and durable; they also could be enhanced by molded reliefs on their outer surfaces and were coated with colored lead-based glazes. (Amiet, 1976, p. 14) This was quite an important breakthrough because the brick got a different role in the whole process of molding architecture and as a decorative element was also used in the Achaemenid period – The Archer Frieze from the *apadāna* (great hall) at Susa, now in the Louvre Museum, Paris.

<sup>&</sup>lt;sup>45</sup> In combination with quick dry gypsum mortar

Another step in the experimentation with the brick is the inclusion of the gypsum mortar as a bonding agent. This discovery aided the construction of barrel-vaulted ayvāns and the dome on squinches (See Fig. 9 & 10), introduced in the Parthian and Sasanian periods respectively. *In the 17th-century mosques of Isfahan, for example, vaults up to 30 m wide and colossal thin-shelled domes on complex squinches "achieved a lightness and elasticity rivalled only by the Gothic stone architecture of northern Europe, and a beauty qualifying it for the circle of the greatest arts where no rivalry can be supposed". (Survey of Persian Art III, p. 901; cf. pp. 1165–1215)* 

A turnover in the marvellous path of the brick happens after the Second World War as the production of it got industrialized and substituted the manufacture of traditional materials. (Bromberger, pp. 710–11) Although this "downstep" has caused old techniques of brick construction and local craftsmanship to become lost, the brick finds a way through still even in the very high technology century. Architects that stand behind the value of the traditional material and its important presence in the daily life of the residents incorporate the brick by supporting local environmentally friendly ways of dealing with architecture. Some of many successful projects that stand out as an example of it are also included in this master thesis as catalysators for a new approach as an answer to the global issues of the 21<sup>st</sup> century and a reminder of a great cultural feature of the Iranian traditional architecture.

# Traditional Iranian house

Every traditional house no matter the origin brings unique values that the people have set as life principles over the years. Iranian traditional house has its own aesthetic and personality – a blend of wisdom, skill, and grace. Bricks, flower patterns on the walls, a kitchen with a view of the other rooms, a large yard with a sparkling blue pool and flower pots...

The traditional houses of Iran have elegant interior structures based on the beliefs and culture and have long been considered by the architects. The space flexibility, understandability, introversion, spatial hierarchy and respect for the privacy of family have special importance in the Iranian architectural and have been replaced by the extrovert architecture (Nosratpour, 2012).

Even though on first sight it seems that the climate and with it the availability of local materials primarily define the concept of building for a living, thus the architectural residential style, **the family and its relationship with the Persian house** plays the main character in the story of indigenous "home" architecture. *The Persian house as a concept lays its principles in the family members, the family gathering, the family respect and appreciation. (Shirazi, 2005)* It is a place not only for the material but also for the spiritual aspects of the everyday life and in that way one can say that all traditional elements represent a value, carry a significant part of the word "family" and everything it brings with itself.

The traditional Iranian house can be seen as an example of not only a comfort for the family residing in it but also for the bigger circle of family and friends. Therefore, when it comes to rooms and spatial design, the house in most cases accommodates more people than standard members of it for diverse family celebrations and gatherings. This is what makes the atmosphere, the vibe of the traditional house in Iran, the **feeling of hospitality, of being welcomed**. That is how traditions, customs and home education is being transferred to generations.

The size of the average Iranian family has gradually decreased over the last century. Until the early 20th century, it was common practice for extended families to live together under one roof. Today, however, the family unit is more discrete and typically consists of parents living with their children in a single dwelling. The average size of the Iranian family today is two children and their parents; in other words, a typically Iranian household has four occupants. As has been mentioned, spaces and rooms in traditional houses were multi-functional but today each room has a specific function and is used exclusively in that manner. Moreover, it is common for each family member to have a private room. The main communal area in modern houses is the living room area which typically consists of sofas facing a television. All other spaces are reserved mainly for private use by individuals. In Persian families, respect and deference are shown to the elderly. Unlike in years past when women were relegated to the domestic sphere, Iranian women and mothers today likely have a job in the formal economy in order to raise the household income (Mirmoghtadaee, 2009, p.69-80).

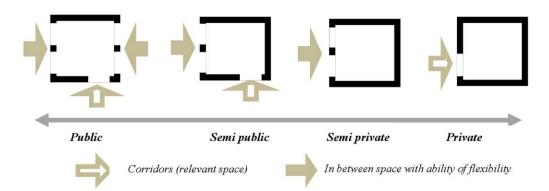


Fig. 16. Iranian traditional way of eating with the family.

## Privacy and hierarchy of space

High population rates, bigger housing demand, economical sides of building a residential unit are just some of many factors that help neglecting the cultural, the actual requirements of the residents. One of them, deeply rooted in the Iranian tradition of establishing and shaping the space-home, is the privacy and the hierarchy of spaces. Namely Sohrabi Mollayousef in his study "Local Architecture: Using Traditional Persian Elements to Design for Climate in Yazd, Iran" published by Carleton University in Ottawa in 2015, argues privacy as one of the foundations, a must-know unwritten rule when designing a home of an Iranian family. He describes this phenomenon as a duality between the secure, trusted secluded-in-a-way life inside the walls and the exposed, public room outside the walls. It is the cultural background supported by the religious factor that creates the so-called double life. Consequently, architecture follows the rules, the requirements, the needs of the residents and therefore the traditional Iranian house becomes a playfulness of space categories based on the level of permitted visibility.

The family name and honour are sacrosanct, and all members make a conscious effort to keep private the affairs of the family. The emphasis on privacy in Persian culture had a marked impact on the architecture of traditional houses and led to the creation of physical divisions in the house to create privacy within the domestic sphere too. A typical Persian house contains multiple divisions, including open, semi-open and closed spaces (Tahir M, 2010, p.273–287).





A more recent article on the matter "A Survey on Privacy of Residential Life in Contemporary Apartments in Iran" by O. Heydaripour and colleagues, elaborates more on privacy and its influence (or not) on the contemporary architectural scene in Iran. They deal with the possibility of being able to detect the three main recognizable tradition zones in tradition cities as they seem to have a movement pattern in change of size as passing from one to another. Additionally, they stress out that the neighbourhood gateways are indicating the entrance–flow between the public and private life such the life of the house or the neighbourhood itself and the bazaar or any other public spaces. The courtyard house is a great example of creating enough private space only for the family members while allowing them to enjoy the outdoor benefits. The concept of privacy and space hierarchy had developed over the year as a result of the user experience and architectural modifications and therefore creating a certain space pattern that would satisfy and serve the customs of the residents.

The visitors could not see the inside of a house from the alley when the door was open. It was provided by the hierarchal movement pattern of the entrance elements. In this system, the gradual movement from the entrance into the centre of the house (from the semi-public space, the alley, to the most private part of house) is recognizable. In order to access the house spaces, it was necessary to pass from pre-entrance, entrance, vestibule, and corridor in order to get into the courtyard. Thus, the visitor do not have any view into the courtyard as he passed through the corridor. This indirect and hierarchal movement pattern satisfied the highest level of privacy for residents. (O. Heydaripour, F. Behmaneshnia, E. Talebian, P. Hoodeh Shahi, 2017, International Journal of Scientifific Study, p. 257) However, the fascinating part of the whole philosophy behind the concept of privacy in the Iranian traditional home is the application of it in an inner circle of the architectural hierarchy. That means have mastered the space division not only as a private and public space separation but also as a "inside" and "outside" space within the private area, the home itself. Shabani, M. in his work from 2011 "Relation of cultural and social attributes in dwelling, responding to privacy" writes specifically about the role of privacy in creating, physically separating spaces inside the residence.<sup>46</sup> The "outdoor" part or *bīrūnī* and the "indoor" part *andarūnī* are two well–known motifs as the most profound and purest architectural forms produced by the social, spiritual and cultural behaviour.

The most private part inside the house is the area where women of the house are free to move about without being seen by an outsider (na mahram). This is also the place where women can interact with their kin (maharim) without following the dress code or without wearing the hijab. (Arjmand, Reza (2016– 09–13). Public Urban Space, Gender and Segregation: Women-only urban parks in Iran. Oxon: Taylor & Francis. p. 24.)

Clearly the *andarūnī* is on top of the hierarchy of space-privacy and the bīrūnī, as A. Reza explains, is the equivalent space for man but it differs in function and therefore is considered less private area. Namely, these rooms are also used sometimes for male religious ceremonies, business meetings etc. Traditionally every family would aim to have both of the spaces as long as the financial situation allows it but also the economically lower class would often "sacrifice" other spaces in order to maintain the privacy division.

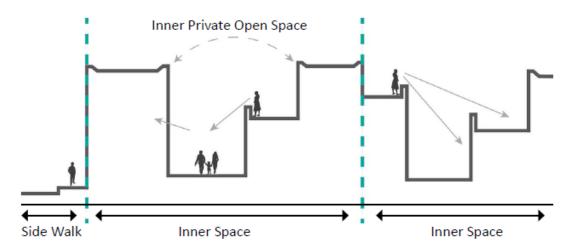


Fig. 18. Achieving Privacy in the Iranian Contemporary Compact Apartment through Flexible Design

As previously mentioned, discussing the Persian (Iranian) House, especially the traditional one, means directly referring to the great range of the cultural and but also the geo-climatic areas in Iran. There are four seasons to be found across the country, but its **geographical position** creates possibility for extremely diverse conditions that shaped and influenced the architectural styles on the building and designing the traditional home. Consequently, the north and its mountains have the typical thatched houses with the terraces around them (the porches) and on the other hand, the south and mostly it desert parts have the houses with the courtyard in the middle. When observed the types of the houses that emerged over the years, the most fascinating part from today's point of view are the **eco-friendly, sustainable concepts** behind the house architecture, as this topic is becoming high priority in the contemporary world.

### The eco-friendly approach

It is not a secret that traditional design is what today we call a sustainable and/or green architecture. As sustainability becomes a global concern as one of the main factors for a future healthy living environment, architects turn more to the principles of passive traditional designs. Iranian architects, having the need to deal with different types of environmental conditions skilled in finding the right material and working with it to create a home. Here are some categories, each with its own touch on architecture, according to the weather conditions and therefore materials as well.

The architecture in the south of Iran<sup>47</sup> is unique in style having to deal with the hot weather, in finding the most suitable design that will protect the inhabitants from the sun. Therefore, a play between the shadows and light is what marks this southern architecture special. The way light penetrates the indoor of the house and the atmosphere that it creates not only measured by the temperature but very much by the aesthetics and the feeling of beauty as well. The urban fabric itself creates a shadow system by building and planning the houses close to each other as well as the sunshades on the facades, above the terraces. The floor plans are quite spacious, therefore creating space for extended family and storage as well. *For instance, most of the people used to be fishers and in order to cool down rooms for storage, they used quite a lot the wind catcher.* On the contrary, in the northern part of Iran<sup>48</sup> where rain is the main weather factor, which especially winter can get really heavy. The architecture responses to this "issue" by building gable roofs and using wood and soil as the most abundant local materials. (Khaki, Sadat, 2015)

And then there are the extremes such as the cold areas and the deserts. For instance, Tabriz is well known to have one of the coldest winters in the whole country. Here it is important to use such materials that would also play the role of a insulation as much as it is possible. *(Khaki, Sadat, 2015)* 

<sup>&</sup>lt;sup>47</sup> Cities like Bushehr and Abadan

<sup>&</sup>lt;sup>48</sup> Cities like Rasht, Gilan



Fig. 19 – 22. Architectural design Southern (up left), Northern (up right), Cold areas (down left), Desert area (down right)

**Brick and clay** are also materials that could save the temperature during the day and emit it back during the night. *Moreover, a traditional design element was created due to the need to store as much warmth – "zemestan neshin" is a room in the house that faces the sun. (Behnejad, 2012)* Again, totally opposite were the conditions in the desert area<sup>49</sup> the people had to find the best means to decrease the temperature in order to survive. Without modern technology, they came up with passive cooling systems, as previously explained – the wind catcher in combinations with other elements. One of the most famous cities for this type of architecture, whose historical city is recognized as a World heritage site by UNESCO, are the cities of Yazd and Isfahan. There are 26 properties in Iran inscribed on the World Heritage List and 61 sites on the Tentative List with **the Persian House in the Central plateau** on it. The justification of Outstanding Universal Value of the **traditional (courtyard) house** in this area is includes as an extra attachment to this research paper.

# The traditional courtyard house<sup>50</sup>

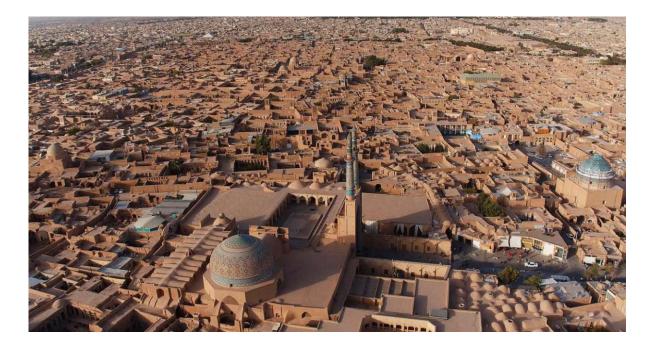


Fig. 23. Yazd's urban fabric

The famous traditional courtyard house is an Iranian cultural and architectural marble that is a mixture of tradition and environmental circumstance's concern. This central unit of Iranian traditional residential architecture "survived" since the pre–Islamic era and kept its originality, design patterns, importance all the way to post and during Islamic era. Of course, its physical features have been modified, expanded, mastered during all those years including all spaces that it carries with.

A traditional Persian house consists of multiple spaces, such the entrance (Sar–Dar), a vestibule (Hashti), corridor (Dalan), ivan, courtyard which consists of a pool in the middle and gardens. Most houses also have a basement and the surrounding room wrapped around the courtyard (Pirnia, 2005, p.153–167).

<sup>&</sup>lt;sup>50</sup> Taken as a source of inspiration from the region of Yazd.

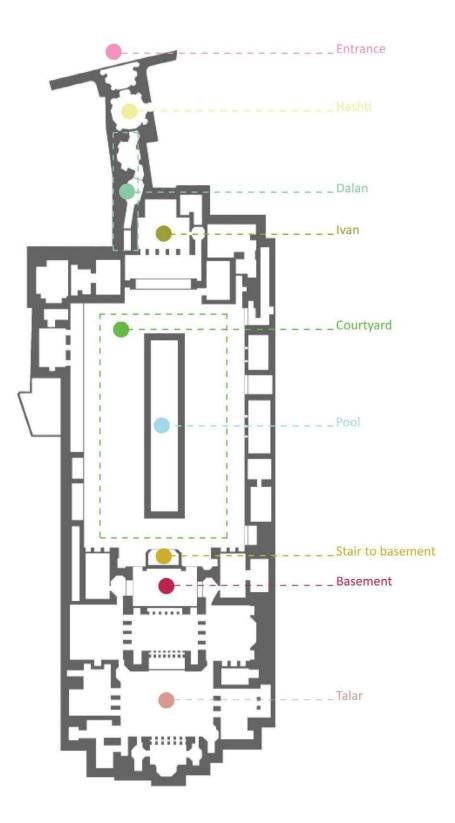


Fig. 24. Plan of a traditional Iranian house, showing the different spaces in the house

Understanding the courtyard houses means first to understand the urban fabric they create and how they interact with each other and the very public space. As we can see from Fig. 20. Yazd's urban fabric, courtyard houses in a bigger scale seem like an architectural play of volumes which create a dense urban mosaic. Starting from the urbanism we could already see that shadow is an important not only private but also public architectural "tool" in order to create a cooler environment and defend the residents from the extreme hot days.

It starts with the arched roofs above the narrow public room between the houses and moves into the very architecture of the house through the outermost walls i.e., the facade. The façade typically consists of thick high brick walls with no openings-windows as the first sign of the privacy concept. The opening as such is represented by the entrance door "Sar-dar" and therefore this element becomes a distinguishable part of the courtyard house. (Mollayousef, 2015)

The description of the courtyard house on the official site of UNESCO sheds light on the traditional architects who *tended to shift all ornaments and decorations to the interior of the house and the external frontage did reveal nothing but a simple entrance door. They attributed this lack of glamour to the Iranian culture which disapproves any form of show-off. As a result of this approach, there was no distinction between the houses of the poor and the rich, the only difference could be the entrance doors.<sup>51</sup>* 

Right after the entrance comes a space called *hashi*, that serves as a "filter" to distinguish between the inside of the house – the private and the outside of the house – the public. It is like a vestibule where the hosts would greed and welcome the guests and typically has a domed roof, sometimes even open with a view towards the sky. (See Fig. 21 Plan of a traditional Iranian house, showing the different spaces in the house)

<sup>&</sup>lt;sup>51</sup> UNESCO's Tentative Lists: The Persian House in Central plateau of Iran. (Accessed in May 2022)

Solmaz Haghighat, a content writer, describes the hashi as a possible link to all other parts of the house so that the reseidents once back home can easily reach where are they want to go. Functionally speaking though, the *hashi* is a mediator space to the corridor/hallway (*dalan*) that leads to the courtyard – "*hayat*", which is considered as the principle architectural aspect of the traditional Iranian house. This is how the entrance gate, the vestibule and the corridor create a hierarchy of space privacy so that the internal yard is protected from any unwanted sight from the street in front of the house. <sup>52</sup>

This introvert (solitary) concept of building up the spaces is partially contradicted when it comes to the talar and its appearance- it is located behind the ivan, which at one time was a room for greeting and welcoming guests (Pirniya, 2005, p.153–167). Since hospitality is of an utmost significance in the Iranian tradition and culture, this room would be the most decorated and furnished one in comparison to the other spaces in the house.

Another recognizable element of the house is the basement as the coolest place and therefore also used for storing the food. Moreover, the submitted description for the tentative list of UNESCO explains that *the design of summer and winter spaces, cellars, wind-towers, porch, sash windows and living spaces were designed by considering the climatic features and conditions such as sunlight, wind blow, green areas, precipitation and etc. Close attention was paid to cultural concepts in the design of Persian House, and these concepts ranged from the door knocker to the configuration and overall format of main spaces. In fact, the Persian House was a perfect and unique model of human habitat in which well-represented cultural patterns can be seen.* 

<sup>&</sup>lt;sup>52</sup> Solmaz Haghighat, Traditional Houses in Iran, The Magic of Persian Architecture, 2021 (Accessed in April 2022)

## Courtyard

One of the most interesting distinguishable elements of the Iranian architecture is the yard and its compounding elements. The water, vegetation, shading and privacy are all seen as one in the culture. Furthermore, the garden is seen to provide relief to the senses due to the high temperatures in the region and the people visiting it can enjoy of it without worrying about being seen or observed. *The houses with courtyards are among the prominent houses in Iran (Nabavi and Goh, 2011). The idea of garden and courtyard, which are complementary to the hot and dry plateau of Iran, is maintained in significant forms in the concept of paradise in the Islamic era (Shokouhian et al., 2007). The heat is greatly reduced in such these courtyards by the trees and water pool and through shading by high walls and this region is applied for recreation during the day (Belakehal et al., 2004).* 

Looking back into the history of Iranian house, we can roughly conclude that there were two different types of houses when it comes to the corelation between the house and its courtyard. As the architect Alireza Taghaboni explains as well,<sup>53</sup> the first one starts with the house itself in the middle, then comes the yard and then the city development and the second one already regulates the boundaries of the courtyard by putting the empty space in the centre and therefore it is defined by the solid part of the house. When we talk about the yard, the house garden, Iranians mostly have one picture in mind – a play of shadow and light, a space of semi–privacy that separates the house – the private part and the life beyond the fence – the public space. In a city full of walls, voices, sounds and different people it is important to have a place where you can have your own peace, meditation, calmness.

<sup>53</sup> PA Talks 06 – Interview, 15.11.2018

The yard starts usually with a dark entrance path (dalan) to create a sort of pre-entry space which is leading to a green "oasis" where finally the view to sky opens. Once inside, a very important feature next to the vegetation is the sense and the presence of the water as it plays a special role such as creating humidity, visual beauty and feeling of freshness and relaxation especially in the hot summer days in central Iran.(Samadi, 2013) The traditional courtyard of Iran therefore has had these elements: water, light, and privacy to work with, combine and optimize depending on the weather conditions, the local distinctive cultural habits in daily life and in building approaches, the people's preferences, economical situations etc.

According to the description about the history of the Persian house submitted by the Iranian cultural heritage, handicrafts and tourism organization for UNESCO's tentative list, the first such "architecture" dates back to the Neolithic Era. It is an ongoing process of evolution and design transformation along the years as specific historic periods prevailed. The house developed in terms of materials available in the nature and later produced by the people, the building techniques, the life values.

Archaeologically, it all started with a square/rectangular form and with the addition/division more rooms were created and that influenced the enlargement of a central room that could not be covered anymore – courtyard. As a result, a concept developed where on one side there were rooms and on the other side covered summer "units". Similar concept has been found in Persepolis and the City of Kashan. (Sedighi, 2019) However, most adjustments to the house design occurred after the Islam coming to Iran as a major cultural change and that mostly seen through materials and new construction techniques. Most courtyards are squared shaped with some houses boasting a rectangular layout, and, in all cases the size of the courtyard is a reflection of the household income and class level (Heidari, 2000, p.26–30).

## Researched architectural projects in Iran

As previously mentioned, my first research paper "The influence of the traditional elements and their implementation in the contemporary house design" sparked the curiosity about the **contemporary tendencies in residential (house) architecture and their relationship to the cultural identity.** Two Iranian projects from the area of the cities of Yazd and Isfahan and two European projects as a comparison reference were chosen and analysed. The interviews with the architects as well as the course itself contributed towards finding other similar projects and architectural studios that are part of the contemporary scene in Iran and play an important role in creating an awareness when it comes to new (residential) architecture and its relationship to the origin/tradition of the dweller.

Designing residential architecture depends on variety of factors that determine the end-product but the one that must not be ignored is the "need" of the resident. Here comes the trickiest part of all as architects are the ones who have the whole concept in mind, and they interpret the very "need" of the resident into their way of dealing with the design. It is natural for people to change and especially their opinions and wishes, as well as their living/existential "needs". Architects are those who should step in and foresee the course of the actions and the circumstances by taking into consideration the big picture of tomorrow. Architectural materials, building technology, socio-economic aspects... they all change as well and the real challenge is the ability to produce the same, even better feeling and atmosphere by adapting the shape and form or sometimes even leaving it behind.

For instance, Iranian culture is very well known for its hospitality and the way architecture answered throughout the years to this authentic characteristic of theirs. The Talar was once the most important design feature of the traditional Iranian house as the architectural emphasis on the treatment and respect of the guests. Nowadays, modern Iranian houses are rarely built with this part of the traditional house as the focus of "luxurious" accommodating is put more on the immediate members rather than on distant relatives. Moreover, the form of the house has also changed from introverted courtyard houses to extroverted houses. *However, privacy remains an important factor in housing designs, and even as houses became more extroverted, the high walls used for creating privacy persisted (Mirmoghtadaee, 2009, p.69–80).* 

But how do contemporary Iranian architects deal with the very traditional coreconcept of the privacy and hierarchy of spaces among the many other traditional influences in the contemporary residential architecture? The architects are those who stand behind the changes of perspectives towards the architecture and their decisions what to include in the contemporary design, how to interpret it and even create a new philosophy in this chaotic architectural scene. The studios I chose to present in the researched cases are led by architects who were raised in the post revolution and propaganda system and dared to go down the path of experimentation and learning by their own experiences. The failure of the public propaganda to find the "sweet potion of identity" in architecture and adding superficial reference to building facades triggered these generation of architects to look for artistic presentations. Each of these artists has succeeded in gaining national popularity through their creativity, and their works have attracted the attention of critics in national and international competitions. (Contemporary Iranian Architects, New space: Movement and experience, Negar Hakim pg. 8–9)

The projects chosen to be analysed were chosen mostly based on the vivid names of architects belonging in the already mentioned group of Iranian architects and their contributions to the newly built residential units and houses with a main focus on their interaction with the regionalism, the tradition and on their response to the global issues of the 21st century.

## Next Office

One of few contemporary Iranian architectural studios that in recent years gained international recognitions by winning several national and international prizes. The leading architect and founder of the Next Office architectural company, Alireza Taghaboni, is also a winner of the 2018 Royal Academy Dorfman Award which celebrates outstanding international contributions to design and uncover fresh new talent.<sup>54</sup> What seem to be the more outstanding is his approach to architecture as he explains in an ArchDaily interview: "*We want to keep our way of thinking and experimenting with contemporary culture and have lessons from the structural and spatial concepts of Iranian architecture. The main purpose of our project is the integrity between these layers.*" (Working with Contradictions: In Conversation with Alireza Taghaboni – Interview, 07.03.2020)

The architect Alireza is born in Tehran 1977, studied architecture in Iran and in 2009 he established Next Office architectural studio based in Tehran. As they describe themselves on their webpage, they stand firmly behind the goal to produce **contemporary alternatives to the traditional Iranian architecture by taking into consideration important factors of today such as climate, economy, socio political and cultural aspects**. Their work ranges from single family houses to residential, commercial, mixed used large-scale complexes to urban masterplans. In another interview, this time for the World Architecture Community, he stresses out that it is important to pay special and meticulous attention to the society and to those that is being designed for by picking the idea from the heart of the situation. "*The point that is very important to me, is to stand on the border of the old and the new. In other words, to stand in a place that is both familiar and unfamiliar. This fragile border is always attractive to me. (Alireza Taghaboni About Sadra Civic Centre by Next Office – Interview, 13.12.2020*)

<sup>&</sup>lt;sup>54</sup> www.royalacademy.org.uk/page/architecture-awards (accessed in January 2022)

The phenomenon of constant changing and living in different times of architectural needs is what the architect keeps in mind, especially when it comes to the Iranian society as the main design ground for his projects. *After* the Constitutional Revolution<sup>55</sup> in Iran a group of brilliant, talented and educated mid-level class people had accumulated, many of whom began going abroad for higher education which resulted in the formation of numerous big universities in Iran, built on the strength of the oil-based economy, and also the government and politics became quite contradictory for various reasons. These conditions resulted in the formation of a very different and heterogeneous society - full of contradictions, full of generational gaps in families. For example, in one family, you would see a father and son or a mother and daughter who were in very meaningful, opposing mindsets from each other. Or in one building, there could be two neighbours living with two drastically opposing attitudes. And this caused us to think and focus on such topics. The important issues to me are these contradictions and the opposing mindsets that exist in this society on one hand, and on the other hand, my passion for art, painting, literature, structure, and effectiveness of art. The existence of these parameters made me think about some type of architecture that could burden this tension inside and could keep it within itself. Such tension could reveal itself in different ways such as space, materiality, building technique, diagrams, etc. (PA Talks 06 -Interview, 15.11.2018)

The next projects that I am about to analyse are one of the many that show the work of the Next Office architects from words and ideologies they represent to actual physical manifestation of them. The unique architectural history of Iran is above all a great historical accumulation of knowledge that some may (not) chose to use while designing for the future. Architect Taghaboni and his team choose not to stay indifferent to the past but on the contrary, learn from it and develop a better version of it.

<sup>&</sup>lt;sup>55</sup> Persian Constitutional Revolution Period 1905–1911. The revolution led to the establishment of a parliament in Persia (Iran) during the Qajar dynasty.

#### **GUYIM VAULT HOUSE**

TRADITIONAL STRUCTURAL VAULT SYSTEM AND BRICK AS A DOMINANT TRADITIONAL MATERIAL; HIERARPHY OF SPACE PRIVECY AND ORIENTATION IN COMBINATION WITH MODERN GLASS HOUSE CONCEPT

Architects: Next Office - Alireza Taghaboni Status: Construction in progress Location: Guyim, Fars, Iran

Guyim Vault House is a research project to combine and integrate a structural diagram with the formal constructional diagram and the diagram of Iranian lifestyle. The research was how to have all these three diagrams in one while being able to express the characters of introversion and extroversion. For instance, the three half dome structures on the second floor, which are the private part of the house by facing each other produce an introvert, semi-private sunken courtyard. And the three half dome structures on the ground floor, which are semi-public part of the house by turning their "backs" to each other create a fourth fluid-like public interior space around and between them.

The idea comes originally form the Iranian architecture where the dome sits on arches, and the question that arose was how to put dome on a dome (half dome) and structurally match them together. The challenge was to broaden the structural system of this traditional Iranian element called the Chartaqi (Chahartaq) dating from the Sasanian's 210s AC. The next step was to give this traditional approach a contemporary feeling and incorporate it within the needs of nowadays. This is how the architect combined the famous "modernist" concept of the glass house with the dome-shape structures and created a unique contemporary house that takes a look into the long Iranian history. (Fig. Guyim Vault House)



Fig. 25 - 29. Guyim Vault House

The Guyim house is a, as the architect himself prefers to explain, a result of this above-mentioned tension that exists in the relationship between the past and the future of Iran – a tension that exists between private and public. His approach tries to nurture these relationships between past and future, introvert and extrovert, being very isolated and very free, all in the design. Because of the mentioned points, projects like Sharifi-ha House and Safadasht Dual are extremely challenging projects to him.

#### SHARIFI-HA HOUSE

TRADITIONAL INTROVERT-EXTROVERT CONCEPT (COURTYARD VS TERRACE) AND SPACE FLEXIBILITY IN COMBINATION WITH A CONTEMPORAY HIGH-TECH STANDARD

Architects: Next Office - Alireza Taghaboni Status: Finished in 2014 Location: Tehran, Iran

In this highly innovative project Sharifi-ha House, the turning boxes on the façade provide flexibility in the spaces, while changing the façade depending on the changing climatic conditions. Therefore, the house itself through the possibility of revolving rooms adapts to shifting the lifestyle inside the building. This house also demonstrates a critical take on building regulations and zooning bylaws.

For the architects, the Sharifi-ha House is somehow a kind of an experiment and a real project simultaneously. That means that the goal was to implement and integrate two major conditions at the same time regarding space orientation, space privacy and space use. In Iran, there is, as the architect says, very controversial situation and circumstances in the sense that there are so many different lifestyles, opposing ones that exist together. In that way this architecture responds and **creates a living place for different type of social groups coming from different geographical and therefore climatic parts of Iran** - a living place for diverse life situations under the "same roof".

The project is all about uncertainty and flexibility, contradiction, and functionality. In this house one can notice a full transparency and openness but at the same time intimacy and closeness. The turning boxes allow these two conditions changing as the residents please. As a result, the architect transforms a two-dimensional façade into a three-dimensional volume, into a liveable and operational façade-space.

The architect stresses out, that the concept of the project has a reference in Iranian traditional architecture regarding space orientation and lifestyles due to climate conditions. (Fig. Sharifi – Ha House Strategy) And we can see that – For instance, in the North of Iran there are buildings that have a closed core and a terrace all around it. All the activities happen most of the time in the outskirt area of the building and thus opening to the street. However, in central Iran there is a concept that reflects this one consisting of a closed area and a courtyard in the middle. Everyday life happens in and around the courtyard as the sandy wind cannot penetrate through the whole body of the building but the residents still having access to the sky. Two opposite concepts of livings: introvert and extrovert architecture, lifestyles.

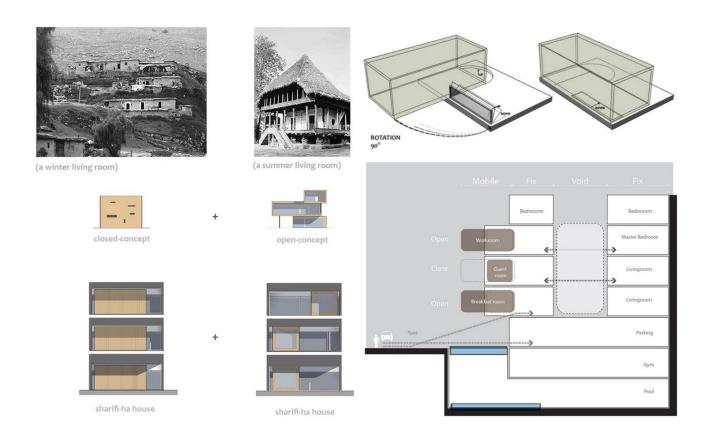


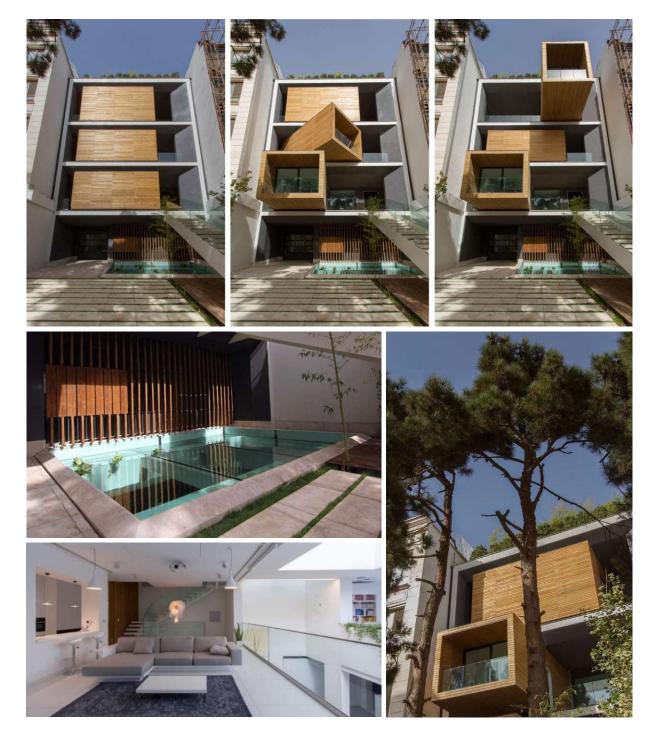
Fig. 30 -33. Sharifi - Ha House's Design Strategy

The architectural studio Next Office deals in most of their works with these different approaches to the open and closed space and also the connection between the closest place to the public parts of the city. The Sharifi-ha house has both of these characters and the ability to transform from one to another but also many positions in between. There are three parts: fixed one, the void between and the one that has the possibility to rotate. When the rotating part is open, the whole attention from inside is towards out, towards the very exterior (it means there is an active terrace) and when it is closed, the void-courtyard gets the attention as the main connection between the two firm structures (it means there is an active void-courtyard).

This dual configuration in a building and gradient between the open and closed space set a unique experience in the in and out variants, in the inside courtyard and the outside terrace. This again references the Iranian traditional house and the concept of a room serving as a seasonal mode of habitation: Winter living room (Zemestan–Neshin) and Summer living room (Taabestan–Neshin).

The guest room as an important traditional element of the Iranian house, although quite forgotten when it comes to the contemporary design, is a part of the Sharifi-ha House in a very creative way. The flexibility as well as one traditional feature covers the (no) need of the guest room as such by creating a multifunctional space that transforms its functionality according to the situation. However, the architects placed this multifunctional (guest) room on a different level from the private area of the residents so that **the level of privacy and hierarchy of spaces still prevails** over carefully coping with a traditional floor plan division.

The project is an example of a contemporary residential project that takes Iranian tradition as a reference and tailors it in a new way using high-tech technology specifically for the Iranian residents and their lifestyles. **Even the name of house, Sharifi-ha House is to remind of the traditional Iranian mansions.** 





### SAFADASHT DUAL

DIFFERENT GENERATIONS UNDER ONE FAMILY ROOF OF PRIVATE SPACE NEEDS TRANSLATED INTO A CONTEMPORARY ARCHITECTURAL SOLUTION

Architects: Next Office - Alireza Taghaboni Status: Finished in 2016 Location: Tehran, Fars, Iran

This is a project, an architectural solution to a life situation where the gap between separate generations under "one roof" creates a mix of lifestyles and different ways of space needs. On one side is the social gap that globalisation in the 21<sup>st</sup> century brings with and as well as the ability to afford certain life qualities and on the other side is the perseverance of the coexistence of diverse or even contradictory social styles as part of traditional way of family functioning. Therefore, **hierarchy in privacy is the main challenge in the design of this house** and the architects responded by adjusting the needs of the family members by giving them spaces according to their traditional/modern lifestyles.

This diversity in lifestyles, particularly in such cases as private versus public, conventional versus modern, masculine versus feminine, seems to be bolder, the effects of which, in approaches to architectural design throughout history, can be observed on the relationship between mass and void, hierarchy, and spatial sequencing. <sup>56</sup>

As the architects explained their intentions in the description of the project, the topic or the issue that was a focal point is the differences in spaces (when it comes to privacy) originating in various cultural and religious ideologies alongside diverse regions in Iran. This architecture represents the matter very much visually just by **putting the northern and southern Iranian concept of a house next to each other.** 

<sup>&</sup>lt;sup>56</sup> Text directly provided from "Next Office Architects".

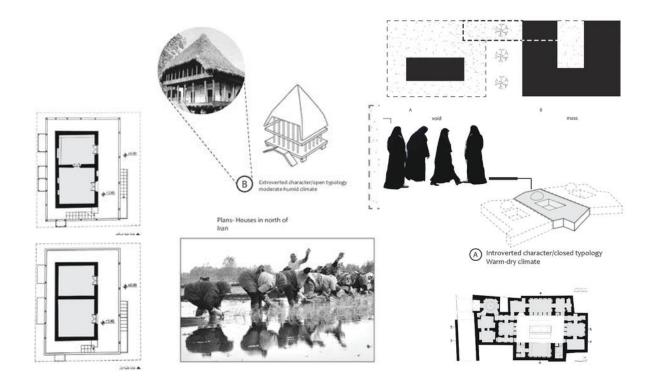


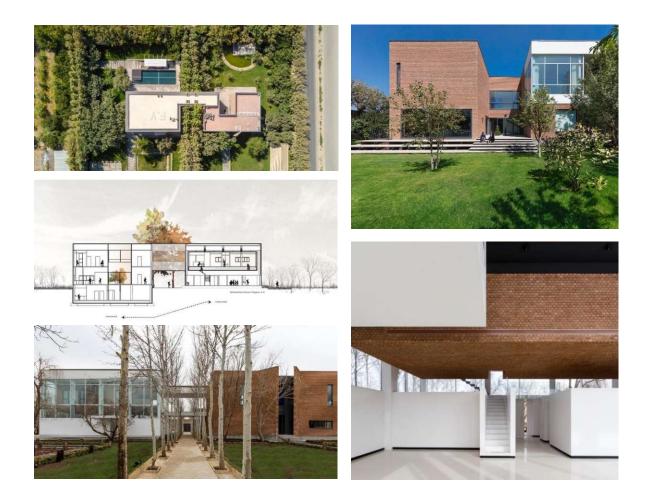
Fig. 38. Safadasht Dual House's Design Strategy

The diagram of the first building is based on a central yard with the construction surrounding it, and to accept the boundaries, brick walls and numerous windows have been employed. The diagram of the second building features a rigid core surrounded by public and semi-public spaces.<sup>57</sup>

The room concept follows the level of either more or less freely developed social interactions within the family. For instance, the northern regions due to the more freely social life flow in the family and also in the community, have developed public areas and the semi–public ones are surrounding the very core of the house – the private family room. On the other hand, the stricter social norms have aimed towards an empty space that is surrounded by the mass of the house / creating private courtyard and "investing" less in the public space as such.

<sup>&</sup>lt;sup>57</sup> Text directly provided from "Next Office Architects".

This way clients' demand could be fully satisfied as they have one building for the religious family who practises religious rituals and need more privacy and the other building mainly for the younger family members who intended it for late night parties. **The materials are chosen in a way that the traditional brick covers the façade of the parents' building and glass as a more contemporary material as the predominant feature of the second building**. The very much nowadays as well as kind of traditional characteristic that was added to the whole design is the flexibility of being able to use both buildings simultaneously and that also provides the possibility, if needed in the future, to sell one of the buildings separately.





What I say is, if you want to design a school, first you need to know its history. Perhaps not the history of the school, on the contrary you need to know the history of education, you need to know about the history of art. And also, you have to look and pay special and deep attention to your society, to those who you are designing for.

Alireza Taghaboni (PA Talks 06 – Interview, 15.11.2018)

### SADRA CIVIC CENTRE

THE IMPORTANCE OF NEGATIVE SPACE AND ITS ROLE AS A TRADITIONAL SPACE ELEMENT INTERPRATED IN A CONTEMPORARY CLAY-BUILT RESEMBLENCE OF A TRADITIONAL IRANIAN CITY SKYLINE

Architects: Next Office - Alireza Taghaboni Status: Architectural design Location: Sadra, Schiraz, Iran

Sadra Civic Centre was born in a competition for a new urban unit near the city of Shiraz. The wished result should be a new city but with focus on the cultural side of the whole story in order to avoid creating a single purpose zone. As the architect Taghaboni explains himself, the new cities that arise are normally seen as mainly residential units which people would use after work as they still commute to the bigger nearby cities. Therefore, they do not have much a chance to develop a higher cultural and life quality most of the time due to designing the units for one type of social group (for instance, a poor social housing), lack of infrastructure and certainly lack of public space for the residents.

The approach the architectural team of the Next Office was to look back and see how people use to inhabit private and public spaces in Shiraz, which ways worked for them to create a successful living environment. The goal is to continue the long tradition and cultural values of the residents and translate it in the contemporary cloak of their design.

So, we talked about negative spaces in Shiraz. Many years ago, people lived in the central courtyard and this courtyard was the main space. The courtyard had a very clear dimension, very perfect shape of a rectangular and the shape of the house was very accidental because of the texture of the city. (PA Talks 06 – Alireza Taghaboni Paradoxicality of Context; Interview, 05.02.2020)



Fig. 44 - 49. Sadra Civic Centre

This kind of spaces were very important – the introversion, the decoration, the façade (in the courtyard as it was the one having windows), the trees and the shape of the pool. This area itself as a so-called negative space or void was of a special meaning to every member of the Iranian household. This is why, the architect Taghaboni makes it a central thought, a leading feature in their proposition project for the competition. The idea is also to raise an awareness about many other ongoing social housing projects that build and design the mass but not the void in between. This is how different sizes and shapes of yards were created in the Sadra Civic Centre ranging from private to public ones creating a web of spaces. Exactly this design represents a little city instead of solitary house buildings. The different atmospheres and rooms allow the feeling of belongingness and own neighbourhood where the residents can perform daily activities as a healthy way of their developing.

Another very crucial feature of the project is the materiality and what everything could be triggered only by choosing the "right" material for a project. Considering the budget for the project the goal is not to reduce in quality but on the contrary to at least keep the aimed life standards, **use local** materials and craft and therefore build more environmentally friendly. As architect Taghaboni explains that the design of the pixelated cells around the courtyards allows to build each one separately and they having an experience using the clay for a single units would mean involving local community as well. Local people could build these using guidelines but in a way that gives them the possibility to be creative and mold the clay shapes in endless ways. Moreover, this method would result in an improvised shape of the "city" resembling to the traditional Iranian city. The final result - a multifunctional complex as a place where the fluidity of people can penetrate easily throughout the whole area and therefore filling in for the general lack of cultural and commercial spaces in similar projects - an awareness how to think about architecture.

### **Bonsar Architects**

### COURTYARD APARTMENT NO.9

THE "LUXURITY" OF A TRADITIONAL PRIVATE COURTYARD SPACE BROUGHT INTO A CONTEMPORARY HIGH-RISE BUILDING IN THE CITY AS A VISUAL EXTENSION OF THE SURROUNDING GREENERY

Architects: Bonsar Architects Status: Architectural design Location: Tehran, Iran

Mohammad Majidi, the leading architect, and founder of the architectural studio Bonsar Architects is another prominent name in the scene of the contemporary architecture in Iran. Not only he won three times the Memar architecture national Award but also his work reached an international audience's attention by getting many of his projects published in international architectural journals. Born in 1967 in Tehran and 30 years later he establishes the studio Bonsar Architects which gains its reputation quite fast because of his approach towards architecture as part of the whole urban play rather than a single building.

They present themselves as architects who stand behind the bigger picture when it comes to architectural design – starting from the environment, the city and it correlation with single architectural elements that build the whole concept of living. That means that the main focus is not on the building as the physical mass, as an architectural form that is required from the customers but the in-between spaces as well which actually define the whole context if using the so called "the built" and "the unbuilt" spaces.<sup>58</sup>

<sup>&</sup>lt;sup>58</sup> from the official studio website. bonsar.com/about (Accessed in January 2022)

In fact, Majidi finds the most memorable, introverted, oriental and architectural spaces – not in the built body of the work, but rather, in the unbuilt spaces such as the central courtyard. And his designs are distinguished by his keen interest in giving priority to the unbuilt spaces. The architect complains that nowadays urban spaces in Iran mean nothing more than a number of pavements and a raw od facades and how, for a very long time now, Iranian cities have been deprived from experiencing calm environments which are conductive to rest. (Contemporary Iranian Architects, New space: Movement and experience, Negar Hakim pg. 39)



Fig. 50 – 53. Courtyard Apartment No.9

In his project "Courtyard Apartments", the architect responds to the trend of creating so called high-rise residential buildings while the focus itself is not as much on the residents and their needs but rather the developers' needs. So the challenge was primarily to provide a quality of living suited for the people by trying to **"give" them spaces they are familiar with and somehow much needed considering the climate and the traditional habits**. Moreover, as the project itself is on the slopes if Alborz Mountain, the ideal solution would be to orient the spaces as much as possible towards the green side and avoid the direct contact with the already high-rise buildings in the surrounding.

The main question arises at this stage.

How can we inject the idea of "Courtyard Houses" into Tehran apartments? How can we have the same sense of independence, which we have in our backyard, while living in apartment buildings?

To achieve these goals, we should organize open spaces of the project. Once the important axis of the site was figured out, we started organizing forms based on them. Two intersecting axes; one with an in-depth view of the city and the other one with the view of the park nearby, led us to a mass with a particular combination of porosity. Through making more models, **each flat was connected to a private courtyard, which could offer the city view in combination with a green space and which also to provide a natural breeze.** Each apartment with an average height of four meters owned a backyard with a height of eight meters, creating a high rise building while each flat owned a private yard, the project name was changed into "Courtyard Apartments".<sup>59</sup>

<sup>&</sup>lt;sup>59</sup> from the official studio website. bonsar.com/courtyard-apartment-No9 (Accessed in January 2022)

# Admun Design & Construction Studio

### **CLOAKED IN BRICKS**

PRIVACY AS A TRADITIONAL IRANIAN QUAILITY BROUGHT IN A CONTEMPORY WAY OF USING A TRADITIONAL MATERIAL, THE BRICK

Architects: Admun Design & Construction Studio Status: Finished in 2015 Location: Tehran, Iran

Admun Studio was founded in 2010 by the architects Amirreza Fazel and Seyed Shobeir Mousavi, to whom Mehdi Kolahi later in 2016 joined. Not only did they cooperate with many other famous Iranian architectural firms, but they also did serious research in many sub-fields in art and architecture with main emphasis on traditional architecture of ancient Iran and/vs contemporary worldwide architecture of today. They received quite some envying number of national as well as international awards led by their philosophy:

In architectural design process, as a space for human living, to search for a full response to the main question of the project arisen from the context of the project, variety of climates, traditions, functions environment and need, Admun Studio is trying to reach a sustainable synthesis of dialectic relationships of effective forces on the project and reaching an appropriate pattern of architecture today by creating a durable piece.<sup>60</sup>

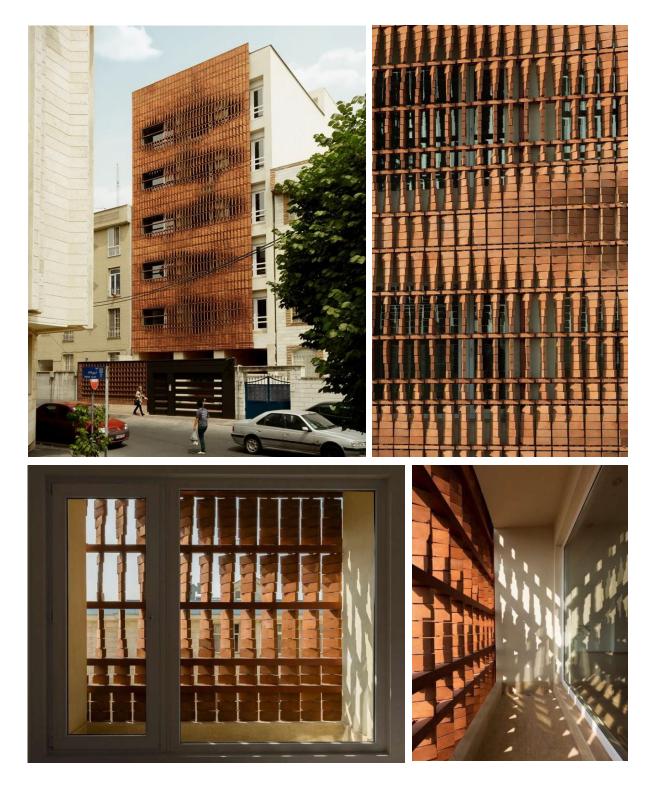
This project is an example of a successful adaptation to an existing situation by creating a solution as a response to the actual needs of the residents while using the traditional brick material as the main character in the design.

<sup>&</sup>lt;sup>60</sup> from the official studio website. admunstudio.com (Accessed in January 2022)

In an article for the architectural weblog ArchDaily in 2015, the architects explain that the focus point of an architectural design unfortunately has changed so much over the years. If in the past, in traditional Iranian approach towards residential units the **most important part of the design were people's needs and space relationships, nowadays this priority is rather substituted by the financial perspective** and the chance to be able to make as much profit as possible. This is one of the factors why residential units tend to grow vertically and as much as this is a great economical solution which also solves the problem of insufficient building land, it is extremely not in accordance with the Iranian lifestyle, cultural and religious beliefs, and space connection.

The building itself is surrounded by other residential buildings which are the best witness of the lack of a life value that is very important for the people living in them. The concept of privacy as it was part of Iranian daily life in the past has changed over the years not only because of architectural approach and economic background but also because of the new generations growing up as part of a global village rather than a small, closed community. However, as the architects put out as well, the step between the traditional introvert courtyard architecture and the contemporary residential unit is quite enormous. The life inside the family is often too much exposed to the public life by so that the privacy as a concept becomes a lost quality. Therefore, people "redesign" the building by using non transparent materials to cover bigger glass surfaces or opaque materials to create privacy on the balcony and avoid direct exposure to the neighbours.

This is one of the main goals that the Admun Design & Construction Studio wanted to pursue in the "Cloaked in Bricks" project. *The architect's role was to overcome the mentioned challenges to produce a design that addresses its users' needs and reconceptualize vernacular precedents to create a unique architecture. (ArchDaily – Cloaked in Bricks / Admun Design & Construction Studio; Interview, 11.11.2015)* 





A mix of smaller steps such as providing privacy, protecting it from the hightraffic noise but also letting enough sun inside the flat itself brought the solution to cover the façade and create grid of openings. Brick appeared to be a proper choice since it has always been used as a local building material in Iran meeting environmental needs while creating numerous aesthetically beautiful textures. (ArchDaily – Cloaked in Bricks / Admun Design & Construction Studio; Interview, 11.11.2015) So the brick used is a building material coming from the architectural traditions of Iran plays a of an artistic element, an expression of the façade but at the same time a sensational element for the interior as well. Brick has this unique potential to create a dynamic facade while using merely a single material. The brick texture is a reflection of the context's chaotic skyline and the openings are located considering the pleasant and unpleasant neighbourhood views. The architecture is constantly alive, from both inside and outside. The facade's colourful texture changes during the day representing different qualities of light and shadow as the inner spaces experience the same. (ArchDaily – Cloaked in Bricks / Admun Design & Construction Studio; Interview, 11.11.2015)

The architects cared to extend the "privacy concept" from the façade into the space division and bring another level of privacy already inside the family unit and therefore creating a closer relationship to the traditional family house. For instance, a filtering space although not domed as the well-know hashi space, it certainly brings a feeling of being home in Iran and a space that the people living here would certainly appreciate. *The location of the kitchen adjacent to the void, more than getting enough light, provides natural ventilation. A ledge is designed in the gap between the brick membrane and the outer edge for placing flower-boxes and providing access to the windows from outside in case of cleaning. Balconies are placed behind the brick facade creating private semi-open spaces to revitalize their function. (ArchDaily – Cloaked in Bricks / Admun Design & Construction Studio; Interview, 11.11.2015)* 

The project is one of the many that brings awareness among the people and the architects as well as being a great example, a creative architectural response to the current issues in the contemporary residential buildings in the region. On top of that, it uses a local traditional material that becomes a solution to only functional while satisfying the aesthetical needs.

# Habibeh Madjdabadi Architectural Studio

### VERTICAL VILLAGE 10+10

AN ARCHITECTURAL RESPONSE TO THE HIGH-RISE RESIDENTIAL BUILDINGS BY PILING UP THE TRADITIONAL ROOM VERTICALLY

Architects: Habibeh Madjdabadi Architectural Studio Status: Architectural design Location: Sorkhrood, Iran

Another name in the list of most vibrant architectural studios on the contemporary Iranian scene is the architectural studio lead by the architect Habibeh Madjdabadi. Her career as an architect but also as an author, designer and speaker was a successful follow up of her first winning prize in an architectural competition in 2003. As one could see from the office webpage of her architectural studio, she had won several awards and recognitions such as the Worldwide Brick Award 2014, MEMAR Award in 2014, winner of Chicago Award 2014 etc. Moreover, her international involvement such as exhibiting her work at the Venice Biennale and lecturing engagement in many prestige universities has brought her even more to the international audience's attention as one of the most talented Iranian contemporary architects.

Madjdabadi emphasizes the role of culture and geographical matters in her designs as well as putting a vast attention into choosing the materials and methods of fabrication. Materials are important means of 'expression' in her works, and she considers them from a poetic point of view. Her creations are the result of a meticulous research for discovering how an artistic approach can be at the same time, **contemporary and rooted in tradition, local and global.** In her recent works, she tries to uncover **the poetic side of the materials** by underlining their natural attitude and their interaction with the human body, through artisan modus operandi.<sup>61</sup>

<sup>&</sup>lt;sup>61</sup> from the official studio website. habibehmadjdabadi.com/about (Accessed in March 2022)



Fig. 58 - 61. Vertical Village 10 + 10

A project of hers that draws direct inspiration from tradition as in shape as well in atmosphere simultaneously creates a contemporary form of residential unit. The Vertical Village, as one could guess by its name, is a high-rise building that is economically most suitable one to provide living spaces for more families at once, but the difference is exactly the approach that the architect chose – **a creative concept that brings the feeling of the traditional house** located in Shomal, northern Iran.

This area, known as the southern coast of the Caspian See in northern Iran is well-known for the horizontal architectural city line made up from the singlefamily houses **where Iranians enjoy the traditional sheltered terraces and roofs that face the surrounding green lands**. The Vertical Village project took the chance to play with the architectural spaces familiar to the residents of this geographical region and assemble a neighbourhood in the vertical direction.

The architects took the atmosphere and the space from the traditional home and interpreted the challenge to build vertically as a chance to create even better view and amazing scenery from the surrounding landscapes and see views. The residents not only could afford a "house" but also a **brand-new values, experience and feature was added to their lifestyles while they feel being at home**. To enhance the feeling of even more being home, the architect brings a level of introversion in the architecture as she places the main facades face the inner courtyards decorated with trees, plants, flower, and water pounds.

# Sizan Architecture Studio

### THE POMEGRANATE GARDEN HOUSE OF GRANDFATHER

REGIONAL TRADITIIONAL ELEMENTS, TECHNIQUES AND MATERIALS AS WELL AS LIVING CONCEPTS BROUGHT TOGETHER IN ONE CONTEMPORARY HOUSE DESIGN

Architects: Sizan architecture studio Status: Finished in 2017 Location: Taft, Yazd, Iran

This project is an example of a case where the architects have to take into consideration not only the building itself but the surrounding of it, especially if it a part of a city that is also a World Heritage site – the city of Yazd. Contextual residential architecture is a challenge when planning in historical city centres but even in the outskirts as it is facing the challenge of providing and implanting the genius loci of the tradition in a contemporary cloak.

The house is located in Taft, about 200 km from Yazd's historical center, "The pomegranate house of Grandfather ", and it was designed in 2014–2017 from the prestigious Sizan Architects office.

"The word Taft has two meanings, warm and wooden fruit basket, which is an appropriate metaphor for the city since when viewed from the surrounding mountains, the many pomegranate gardens appear like a green basket, conveying the feeling of a garden-city".<sup>62</sup>

<sup>&</sup>lt;sup>62</sup> Contemporary Architecture of Iran (2019): Pomegranate House of Grandfather, 9 July 2019. (Accessed in May 2021)

The architects chose materials and building elements which take **reference to the Iranian building tradition, such as ventilation techniques, building materials and garden elements.** 

The pomegranate garden house of Grandfather is located in the cooler area of Taft, where the surrounding buildings are more of a contextual character. Influenced by this fact, they aimed toward a contextual type of architecture and chose to plan a house in which you see and feel the Iranian culture, therefore the primary material used is the brick, inside and outside. Built upon the already existing concrete structure, they decided to build upon with brick inside out. Having a good connection to nature and its surroundings, brick has sustainable qualities, as it can easily be recycled, which makes it ideal to build with. Staying loyal to tradition and the old architecture of the city, the element of brick is shown on the outside and is not covered by additional decorative elements, showcasing here the simplicity of traditional building materials. The interior is either better polished or was appropriately combined with other element such as glass or wood.

"The best example of this proportional unity in architecture and building material could be traced back to Seljuk dynasty".<sup>63</sup>

"...the Yazdi house is also built around one or more courtyards. However, analysis reveal that in Yazd the orientation of the rooms is much more consistent and rigorous, and the use of the basements, semi-open space (talar) and wind-catcher (badghir), more widespread". (Gholamhossein Memarian, 1998. House Typology in Iran-with special reference to Shiraz. School of Architecture, Vol One of Two.)

<sup>&</sup>lt;sup>63</sup> Contemporary Architecture of Iran (2019): Pomegranate House of Grandfather, 9 July 2019. (Accessed in May 2021)

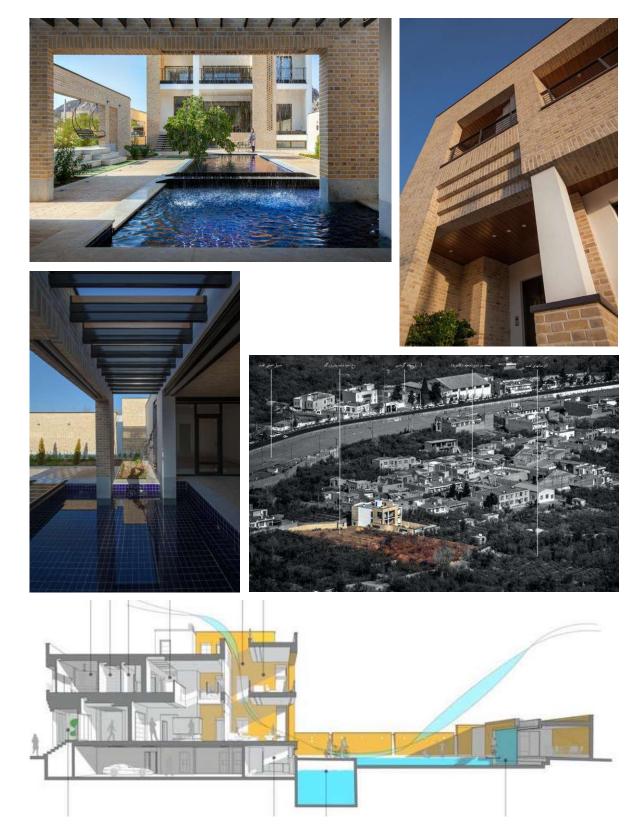


Fig. 62 - 66. The Pomegranate Garden House of Grandfather

Referring to Yazd as the city of the windcatchers, the architects couldn't leave this important traditional building element out of their design. Based on this concept, Sizan Architects, introduced the thick walls, which function **as wind catchers and help the ventilation process throughout the entire house including the garden area.** 

*"Similarly, the courtyard has been a feature of Iranian houses for over 8000 years*"<sup>64</sup> *"Traditional houses in Yazd, presents only ten houses, of which eight have a single-courtyard, the other two being mutli-courtyard houses*".<sup>65</sup>

From this point of view, the Yazdi houses are characterized by the garden, and the traditional form of the garden and the house itself works as one. The challenge the architects encountered here was the duality of **implementing the** garden and its elements but at the same time trying to separate the inside from the outside.<sup>66</sup>

The central opening in the house, plays an important role for the lifestyle of the region. Privacy is one of the main elements to influence the design of the house, by being able to create an open space inside the house itself, life can be transferred on the outside without being seen or observed from the outer world.

Next step was the interconnection of the inside and outside space. By using the garden elements such as the element of water, by designing a waterway as the main axes of the house, which makes possible a connection between the two buildings, and beautifies further the open space. Water is one of the most important elements of the yard and yard design in general mainly because it has a special role such as creating humidity, visual beauty and relaxation in residential houses.

<sup>&</sup>lt;sup>64</sup> Gholamhossein Memarian, (1998). House Typology in Iran-with special reference to Shiraz. School of Architecture, Vol One of Two.

<sup>&</sup>lt;sup>65</sup> M.Gezelbas, F.Abulzia, Alefbaie Kalbod Khane Sonatti Yazd, Tehran, Sazman Barname va Budje, (1364/1984).

<sup>&</sup>lt;sup>66</sup> P. Jafarbeigy, N.Jafarbeigy, 2021. Interview with Fresku L. – Stojkov B. 7.6.2021 Zoom-Platform

The gooseberry tree planted by the grandfather himself about 20 years ago, was included in the water way, as treasure and inclusion of the already existing vegetation elements.

The water element is used in a vertical way, functioning as a curtain fountain, putting even more in evidence the linkage function of water in the area. "In order to unify the outside space with the interior and also better interconnect the interior spaces, a part of the top roof as well as the first-floor ceiling was left open creating a central void space ".<sup>67</sup>

*In the Iranian culture there is a special area used during hot summer nights for having tea or even sleeping, called "Baharkhab*".<sup>68</sup> It is exactly why these void spaces were implemented from the architects, to keep connection to the traditional referring to usage of certain spaces.

These void open spaces are connected through a brick wall build in the northwest direction (Esfahan Wind), which starts outside, and it is extended inside the building. Aiming to create a space which is not only physically located in Iran but that makes its visitors feel the culture and tradition once entering that certain space, it is that what makes contemporary architecture want to include traditional building elements into their design.

Being people the ones who carry the cultural habits within themselves, traditional elements are preserved and conserved throughout generations, that is why they are mostly to be found in residential architecture. Providing a certain space with greenery and water leads to a private space where life itself takes place.

<sup>&</sup>lt;sup>67</sup> Contemporary Architecture of Iran (2019): Pomegranate House of Grandfather, 9 July 2019. (Accessed in May 2021)

<sup>&</sup>lt;sup>68</sup> A veranda or high space used for sleeping during summer.

# Hamed Tadayon, Mohammad Amin, Davarpanah, Javad Roholoullahi

### THE KHARAND-HOUSE

THE CONCEPT OF PRIVACY AND A COURTYARD CHALLANGED BY THE SURROUNDING URBAN ANARCHY IN A CONTEMPORARY FAMILY HOUSE DESIGN

Architects: H. Tadayon, M. Amin, Davarpanah, J. Roholoullahi Status: Finished in 2018 Location: Isfahan, Iran

Looking back into the history of Iranian house, we can roughly conclude that there were two different types of houses when it comes to the corelation between the house and its courtyard. The first one starts with the house itself in the middle, then comes the yard and then the city development and the second one already regulates the boundaries of the courtyard by putting the empty space in the centre and therefore it is defined by the solid part of the house. When we talk about the yard, the house garden, Iranians mostly have one picture in mind – a play of shadow and light, a space of semi–privacy that separates the house – the private part and the life beyond the fence – the public space. In a city full of walls, voices, sounds and different people it is important to have a place where you can have your own peace, meditation, calmness.

The yard starts usually with a dark entrance path to create a sort of pre-entry space which is leading to a green "oasis" where finally the view to sky opens. Once inside, a very important feature next to the vegetation is the sense and the presence of the water as it plays a special role such as creating humidity, visual beauty and feeling of freshness and relaxation especially in the hot summer days in central Iran. The traditional courtyard of Iran therefore has had these elements: water, light, and privacy to work with, combine and optimize depending on the weather conditions, the location, the local distinctive cultural habits in daily life and in building approaches, the people's preferences, economical situations etc.

House-courtyard as one of the original features of Iranian architecture has been very popular in the city of Isfahan. However, nowadays due to new municipal policies and limited laws, as well economic reasons the yard is one of the most fundamental spaces missed in contemporary's construction and architecture, especially in the vertical direction of the house.

The design of Kharand House, a three-storey residential villa, in Isfahan, Iran is a contemporary project with a traditional modification. The word " خرند " is an old term from Isfahanian dialect that was used to refer to the yard and was used in traditional houses as one of the principal elements.

*"In this project, we try to redefine the main character of a traditional yard in a new context. In addition to providing green space, the traditional Iranian yard has some special characters, such as the presence of water and privacy. Water plays a prominent role in as much as it provides ample condition by increasing moisture, visual quality, and a pleasure sound of falling water. Such factors create a perfect traditional yard."*<sup>69</sup>

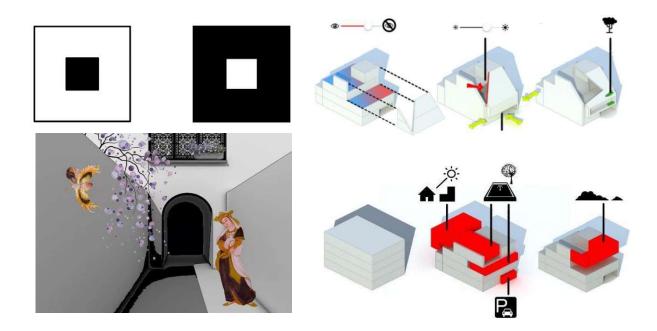


Fig. 67 – 70. The Kharand House – Courtyard concept development The design of Kharand House incorporates a broaden goal that touches the

<sup>&</sup>lt;sup>69</sup> ArchDaily (2018): Kharand-House, 9 July 2018. (Accessed in April 2021)

field personality by setting an example in the urban context of no yardinclusiveness. This project not only includes the yard in the form of the Iranian contemporary house's concept but also defines a new character for this area. The city fabric around the Kharand house is still not developed in a residential urban sense and therefore lacks defined functionality, communications, and an architectural common language. As the architects mentioned in the interview, there are buildings around that are not at all connected to Isfahan or to the surroundings. Consequently, the plot of the house reacts to it with high walls from all sides, and it plays an isolation role from the rest while bringing the attention to the inner part, the house itself and the courtyard. **The yard becomes a focal point where all senses are important to be included in the design since that is what brings more on quality of the space**. That is how the user's perception is maximized.

Another way to emphasis the yard is to place it right at the entrance so that it becomes a first contact and stay part of the active usage of the house the whole time. When it comes to the building's shape concept, **the first step was to reduce the primary volume they were given to provide two yards,** park spots and adequate light for the neighbours which speaks very positive about the contextual approach as well. The next step included more volume substruction to create better connection between the yards themselves and the **sky as well – again referring to this as an element from the traditional courtyard house.** 

"The challenge is to solve/combine contrasting **elements such as having privacy and having a view or letting light inside and avoiding overheating**. But architecture is about optimizing and creating a balance between different factors".<sup>70</sup>

That is how the slope of the façade was born, extending from the roof to the north façade of the house, together with the openings in it. This allowed terraces on the upper floors with more greenery, which is a perfect solution for the residents to have not only **"yard access" on different levels but also privacy and shade while still being able to look above**.

<sup>&</sup>lt;sup>70</sup> Archdaily (2018): Kharand-House, 9 July 2018. (Accessed in April 2021)

The "sloped facade" passing in front of the living room is most effective in reducing the light coming inside and allows them to have the view of the surroundings, but they cannot be seen directly from the street, which gives them a sense of security – a concept that is also part of the traditional Islamic architecture.



Fig. 71-76. The Kharand House - Environment

The water fountain on the west side of the building and the pool on the north side are helping to improve the physical and climatic conditions while creating a pleasant view in front of the living room. The ground floor includes a wide terrace in front of the hall, which is followed vertically by a terrace in the bedroom on the upper floor. On the second floor, a significant volume of the house has been removed to provide a yard for the residents of the upper unit. Due to the full and empty spaces in the volume, the house building is faced with a kind of contrast. Therefore, the design of the courtyard on the ground floor and the second floor have earned a protected privacy and provide fresh light and air for the whole building in addition they open to the external environment.

The interior functionality of the space in Kharand House is mainly "divided" into private parts where only the residents of the house can go and the other spaces where also guests could come – a feature that is typical for Iranian house architecture. The interior decoration and furniture design are also designed or selected under the influence of the building form concept. To add visual and aesthetic enhancements, a small (second) fountain and several flower boxes were added to the living room and dining room to connect the courtyard ambient to the interior of the house, such as the kitchen, living room and dining room.

An interesting aspect to mention is the material usage and how the architects try to bring the tradition with it but at the same time satisfy the wishes of the clients. It is known that architects use the brick as a building material especially in and around the area of Isfahan. The brick has a good connection with the nature and can be recycled. For this reason, there is a law in Isfahan that more than 50% of the building material must be brick and depending on the location and the urban context, sometimes you can use only brick and only special kind/colour of brick. However, as the architects also mentioned in the conversation with them, the clients usually can have a bigger influence than the law when it comes to the design and even sometimes ask for special permission to build something.

In the case of Kharand House, as well as the buildings around, stone is the main building material since they have local stone mines around. People, among them the client for the Kharand House, who happens to be even an owner of one of the stone mines, consider the white stone classier, kind of more luxurious material.

Consequently, many contemporary house designs, usually on the demand of the clients, do not incorporate the brick as much as the traditional house used to and mainly because the clients consider it out-fashioned and not that representative.

This is where the architects step up and try to bring some sort of indirect and light connection to the tradition, even if that is sometimes only using the colour of the brick in the interior as an accent, making the space more vivace.<sup>71</sup>

In the Kharand House the architects used wood to accompany the stone but there is a different project, a 7-storey house that they designed in Dezful – the city of the brick, where the colour is the bridge between now and then. This way people feel the contemporary atmosphere they so desire but at the same time **the interior is triggering memories from the childhood, from the traditional home, from the cultural ambient**.



Fig. 77 - 78. The Kharand House - Interior

<sup>&</sup>lt;sup>71</sup> the soil's colour that is used to produce the brick.

## **BAM Architects Office**

### THROUGH GARDENS HOUSE

KEEPING ON HISTORICAL CONTINUITY TO PRESERVE THE ARCHITECTURAL HERITAGES IN VILLAGES BY BRINGING A HISTORICAL CONTENT INTO THE CONTEMPORARY FORM

Architects: BAM Architects Office Status: Finished in 2017 Location: Parvaneh, Isfahan, Iran

The project is a fascinating architectural response to the client's desires in which the architects took the lead of the design into a direction that consciously choses materials, forms and drives inspiration from the local surroundings. As the client wanted to move to a small village called Parvaneh near Isfahan, the architects challenged themselves to provide a solution that would be as contemporary as the needs and desires are but as poetic and traditional as the village's genius loci is.

In order to stay in the spirit of the 18th century neoclassical architecture that the place already thrived, they chose to spray all over the walls of the house with an experimental plaster that was made of a sand and straw. This is how they achieved the harmony with the neighbouring structures and the feeling of adobe – one of the earliest building materials, which is made of straw and dung.

We believe that this project could somehow sustainable because for the shortage of budget (almost 30000 US Dollar) and farness from big cities, we decided **to use local materials and workers**. So, we experimentally try some new building techniques alongside old techniques. Now, the local workers can do something which couldn't do before this. Furthermore, our focus was to use local materials look like sand, stone, straw and etc. (ArchDaily – Through Gardens House / BAM Architects Office; Interview, 05.10.2017)



Fig. 79 – 82. Through Gardens House

Through Gardens House got its name from the traditional courtyard houses in Iran that the architects used as a layout reference, first of all to bring all the benefits that comes with it such as daylight and natural ventilation in the desert climate and, secondly to achieve this atmosphere of calmness and privacy that the resident much needed. The play of materials is a continuous concept that breaks the in and out of the house. For instance, the brick used in the courtyard is to be found on the kitchen as well as part of the interior. Here is where the contemporary spirit comes as a contrast in monochromatic finishes with different colours and textures from the outside of the house.

"We wanted something more local for him. We told him that we should keep on historical continuity in the villages, otherwise we will lose our great architectural heritages in villages."... "Although using a courtyard is a fundamental solution to Iranian architecture, recently many people neglect it. We tried to use a historical content into the contemporary form." (Eleanor Gibson- Through Gardens House / BAM Architects Office; Interview, 08.10.2017)

# Shaygan Gostar Architectural Group

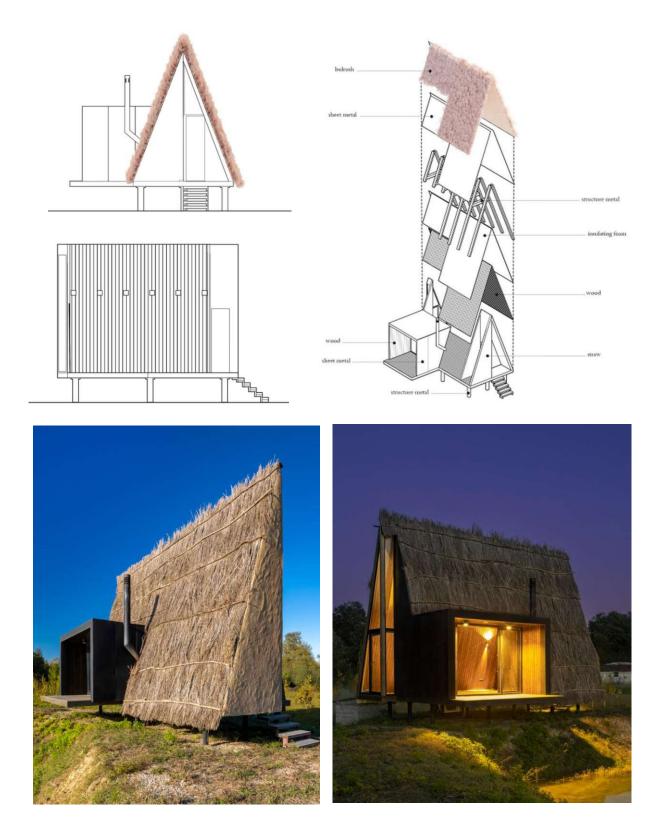
#### WICKER HOUSE

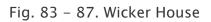
USING LOCAL MAZANDARAN ARCHITECTURE AS INSPIRATION TO DESIGN A TWIST ON LOCAL RURAL ARCHITECTURE THROUGH A CONTEMPORARY EYE

Architects: Shaygan Gostar Architectural Group Status: Finished in 2020 Location: Shahrkoola village, Noor, Iran

Another project where the right balance between the traditional and the contemporary delivers an architectural piece – an approach respecting the traditional values while satisfying the "new" needs of the client. The house is to be found in a village outside the Iranian city of Noor – region known as the northern Mazandaran area where one can witness the tradition in building and being completely dependent on the nature. The architects designed the Wicker House praising the local architecture and the heritage of the area. The house is defined by its compact size and dramatically sloping wicker A-frame roof elevated atop low stilts and by its components that natively have been prepared from the nature of the local region.

As the client wished for a house that would somehow correspond to the local architecture but at the same time allow him to have a new experience, the architects decided to play with two volumes – representatives of the traditional and the contemporary. The geometric composition of a plain simple black cube coming out from the slivered triangular piece introduces a contemporary expression on an agricultural rural land. The black cubic extension overlooks the dam and the surrounding landscape by opening up the interior – a feature brought to the traditional A-frame house. (Text description provided by the architects, Wicker House / Shaygan Gostar Architectural Group, Interview, 03.01.2022)





The materials were chosen respectively so that each shape tell its story, makes its own impression the outside but combined creates a unified interior experience as a one whole piece. The A-frame cabin is therefore wrapped in in thatch and clay and straw as the rural housing typology dictates it. Under the straw covering one cannot much differentiate the interior and the materials from the traditional A-frame house except for the contemporary touches such as the new wood-panelling or the small deck experience.

In the face of climate change and growing development, the area has seen a shift in its local housing design—the Wicker House, with its familiar aesthetics and future-forward technologies, provides an example of one way forward. Although more of an outpost and housing study than a lux retreat or full-time residence, the Wicker House demonstrates how vernacular architecture can be combined with the styles of today to create housing prepared for the future. (Ellen, The Wicker House A-Frame Proposes a New Housing Model for Rural Iran, Interview, 02.04.2022)

# Shomali Design Studio

#### **KUJDANE CABIN**

A NEW REINTERPRETATION OF A LOCAL HOUSE TYPOLOGY SETTING AN EXAMPLE HOW TO BRING TRADITIONAL ATMOSPHERE IN A CONTEMPORARY SETTING DEMANDED BY THE CLIENT

Architects: Shomali Design Studio Status: Architectural design Location: Gilan province, Iran

A different reinterpretation of the A-frame typological house in northern Iran, is the design of Kujdine Cabin led by Yaser Rashid Shomali and Yasin Rashid Shomali. This time, the project itself is found in the beautiful green Gilan province that connects the rest of Iran with the Caspian Sea and therefore represents a very distinctive climate and geographical conditions.

The design team finds inspiration in the local architectural house typology to create a contemporary home in the place which already represents a home for the residents. In that sense, the challenge was to find a new way for the already proven type of architecture – the A–frame – and with it achieve the luxury of a contemporary space. So this kind of experimental setting is a "risk" consciously taken to mix the traditional and the contemporary in order to adapt to the new needs, possibilities of lifestyle and comfort as such while respecting and using the benefits the traditional architecture has to offer.

The architecture of the Kujdane cabin on first sight seems like a "modernized" type of traditional A-frame house, however it goes conceptually deeper when it comes to new space experiences with the outdoor atmosphere thanks to the new materials and the way its geometry is shaped.

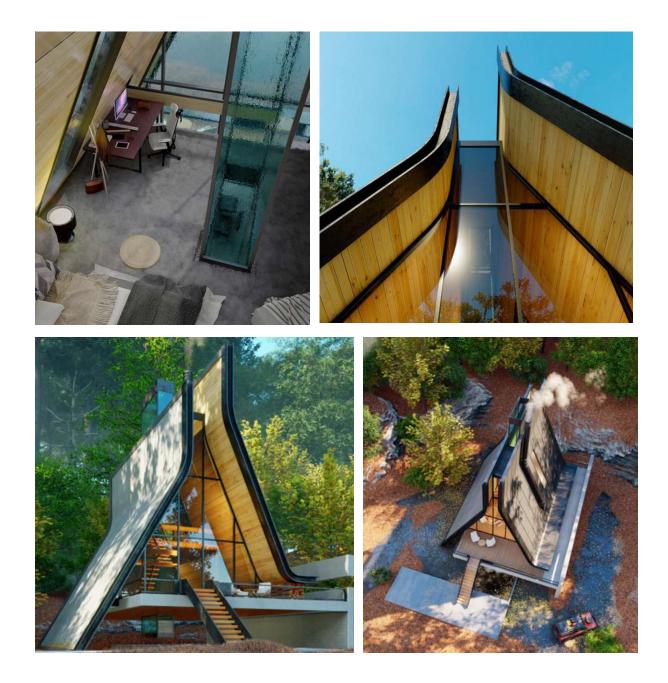


Fig. 88 – 91. Kujdine Cabin

Shomali design studio's Kujdane cabin is expressed with a centralized glass core which runs vertically through the heart of the building. this distinctive element serves to create a vertical connection between the sky and the ground plane, allowing residents to feel the passage of snow and rain through the interior of the house. beneath the elevated house, the rain and snow runoff drains through the vertical core into a small reservoir. while the feature introduces an exciting visual element to the interior, the pond below offers a natural cooling effect.

The architecture is ideated to present the luxury of a contemporary space that snuggles within nature and wherein every space one can feel the passage of snow, light and rain. (Kat Barandy, Shomali design's 'Kujdane' cabin offers a new take on the typical A-frame, Interview, 05.12.2020)

The magnificent part of the Kujdane cabin design is the message it sends out to the world as an example of a way how to treat tradition in the contemporary era of today. As the A-frame typology is also to be found in other parts of the world with similar climate conditions, the applications of the design expand beyond the boundaries of Iran as well. Its concepts is very functional and space efficient because it uses the upper smaller floor part as a bedroom and study while the main lower and bigger floor part is for all other daily activities. Moreover, the Kujdane cabin extends the main interior floor towards the outside – a deck with a staircase leading to the ground level of the surrounding.

The reason we designed the 'Kujdane' Cabin with a centralised core is so that residents continue to feel one with nature even though they are inside the house. While we were inspired by the traditional triangle roof of every A-frame chalet, we have deconstructed the style and expressed it in our own unique way. (Archoskar, the 'Kujdane' by shomali design studio, Article, 05.01.2021)

# Researched architectural projects in Europe

The trend of global architectural transparency thanks to the possibilities to share content, design ideas, talk about worldwide issues and travel as much as never before, empowers architects to look for a source of inspiration in so many distinctive ways. European architectural contemporary scene has a vibrant portfolio of designs as its area is splitter in many similar but yet different cultural identities. One of the current trends is the inspiration architects get from their local architectural treasure and present it in a contemporary interpretation.

Personally, I had the chance to be part of 3 architectural university institutions during my studies and therefore part of three European cultures: Slovakia, Portugal, Austria. The very one in common, speaking from the architectural point of view or how architects, professors would talk about architecture is through memories of what was very familiar to them – the local architecture where they grew up and experienced directly.

As part of my research, I even came across similar research done at the Faculty of Architecture in Bratislava called "Tradition and innovation". *The subject of the research are manifestations of traditional functional–operational schemes, means of expression, morphology and construction principles of folk architecture and their transformation and application in the current creation of family house concepts in Slovakia. The theoretical part of the work confirmed the existence and transformation of the principles and signs of folk architecture in the works of selected Slovak architects of today. The influence of these signs on their work was assessed by expert juries of the nominated/awarded CE.ZA.AR, ARCH and Dušan Jurkovič awards.<sup>72</sup>* 

<sup>&</sup>lt;sup>72</sup> Tradition and innovation in architecture, 24.06.2020, fad.stuba.sk (Accessed in May 2022)

As the pool of projects is quite big to choose from, the research team decided to focus on works of prominent architects awarded with most prestigious national architectural awards by analysing the transformation of the mentioned expressions into the architecture of family houses.

I am including this part to the thesis research more as an extension to the Iranian projects but from European architects who tend to have the same approach of treating traditional, local architectural elements in their contemporary designs. The projects I selected to present in the next few pages are also projects that have touched the international audience either through an award on national/international level or triggered a worldwide curiosity through many architectural reportages.

## JRKVC Architects

#### **IST – HOUSE**

# TRADITIONAL LIFESTYLES AND FAMILY RELATIONS SUPPORTED BY CONTEMPORARY ARCHITECTURAL SOLUTION

Architects: JRKVC Status: Finished in 2013 Location: Cunovo, Bratislava, Slovakia

In the past, architecture was shaped by the character of the surrounding nature, climatic conditions, local materials and the craftsmanship of the people from the region. Naturally, this resulted in architecture that perfectly fit into the environment, interacting harmoniously with nature and with the people themselves. Slovak traditional architecture, especially the house architecture has developed quite similar across the country whose most recognizable element is the typical gable roof. *The popularity of pitched roofs in our latitudes is primarily due to the nature of the weather. Compared to flat roofs, you can count on better rainwater run-off, higher resistance to weather effects, and you will also be pleased with lower insulation costs.<sup>73</sup>* 

Wood, clay and straw as basic building traditional materials have good thermal insulation properties and thus helped to save on heating together with small windows. The windows were not as good as they are today, but they were relatively small, therefore the contact with the environment was very important. This was ensured even in the winter by the porch called ganok. (Thurzo, 2004)

<sup>&</sup>lt;sup>73</sup> The idea of Slovak architecture, slovenskydom.sk, (Accessed on 10.12.2022)

Ganok is an open corridor along the yard, less often the street wall of the house. The porch was bordered from the yard or the street by wooden or brick pillars, between which there could be a railing or a wall. It protected the entrance to the house and was also a place in which to work or rest in the summer. When the space between the columns was glazed, it became a veranda.<sup>74</sup>



Fig. 92 – 96. IST House

<sup>&</sup>lt;sup>74</sup> Center for traditional folk culture. *Ganok*, ludovakultura.sk (Accessed on 09.12.2022)

Architect Jurkovic's house design for a family in Cunovo, near the capital Bratislava carries a traditional geometrical shape of the Slovak home but packed according the contemporary technical and building material possibilities. The house is actually a part of a newly developed area and as such it sets an example of a good quality architecture especially using a concept that established a way of communicating tradition in the context of nowadays.

The project itself has a few other fascinating aspects that make it as unique as it is. First of all, it is a low budget project as the desire of the customer was also to live in a "small" house on a "small" plot. The architect took this request and developed it further by incorporating a concept that efficiently uses the given space. He decided to use certain principles encoded in the traditional folk architecture such as minimizing costs especially in materials and their transportation. He takes the pitched roof as a reminder of a home and adds the "ganok" part to allow them have extra space as they are used to have. On top of that, he enriches the whole house concept by using more glass than traditionally would have been used and only because the technology of today allows that and even ensures a better life quality. Even the interior room separation is following a traditional pattern of three–room scheme. The living and sleeping rooms are around a central "service" box. (See Fig. x) So the end–product is a fusion of old and contemporary.

It reaches for a historical model – a traditional type of country house with a porch – and tries to modify it and adapt it to current conditions. It is looking for connections with history, which modern architecture has consciously interrupted. But in contrast to postmodernism, which only achieved historicism in its groping, it tries to understand the essence and reinterpret it. M. Jancok

## Lorenzo Grifantini

#### THE WHITE TOWER

AN ARCHITECTURAL CAMOUFLAGE IN THE RURAL URBAN FABRIC AS A TRADITIONAL ROMAN PLAY OF SPACE/ATMOSPHERE CREATION

Architects: Lorenzo Grifantini Status: Finished in 2020 Location: Puglia, Italy

Italy, especially in the south regions, is quite famous in European house architecture when it comes to the courtyard as an element of it. It is also very similar to the Spanish approach of using the courtyard and its features in the house design and mostly because of the common Mediterranean climatic conditions. The concept of the traditional courtyard house is to create a place of pleasure and recreation and it became popular in the 15th century. They would mostly use elements such as vegetation (preferably evergreen plants), water to soften the geometric shapes (usually it comes in a shape of a fountain) and "cold" material (stone, marble) for path formations and other exterior furniture. Nowadays the contemporary design changed the size and the inclusion of such spaces usually depending on the client's budget.

The client of our chosen project in Italy is the architect of the house as well, Lorenzo Grifantini – director of DOS architects, who designed this house for his family. The architect found a plot in a small village in the "heel" of Italy's boot where flat-roofed cuboids in pale colours are featuring the surrounding. From first sight, one cannot really notice the new contemporary house among the rest as the goal was to establish a connection to the urban language and therefore make as if it was always standing there. That is why, the most dominant shape is the square, and the most visible colour is the white. Also, looking from above, we can notice the play between the private and the public space something which is one of the main features of the Iranian houses as well. The house opens towards the "interior" spaces and minimizes the direct view from the streets as the "The pomegranate garden house of grandfather" does it in a very similar way.









The formation of the voids uses a tradition of the Roman domus, which is the creating of the internal courtyard in way that the residents can see it from almost all the interior rooms while enjoying the sea view. So, a 12m white tower, where the bedrooms are situated, overlooks the surrounding and it is supporting an urban axis of the San Rocco Church's bell tower. At the same time, next to the main courtyard, he incorporates in the design a few patios as well that directly connect some rooms to the exterior part.

"The central courtyard, however, is the real heart of the house, a place of conviviality and play, where the swimming pool and the carefully selected vegetation reproduce the presence of natural elements."<sup>75</sup>

Another traditional feature that was included in the contemporary design and that links us to the Iranian houses is the usage of traditional building material. Although there is no such a law that the local white stone should be implemented in the design, the architects made the floor out of Leccese stone. It is a typical local stone, that is has a high light absorbing index without refracting it. Moreover, the house was built with great attention to achieve environmental well-being and minimize heat loss so therefore it is raised by one metre from the ground level allowing natural ventilation, also from below.

<sup>&</sup>lt;sup>75</sup> Archello (2021), La Torre Bianca, (Accessed in May 2021)

# AKA - Apostolou Colakis Architects

#### FYRGANI

A CONTEMPORARY RURAL HOUSE FOLLOWING CYCLADIC ARCHITECTURE'S CONCEPT OF CLOSED, COVERED AND OPEN SPACES

Architects: AKA – Apostolou Colakis Architects Status: Finished in 2021 Location: Sifnos Island, Greece

A multidisciplinary design studio with offices in Greece and the UK, AKA-Apostolou Colakis Architects works across fields of architecture, interior, exhibition and furniture design, each creative endeavour enriched through their intuitive grasp of functionality, morphological clarity, sensitivity to materials and craftsmanship. (Kala Brba Court, This sifnos holiday home mirrors the blue of the aegean, 24.01.2022) "We aim to create fresh, future classics that are contemporary yet timeless" – is what they write on their official website.

The project Fyrgani is one of those that recognized timelessness in the values of the local atmosphere, traditional colour, and material concepts. It is also a project that brought a few international and national awards to this young talented architectural studio from Greece, who decided to respect the ambient the sea creates on this place since antient times. They chose an approach in which the focus is not on only the building itself but also on the surrounding and more importantly, on the relationship the house has with the tradition of dealing with architecture on this island.

"With the once-colorful Cycladic settlements in mind, the interior and exterior floors were painted in the indigo color of the Sifnos sky, which transcends the boundaries of the house and pours into the landscape. These reflective surfaces generate a feeling of wetness, creating a dialogue with the sea and distinguishing the man-made environment from the surrounding natural and unformed landscape, which remains intact, with gentle planting close to the house". (The architects, 2021, ak-a.gr, Accessed on 05.11.2022)



Fig. 102 - 105. Fyrgani

On first sight is the house looks like a contemporary 'themoniá' – an abandoned rural building among the visually and conceptually similar surrounding architecture – the Cycladic architecture. The very first thing to notice is of course the idigo colour of the Sifnos sky, the local stone combined with wood, mortar, metal and wicker. What is not to be seen on first sight is the concept of alternating closed, covered and open spaces that the Cycladic architecture offer in order to comfort the residents in all climatic conditions. This is the concept architect Taghaboni implements in the "Sharifi-ha house" by giving the residents the possibility to react to the outdoor climate conditions. The use of the indigo colour of the Sifnos sky is another feature Iranian architects used in the interior of the "Kharand house" to stay closer to the traditional feeling of being home.

This secret ingredient is the core of the Fyrgani house: *It is composed of three rectangular volumes: two stone volumes containing the bedrooms and, between them, a small colored volume containing the kitchen. This volume emerges from the retaining dry stone wall, extends into a covered courtyard, and functions as a joint and a passage between outdoor areas and rooms. The negative space between the dry–stone wall and the building creates a corridor that transforms into large eastern courtyard with ample views of the Aegean. (The architects, 2021, ak–a.gr, Accessed on 05.11.2022)* 

Exactly this space configuration and volume dispersion creates pleasant atmospheres that use the potential of the location such as south side access, eastern large courtyard for light sunbathing, minimizing the effects of the strong north wind by covering the yard in front, designing framed views of the sea inside the house and achieving natural ventilation by perimetrical openings. Die approbierte gedruckte Originalversion dieser Diplomarbeit ist an der TU V The approved original version of this thesis is available in print at TU Wien Bi Andrea Statistical Stati

*To provide a meaningful architecture is not to parody history, but to articulate it.* 

Daniel LIBESKIND

# Conclusion

There are diverse criteria, viewpoints, perspectives, and many other ways of distinguishing, categorizing, and writing about architecture and architects when it comes to their work approach and generally their architectural style. A difference that I tried to shed light on throughout my master thesis research is the source of inspiration architects use – the traditional architecture as a source of inspiration in residential contemporary architecture. It is the people who created this type of architecture to later reside in it and the architects who found quality, functionality, and aesthetics in it to later integrate it in their designs no matter the current architectural scene. That is how, even nowadays in the 21<sup>st</sup> century we witness the traditional knowledge about architecture to be part of contemporary designs and that is due to many different reasons.

Traditional architecture, especially traditional space and material concepts that are significantly helping to solve one of the biggest issues of today – the unecological and unsustainable approaches toward our surrounding, nature and even people. However, it is important to notice that history has showed us many examples of traditionalism becoming part of the current trend but not always the application of it has given good results.

The trend of referencing to traditional architecture has somehow been evolving into an international vibrant topic of architecture in the 21<sup>st</sup> century and the reason seems to be the universality in application of it. A traditional element is no more just a physical interpretation in the contemporary architecture as it used to be "copied" on the façades or used as an element that is only supposed to look traditional. Nowadays the approach is rather philosophical and poetical and therefore working with space creation, atmospheres, materials, feelings as the main mediators creates a universality – an ability to be applied all around the globe despite the different local architectural and cultural habits.

Iran is country with very long building tradition and one the richest architectural language in the world. It represents a field of ancient atmospheres, diverse climate-influenced relationships between the people and the materiality of their habitats, cultural lifestyles translated into the concept of using the physical shape of architecture... it is a great opportunity of tracking down the traditional evolution and its existence today. Many internationally awarded and leading architectural studios in the contemporary scene of Iran are practising design through the eyes of the traditional values of their ancestors' architecture. Architect Alireza Taghaboni is one of the many who are consciously introducing a new breath of innovation into the material practice and formal development while continuing to adopt these traditional and contextual influences. This romantic approach of reviving the courtyard element in the contemporary residential concepts, tailoring the level of privacy according to the needs of the residents, answering the global concern by choosing to the work with local materials and traditional sustainable systems is part of something bigger - a metamodern movement, new romantism, beginning of a new architectural style.

It is still early to be able to define the exact positive and/or negative effects of this potential metastyle<sup>76</sup> as it takes much complex research in a different, longer time slot. However, what is certain, is the existence of a response to the scenario of internationalising a style of living. Due to the rapid urbanisation and globalisation and considering the pace of the technological advance as well the increase of population on a global scale, we could face "again" a scenario of "standardizing" a residential unit/architecture. Therefore, the ability to interpret one global style into many physical and aesthetical variations thanks to the regional, cultural, traditional differences becomes a much-needed skill, viewpoint, an inspiration.

<sup>&</sup>lt;sup>76</sup> Greek origin, means "beyond," "after," or "behind." The "beyond" sense of meta still lingers in words like metaphysics or meta-economy or meta-architecture.

By studying the above cases, I cannot agree less that: *Culture/Tradition* reflected in architecture helps create or maintain identity in today's world of globalization and internationalism. It also helps maintain the integrity of the society. This principle makes sure that the user is a good member of the society he/she belongs to. Hence good societies need architecture sensitive to their culture. It is important to consider the way culture can reflect in and simultaneously influence the growth of the architectural medium. Along the way, with the advent of modernism, this principle has been forgotten. Buildings don't have a unique style; they don't even come close to creating or even maintaining identities. We seem to have forgotten the way our ancestors used to do things. We must realize that architecture and culture are two sides of the same coin. The faster we realize that the better. We can avoid the progression of architectural uniformity of the future world. People should always be allowed to express themselves and buildings should let them. (Bharani Sri Gujuluva, How does culture shape Architecture, Article, 2022)

It is in the architects' hands to recognize valuable traditional aspects and show the people what they cannot always imagine, the feeling of being home through shapes, forms, elements, materials, space, atmosphere. That is what is makes a good architecture and modestly said, a good architect – the ability to feel the space through the design, through the imagination, through the combination of knowledge and creativity.

*"If today's architects apply ancient structural systems with a scientific understanding of the new building materials and technologies and with an understanding of the regional climate they will build functionally. If today's builders use traditional building styles and knowledge while they influence the progress of lifestyle, they will produce purposeful homes actually. Simultaneously, despite the shape and form of the buildings will seem traditional, but they have a modern expression indeed". (Ghobadian, 1990, p.3)* 

*"When the full power of human imagination is backed by the weight of a living tradition, the resulting work is far greater than any that an artist can achieve when he has no tradition to work in or when he will fully abandon its tradition"* 

(Fathy, 1973, p.25)

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# Supplement

#### The Persian house in central plateu of Iran

Iran (Islamic Republic of)
Date of Submission: 02/02/2017
Criteria: (ii)(iv)(v)(vi)
Category: Cultural
Submitted by:
Iranian cultural heritage, handicrafts, and tourism organization.
State, Province or Region:
Isfahan, Yazd
Coordinates: N33 58 30 E51 26 27
Ref.: 6200

#### Justification of Outstanding Universal Value

Utilizing pre and post Islamic architectural styles, Persian House has created new concepts in the architecture of houses. Concepts such as introversion, orderliness, respect for neighbors, avoidance of showoff, spatial variety, hospitality, interaction with environment, confidentiality, avoiding waste of time, multi-functionality of the spaces and provision of privacy are some of the constituents of Persian house. The observance of these patterns and styles has given Persian house a distinct and outstanding identity. Persian house represents a unique and magnificent model in the field of house architecture in the climate of Iran's central plateau, the materials, construction techniques, decorations and intangible values of which play a vital role in the realization of Persian house.

Persian house as an outstanding sample from its counterparts all over the world provided patterns for house-building which paved the way for significant progress in this field, it was a van guard for the modern methods in the application of construction techniques, designing, spatial hierarchy, decorations, façade design, space arrangement etc. Criterion (ii): Persian house has developed during thousands of years and it has been inspired in each era by the knowledge and cultural values of that period. All these inspirations reinforced by environmental capabilities and climatic features and other borrowed concepts have led to the creation of a new architectural style for residential spaces in this part of the globe, giving a new comprehensive meaning to the life in a house. Persian house as an outstanding sample from its counterparts all over the world provided patterns for house-building which paved the way for significant progress in this field, it was a van guard for the modern methods in the application of construction techniques, designing, spatial hierarchy, decorations, façade design, space arrangement etc.

Criterion (iv): Persian house is a sample of architectural collection which has gained a distinctive identity due to its unique design. Some of the identifiers and distinctive features of Persian house compared with similar residential spaces relate to its constituting elements and patterns including: the central yard, vestibule, interior (private space), exterior (guest space), special entrance, porch, and many other architectural elements which can often be found in Iran's traditional houses. This kind of residential design based on Iranian's unique lifestyle can be regarded as an important representative of human history in the architecture design and concept of the house.

Criterion (v): Iran enjoys divers climates ranging from hot and dry to cold, temperate and wet. Persian house has been designed in such a way that it can be regarded an integral part of its surrounding environment. The layout of the houses and their expansion, access hierarchies, height and depth of the houses are clearly affected by the form and features of the surrounding natural environment. This influence is so obvious that the role of climatic conditions and geographical features in the arrangement of the houses and also the layout of the neighborhoods can be felt. The formation of internal spaces of Persian house indicates a wise interaction between man and his natural environment. This formation is in such a way that there are two separate locations in each house reserved for winter and summer uses. Being exposed to direct sunlight, the winter space is situated in the northern section of the central yard whereas the summer residential spaces are situated in the southern parts of the central yard away from the sunlight with a higher elevation and bigger openings in order to facilitate cooling process. Spaces like cellars (a cold space underground) garden pit, and also elements such as wind towers are other examples supporting this interaction with the surrounding environment. This adaptability with the environment can also be seen in the materials used for the construction of houses. All the construction materials used in the houses are taken from the nearby environment, an issue which guarantees the easy repair and maintenance and also preserves the integrity of the houses during time. It is one of the best manifestations of man's compatibility with his surrounding environment.

Criterion (vi): The architectural design of Persian houses is directly and clearly affected by the cultural customs, beliefs and ideas of the people and it has been greatly affected by its residents. In fact, in the traditional Iranian houses, interaction with the natural environment and the fulfillment of human needs has become meaningful along with concerns for concepts in the design and layout of the houses. Emphasizing the ideological beliefs such as safeguarding the family privacy, hospitality, god-fearing, humbleness, and many other cherished beliefs, the architects of traditional houses had designed the houses in such a way that all those above-mentioned concepts can be seen everywhere from the smallest items (i.e. the door knockers) up to the overall plan and decoration method of the house. The most prominent example for the integration of these beliefs and customs can be found in the introversion concept (meaning turning inward and arranging and concentrating the spaces around the central yard).