



### **DIPLOMARBEIT**

# **Building Traditions and Identity of Contemporary Houses in Bulgaria**

ausgeführt zum Zwecke der Erlangung des akademischen Grades eines Diplom-Ingenieurs / Diplom-Ingenieurin unter der Leitung

Ass. Prof. Arch. Dipl.-Ing. Dr. Techn. Mladen Jadric

E253 – Institut für Architektur und Entwerfen

E253/4 – Hochbau und Entwerfen

eingereicht an der Technischen Universität Wien Fakultät für Architektur und Raumplanung

von

Angel Vladimirov Gekov 1223301

Wien, am 03.11.2016



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# **ABSTRACT**

The present research is concerned with the identity of houses in Bulgaria, built after the democratization of the country in 1989. Addressing the political change in the early 90s and the following globalization processes, which took place in the country, as the reasons for the alternations of the architectural image, the purpose of the current work is to find out what are the building traditions of houses in Bulgaria, which bear the traits of cultural and national identity, and how they can be interpreted in a contemporary way.

By exploring the contributions on the research field of critical regionalism, are acquired methods and strategies, how to create modern architecture, which at the same time is related to a given place. Further, its practice in China - a symbol of economic and technological development and famous for its rich culture and ancient traditions and history, exemplifies how to implement also cultural traits of a region or a nation in a given project. Similarly, Bulgaria is one of the oldest countries in Europe, but its contemporary architecture seems to have lost the connection to its old building traditions. Through comprehensive studies on the traditional Bulgarian house, also called Bulgarian Revival house, are outlined and filtered the typological features and peculiarities, which bear the culture and identity of the Bulgarian house and for which a modern translation could be sought. The collected information is used to identify the crossing points and divergences between contemporary and traditional houses.

On the base of this information, the outcome of the work provides information and suggestions for the possible modern interpretations of the selected elements, which in turn could be applied in the design of houses, aiming to create contemporary architecture and maintaining the cultural traits and building traditions of the Bulgarians.

**Key Words:** Bulgarian traditional house, Bulgarian Revival house, building traditions, identity, culture

# KURZFASSUNG

Die vorliegende Diplomarbeit beschäftigt sich mit der Identität von Einfamilienhäusern in Bulgarien, die nach der Demokratisierung des Landes im Jahre 1989 gebaut worden sind. Die politische Wende in den frühen 90er Jahren und die folgenden Globalisierungsprozesse, die in dem Land stattgefunden haben, werden als die Hauptgründe für den Wechsel des architektonischen Bildes anerkannt. Zweck der aktuellen Arbeit ist herauszufinden, welche die vorhandenen Bautraditionen, bezüglich der Einfamilienhäuser, in Bulgarien sind, die die Kultur und die nationale Identität zum Ausdruck bringen, und wie man diese auf einer zeitgenössischen Art und Weise interpretieren kann.

Durch die Untersuchung der Beiträge in dem Forschungsgebiet des kritischen Regionalismus sind Methoden und Strategien erworben, wie man moderne Architektur mit Bezug auf einen bestimmten Ort schafft. Darüber hinaus die Anwendung vom kritischem Regionalismus in China - ein Land, das ein Symbol für wirtschaftliche und technologische Entwicklung ist und das berühmt für seine reiche Kultur, alte Traditionen und Geschichte, zeigt, wie man auch kulturelle Merkmale einer Region oder einer Nation in einem bestimmten Projekt umsetzen kann. Ebenso, Bulgarien ist eines der ältesten Länder Europas, aber seine zeitgenössische Architektur scheint den Bezug zu seinen ehemaligen Bautraditionen verloren zu haben. Durch ein umfangreiches Erforschen des traditionellen Bulgarischen Hauses, auch Bulgarisches Wiedergeburtshaus (Revival-Haus) genannt, werden die typologischen Merkmale und Besonderheiten herauskristallisiert, die die Kultur und Identität des Bulgarischen Hauses tragen und für die eine moderne Übersetzung gesucht werden könnte. Die gesammelten Informationen werden dazu dienen, die Gemeinsamkeiten und die Unterschiede zwischen den zeitgenössischen und den traditionellen Häusern zu identifizieren.

Auf der Basis dieser Informationen liefert das Ergebnis der Arbeit Strategien und Vorschläge für die möglichen modernen Interpretationen der ausgewählten typologischen Elemente, die wiederum bei der Gestaltung von Häusern angewandt werden können. Ziel dabei ist eine zeitgenössische Architektur zu schaffen, die die kulturellen Eigenschaften und die Bautraditionen der Bulgaren behält.

**Schlüsselwörter:** traditionelles Bulgarisches Haus, Bulgarisches Wiedergeburtshaus, Bautraditionen, Identität, Kultur

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# 1. Introduction

#### 1.1. Research Background

The built environment demonstrates the human progress since ancient times. Over the ages people raised their habitats in accordance to the geographical location and local conditions. Initially constructed in a primitive way, they aimed to provide protection against climate conditions and enemies. With the time the structures have grown into more spacious, functional and comfortable units. Gradually the indigenous architecture was impressed by the cultural traits of societies and thus it became a bearer of national identity.

Today, human development moves towards a universal identity. The development of modern technologies and science globalizes the world into a single whole. As per Oxford Dictionaries' definition, globalization is "the process by which businesses or other organizations develop international influence or start operating on an international scale". Likewise, it can be explained with events occurring at distant places, but affecting local environment<sup>2</sup>. Initially it started with curiosity of the people to visit and explore new places and thus to get to know new cultures and customs of other folks, as well as their habitats. Around 1850 a major progress towards it happened with the end of the industrial revolution, while later at the turn of the century it evolved to globalization through academia:

"Technology was making distances between countries to vanish, while knowledge and scholarship were making manufactured goods easily available to the whole world like never before"

Undoubtedly, globalization it enhances its range and influence and contributes to the development of humankind. In terms of architecture, globalization expanded its achievements. It made the exchange of information and know-how free and accessible from any point of the world. Architects gain knowledge of building traditions of various nations without crossing physical borders. Borrowing concepts and ideas from

I

distant places enlarged the architectural "toolbox" by introducing new materials, shapes and construction techniques, while modern technologies accelerated and facilitated the design process.

The further globalization progresses, the more universal becomes the appearance of the built environment. Architecture transposed from locally specific to globally uniform and its identity got vulnerable. Concurrence of circumstances the built environment is tending to be clearer and simpler in its design, not only by depriving itself of decoration and ornamentation, but also by eliminating the cultural complexity and disconnecting its character from any tradition. The spiritual and philosophical understandings, applied through architecture seems to lose their value. They mislay their significance and give priority to economic and political factors. Consequently, constructed without relation to the surrounding environment buildings obtained autonomous and independent character.

As a reaction against the loss of architecture's identity occurred a relative and partial return to building traditions and constructions of a bygone era. Subject of investigation become vernacular structures, regarded as repository of national identity and culture. Vernacular architecture is:

"Unpretentious, simple, indigenous, traditional structures made of local materials and following well-tried forms and types, normally considered in three categories: agricultural (barns, farms, etc.), domestic and industrial (foundries, potteries, smithies, etc.)...It has been contrasted with polite architecture, and even classed as architecture without architects, but this is not really true, as most vernacular architecture...was never really an isolated phenomenon, an architecture of the proletariat, rural or urban".

Yet most of the attempts to rebuild traditional architecture are limited to imitation of their façade through the use of contemporary materials. Identifying the essence and meaning of given features does not take place and thus reconstruction remains on a superficial level. The result is a "façade"-architecture, which is not coherent with the volume and content behind it<sup>5</sup>.

A similar process of architecture's development happens in Bulgaria too. Located on a crossroad between Europe and Asia, in its history the country passed through various political events, which left their mark on the culture and customs of the people and consequently on their architecture.

In the 16th century in Bulgaria emerged the so-called Revival architecture, regarded as traditional Bulgarian architecture. Illustrated mainly through single family houses, these structures were in harmony with the local environment, while at the same time they were organized in accordance with the daily routines of its inhabitants and thus they have reflected their lifestyle. With the Liberation of the Bulgarian state in 1878, after almost five hundred years of Ottoman domination, modernization processes took place in the country. In an endeavor to push away the Ottoman past, in Bulgaria penetrated foreign architectural influences from Western Europe. By approaching the middle of the 20th century Bulgaria became a member of the Soviet Union, which afresh changed its political and cultural life. The socialist ideology was imposed as guiding principle in the architectural realm, which gave an additional impetus for the future progress of Bulgaria's architecture by introducing new materials and building techniques. In addition, a strong attention was paid to the urban development of cities and tourist resorts.

With the fall of the Socialist regime in 1989, Bulgaria began a transition from centralized to market economy, which lasts until the present day. This period marks the last and actual stage of the Bulgarian architecture, identified as the focal point of the current research.

# 1.2. Contemporary architecture of Bulgaria

Changing the state authority from socialist to democratic government strongly reflected on the architectural realm in Bulgaria. The course of the architectural development changed radical after 1898 and reached a new dimension. Not only the appearance of buildings and urban development have altered, but also the regulation and elaboration of the projects. Consequently, a real estate market was established<sup>6</sup>.

While in the past the socialist government had imposed its own ideology of minimalism and functionalism, the "new" time was characterized by the discharge of restrictions, which unleashed architects' creativity. Important role in the construction sector gained single family houses<sup>7</sup>, which during the socialist period gave way to apartment blocks with communal use and therefore were not a usual practice. In addition – "more is better" became a leading motto for the arisen private investors. According to Max Holleran the first years after the political change marked the time, when the organized crime was founded in Bulgaria and parallel to it emerged the so called architectural style "Mafia Baroque". Characterized by a distinctive expression,

it was also a synonym of corruption, bad taste and symbol of economic and cultural shift.<sup>9</sup>

The political events caused chaos in the state administration, which stagnated the architectural development in the last decade of the 20<sup>th</sup> century. Building codes were modified and thus the role and position of architects was not clearly Professionals were defined. allowed to collaborate in drawing up the legislation. The personal interest of certain people dominated over the common public good. State owned land was privatized and reclassified, which induced a rapid urbanization. Municipalities had insufficient funds



Fig. 1: Bulgarian contemporary architecture.

to implement the existing and updated urban plans, which resulted in corruption followed by decreasing the qualitative control. In order to profit from newly built apartment blocks with good location, old neighborhoods were destroyed and had transformed the cityscapes, while mountainous and coastal areas were uncontrolled overbuilt. New structures were distrusted by the society whereas professionals, recognized as successful during the socialism, were excluded from the current projects. The government condemned them that they have not detached themselves from their socialist views. Losing their validity and apprehending their inability to influence the design processes, architects and planners were fearing the permanently loss of their face, meantime their role on the stage was played by unexperienced practitioners. 11



Fig. 2: Office building with a blue-glass diamond façade in central Sofia.

A significant relaxation in the understanding of architectural aesthetics was perceptible, yet new projects were often neglecting the existing architectural heritage. Reconstructions such as appropriating balconies as room extension, adding thermal isolation only on parts of building's skin were just some of the indicators of the new time. The typical pure residential block altered to a multi-functional unit with commercial and business areas. Converting ground floor areas from convenience

stores, cafes or beauty salons to banks or offices isolated the buildings from the public space and destroyed the connection inside-outside.<sup>12</sup>

Architectural competitions turned out to be the only opportunity for architects to illustrate unencumbered and independent their views on design. Yet many of them came into naught or ended in an unregulated way. Manipulation of the vote was also not inconceivable, since some of the evaluation criteria were unclearly outlined, while others were too general:

- 1. Functionality of the design proposal and variation of the whole design as well as variations of the single floors in accordance with objectives of the design task.
- 2. Aesthetic properties, construction progress, convincingness of the architectural and design image.
- 3. Contemporaneity of construction and installations, quality of implemented materials, building technology and construction proposals.
- 4. Feasibility of the given proposal. 13

As Prof. Stefan Popov<sup>14</sup> comments, "convincingness of design" is undefinable and unmeasurable characterization, whereas "quality of implemented materials" is unnecessary for an ideas competition. In addition, competitions are conducted in the so-called form of "engineering"<sup>15</sup> - together with the design proposal it is required to be submitted a construction tender of a general contractor with calculation of construction costs and time. Critics explain that the aim is a certain applicant to receive the commission's tender, regardless the design proposal. Economic aspects become more important than the result or the social and public meaning of the project. Once funds are absorbed, the initial design proposal is being further modified and altered until it reaches somewhat the expectations of the society. The professional guild criticized that the quality of architecture and urbanism decayed and decreased due to the corrupt practices in the country.<sup>16</sup>

From another perspective, "Mafia Baroque" could be seen as a reaction against the socialist architecture and thus an attempt to break the link with the preceding building traditions. Induced by the partial Americanization and by the opening of the country

to the Western world, imported foreign styles, in particular Las Vegas-like, were blended with the aesthetic views, culture and mentality of nouveau riche. The wealthy clients, often related with the Bulgarian organized crime, wanted to demonstrate their jump among the high society classes <sup>17</sup>. They became primary investors in the construction sector and dictators of the architectural trends. With a strong call for attention this style was not question of kitsch, but rather a poor interpretation of post-modern architecture. As Holleran asserts it cannot be described with any certain details. Still it is characterized by "plain ugliness, bad taste and gaudiness, but also with a sense of purposeful excess that rudely assaults the viewer" <sup>18</sup>.



Fig. 3: Hotel in Lozenetz, on the Black Sea.

Gaining massive proportions, using an amalgam of expensive materials and mixing indiscriminate elements intrinsic to styles from classicism to post-modernism, without any coherence among them, demarcated the new buildings from the old ones. The plastic and colorful treatment of the façades through oval-shapes, large openings, convex or concave volumetric masses and excessive level of ornaments<sup>19</sup> became a distinctive feature of "Mafia Baroque". Maximization of profit induced the usage of any available floor area, without questioning its appropriateness or functionality. Private banks and office buildings were the first segments affected by the new style, while single family houses and villas demonstrated its further development. Often sited illegally and without density regulations, these large homes represented "ideas of nobility" and "signs of glory", but without "any notion of scale"<sup>20</sup>.

While investors were dealing with the building design, architects and planners were responsible only for the construction and thus their role as professionals was downgraded. They criticized this distinctive type of architecture as "show-off" the wealth and power of the parvenus, whereas the government used it to make itself visible and to indicate the new political course of Bulgaria. Gradually "Mafia Baroque" transformed to the reality of the Bulgarian architecture.

Architects remonstrated against it, claiming its cultural inappropriateness. Attempts to avoid the establishing of "Mafia Baroque" as an architectural language specific to Bulgaria, led to the recreation of the Bulgarian Revival house, considered to exemplify the country's traditional architecture. Using the latter style in designing mountain resorts and single family houses emphasized its importance and role as a carrier of national identity, but it was not considered as a valuable achievement in the architectural development. During the annual review of the Bulgarian architecture in 2008, prof. Boyadzhiev<sup>21</sup> referred to these structures as "pseudo-national", since they represent "a skin, a wrapper from the outside, and from the inside – contemporary interiors, which both together cannot create any masterpiece".

Prof. Todor Bulev<sup>22</sup> shared the opinion, that the Bulgarian architecture from the socialist regime was much more authentic and original. The failure of the Bulgarian

architecture, according to Anton Gugov<sup>23</sup>, is due to the lack of clear vision for its future development. He expressed his disappointment, that Bulgaria neither had established its own architectural style, nor has it adopted fully a foreign one. In addition, less architects are seeking to couple contemporary architecture with Bulgaria's traditional one. After Gugov, contemporary architecture should not come out of nothing. On contrary it should descend from both the environment of a given region and the culture of people, while it successes and respects the existing architectural heritage.<sup>24</sup>

More than two decades after the replacement of the state authorities, practicing architects in Bulgaria consider the emerged "Mafia Baroque" as a phenomenon, which was not only unavoidable, but also necessary. Architects are on the opinion that on one hand this architecture put the country in unfavorable light and because of poor administration Bulgaria missed the chances to improve its image. On another hand, "Mafia Baroque" set a breakpoint with the former socialist regime and directed the architecture on a way, which, despite the adverse circumstances, gave more artistic freedom to architects and urban planners. Entering the European Union in 2007 unleashed a new impulse of foreign influences and led to investors' pursuit for subtle and fine solutions of spatial problems. Gradually they were seeking legitimacy through quality and not only through quantity. Thus, the importance of the architects in a given project raised significantly<sup>25</sup>. Crucial role in the design of multi-functional complexes gained the public space and meanwhile resorts strived the creation of a unifying image. Proposals for future projects including skyscrapers, although untypical for the Bulgarian cityscape, stressed the challenge and the ambition of the architects to catch up with modern trends in the professional field. Yet prof. Popov declared that, still there are no significant buildings in Bulgaria built after 1989 and the democracy did not contribute to development of qualitative architecture<sup>26</sup>.

Undoubtedly, Western influences are tactile in Bulgaria. Despite the products of "Mafia Baroque", they are considered as modern and therefore as "good", but gradually they lead Bulgarian contemporary architecture towards universalization.

Unnoticeably they cause the deprivation of national identity. Architect Angel Zahariev<sup>27</sup> asserted in 2015 that the political transition in Bulgaria is not over yet and thus its architecture still has a long way to go until it reaches the world's architectural stage<sup>28</sup>.

## 1.3. Significance and Aim of the Research

The process of change cannot be prevented or avoided. It is a natural phenomenon marking the development of societies, whereas the built environment is its material evidence.

The problem about the identity of the Bulgarian architecture gained an importance at the beginning of the 20<sup>th</sup> century, after the first wave of imported foreign influences. New movements in the architecture, such as classicism and modernism, settled persistently in the cities and although initially unknown for the Bulgarian society these styles turned into the new contemporary architecture of Bulgaria. Gradually cityscapes lost the image, characteristic for the Bulgarian Revival period. The tactile contrast towards the traditional architecture posed the question regarding the acceptable limits of external impacts on the built environment in Bulgaria. Consequently, it raised the discussion about possible counteractions to this phenomenon.

Over the years, attempts for merging the modern with the traditional were restricted only to reconstruction of certain volumetric shapes and details of indigenous structures through new materials or, as already mentioned, to the mere imitation of their appearance. These efforts neither have contributed to the further establishing of the Bulgarian Revival architecture as a national style, nor led to its successful continuity. On the contrary, the superficial copies of traditional architecture belittled its value. The discussed above current stage of the contemporary Bulgarian architecture emphasizes its alienation from the Revival one.

In this regard, a central question in the present research is how to bridge the architecture of two different epochs, how to combine the traditional with the

contemporary, in order to create a modern architecture with identity, specific for certain society or nation and related to concrete place. In the case of Bulgaria, taking the Revival house as an example of traditional Bulgarian architecture, it is important to understand, what could be learnt from it, which are its specifics and elements, which bear Bulgarian essence, how its design is approached. On the base of the collected information would be offered a method for assessment, whether contemporary single family houses in Bulgaria and traditional ones have something in common and which are their crossing points. Further, in order to blend the "new" with the "old", the study will investigate the features of traditional structures, for which a translation into modern architectural language could be sought. The outcome of the work will provide information and suggestions about the possible recreations of the selected elements, which, in turn, could be put into practice in the construction of new single family houses in Bulgaria. Additionally, the results of the study could not only serve as an inspiration and learning opportunity for future projects, but they could be also applied in residential projects of a bigger scale. The missing link between the Bulgarian traditional houses and the single-family houses built after year 1898 is identified as an outgoing point for the significance of the current research.

#### 1.4. Key Research Issues

The major difficulty for the purpose of the research will be the gathering of information about Bulgarian contemporary and Bulgarian Revival architecture. Since Bulgaria is a relatively small country, there are less resources, which could be found outside of the country. As a matter of fact, except for national periodicals, there are almost no works regarding Bulgarian contemporary architecture published after 1989, whereas literature on the topic Bulgarian Revival architecture dates back to the late 70s of 20th century. Surprisingly, there are a few articles, written by non-Bulgarian authors. Their application is reasonable, since they could enrich the current study, by providing an unbiased information.

As for the beginning of the work, internet could be a useful tool to acquire a general

overview of the topic and its branches, but it will not be considered as a fully reliable resource. However, internet could be still used to contact architects and people having interest or working in the field of the Bulgarian Revival architecture. In order to gather a comprehensive information from sources such as libraries and archives, visiting Bulgaria would be the best solution. Consequently, such a trip could make harder the communication with the supervisors of the research.

Another issue could be the language. The collection of information was conducted in three languages: Bulgarian, German and English and therefore slightly deviations in the translation of non-English resources into English could occur. With the help of classmates and friends, materials were searched also in Chinese, but this approach was used for specific cases only.

Yet, for the final results of the research, the listed above issues are not considered as crucial.

#### 1.5. Thesis Structure

The current research consists of seven chapters and begins with an introduction on the topic of the globalization: its development and its influences on the field of architecture. This chapter overviews briefly the history of Bulgaria, from the end of the Ottoman domination until the present day, in order to illustrate the intricate political events, which the country underwent after its Liberation in 1878 and which had an effect on the built-environment in the Bulgaria. Focusing on the state of the contemporary Bulgarian architecture, this chapter explores the architectural byproducts of the political change in 1989, the vanishing identity of the Bulgarian architecture and the false recreation of the cultural heritage. At the end, it describes the main focus of the research, its aims and significance at the present time.

Chapter two reports about the literature review on existing studies and contributions regarding the reconciling of contemporary and traditional architecture on a global scale with an accent on the academic field of critical regionalism and in particular its practice in China. The collected information serves as a foundation, upon which is

built the theoretical framework for the methodological approach of the study. Further, it explores works concerning the traditional architecture of Bulgaria and its establishing as a national style.

The next chapter determines the methods and tools, essential for achieving the aims of the study. It identifies also the subject of investigation, necessary for gathering supplementary data for the research.

Forth chapter is devoted to the essence and peculiarities of the most remarkable example of traditional Bulgarian architecture, namely the Bulgarian Revival house. It overviews the formation, the characteristic features and development of the typology. Further through a comparison with the domestic architecture of the surrounding Bulgaria ethnicities are outlined the traits, which demarcate the Bulgarian house among the others.

In chapter five, a study on possible attempts for combining the traditional style with the current architectural trends during the years after the Liberation of the Bulgarian state and until 1989 is conducted.

The obtained theoretical data and findings, about traditional Bulgarian architecture and its probable continuity, will be used in chapter six for the examination of case studies, illustrating contemporary Bulgarian houses. It will be demonstrated in which aspects the chosen projects fail or succeed to achieve modern architecture, based on building traditions from the past and bearing a Bulgarian identity.

The last seventh chapter concludes the results from the research. It outlines the factors and features, which have been proved to be crucial and vital for the identity of traditional houses in the context of contemporary Bulgarian architecture. Finally, the chapter provides ideas and suggestions for contemporary interpretations of traditional structures and their elements, which could be implemented in future projects.

### Introduction Contemporary Sign:ficance and Research Aim of the Research background architecture in BG Key Research Thesis 951125 Structure Theoretical premises Between Contemporary and Traditional Literature Raview Summary Methodology The traditional Bulgarian house Essence and Peculiarities The Bulearian Development Architecture of Revival house of the typology surrounding ethnic:ties Summary Development of the Bulgarian Architecture Possible attempts for reconciling of contemporary with traditional architecture Between the two 1878 - 1920 The Soviet Union World Wars Summary Case studies Case Study 01 Case Study 03 Case Study 05 Case Study 02 Case Study 04 Case Study 06 Summary Conclusion

# Glossary Acknowledgments Bibliography

Appendix A: Evaluation lists of the Case Studies
Appendix B: List of Figures and Tables
Endnotes

Table 1: Thesis Structure.

# 2. Theoretical Premises

#### 2.1. Literature Review

#### **Between Contemporary and Traditional**

As it has been already discussed the progress of globalization leads to universalization of architectural styles. It started with the avant-garde movements in the early 20th century, considered as an act of enlightenment. Russian Constructivism, German Expressionism, Italian Futurism and others were designated as avant-garde movements for "their experimentation, their break with the past, their social agenda, and their attempt to strive for "something necessary and universal" 29. Renato Poggioli shared that the distinctive feature of the architectural avant-garde is "the break with tradition" and "the cult of novelty"<sup>30</sup>, while Hilde Heynen explained "the destruction of the old and the construction of the new" as the "avant-garde logic"<sup>31</sup>. Avant-garde movements were assumed as liberative phenomenon, yet they overrun their initial expectation. The end of World War II and the raising capitalism set the beginning of the "universal civilization" - a term coined by Kenneth Frampton<sup>32</sup>. The more this phenomenon spread, the more the local identity of ethnicities and of their architecture disappeared. He shared that while in the past time the culture of societies was perceivable in the city's fabrics, globalization changed it quickly through "the victory of universal civilization over locally inflected culture". 33

In this regard, Alexander Tzonis and Liane Lefaivre commented that: "Today ... regions in the cultural, political, social sense, based on the idea of ethnic identity, are disintegrating before our eyes"<sup>34</sup>, whereas Paul Ricoeur stated: "It seems as if mankind, by approaching en masse a basic consumer culture, were also stopped en masse at a subcultural level".<sup>35</sup>

According to Kenneth Frampton, currently it can be assumed that there are two mainstreams in architecture – Neo-Historicism and Neo-Avant-Gardism. While the

first take course back to building traditions or styles of a bygone era, neo-avant-gardists advocate for the further modernization of the architecture, since it can provide freedom and creativeness in the architectural expression<sup>36</sup>. Yet, the modernization of countries caused the loss of cultural traits in their architecture<sup>37</sup>. Additionally, modern architecture was criticized by Lewis Mumford for its regional autonomy. Lacking a sense of belonging and thus creating an unintelligible dialogue with the viewers was also recognized by Tzonis and Lefaivre. They both considered that even the pure reproduction of local elements cannot be regarded as a counter reaction, since it achieves a mere pastiche.<sup>38</sup>

Among architects and theorists raised the discussion about "how to become modern and to return to sources; how to revive an old, dormant civilization and take part in universal civilization"<sup>39</sup>, both in the same time. As Paul Ricoeur asserted, this could be achieved by merging the indigenous culture of a given society with the universalization of the world ("universal civilization"<sup>40</sup>). Likewise, Tzonis and Lefaivre offered a new movement in the architecture, which they termed "Critical Regionalism" and which aimed to mediate between modern architecture and building traditions of a given region. In their article "Why Critical Regionalism today?", Tzonis and Lefaivre explained that this new movement in the architecture should not be seen as certain style, but rather as an approach, which:

"draws its forms from the context. In other words, its general poetics become specific drawing from the regional, circumscribed constraints which have produced places and collective representations in given bound areas". 41

The approach is "critical" in an ambiguous sense, namely as "self-examining, self-questioning, self-evaluating, that not only is confrontational with regard to the world but to itself"<sup>42</sup>. The use of "regional design elements"<sup>43</sup> should contend with the universalization of architecture by "commitment to "placeness", as Tzonis and Lefaivre formulated it, and not by "deification of Heimatsarchitektur"<sup>44</sup>. To avoid an excessively tactile recreation of "place-defining" elements"<sup>45</sup>, Tzonis and Lefaivre suggested to extract them from their context and to implement them in a way, at first

sight alien for the viewer. Consequently, their perception would be implicit and it will attract the attention, by opening possibilities for various interpretations.

Likewise, Tadao Ando asserts that new structures should be "trans-optical" and thus they should not replicate certain geometric shapes, but rather the sense of space<sup>46</sup>. Selected components of a given structure should not be rebuilt in their original form, creating a visual remembrance, but rather they should:

"...be used in an everyday sense but to supply that which, in the context of contemporary architecture, everyday life does not".<sup>47</sup>

Therefore, Dimitris Pikionis stressed the importance of studying vernacular houses and their elements.<sup>48</sup>

Kenneth Frampton suggested that contemporary architecture should accept the position of "arriere-garde" (later he borrows the term "critical regionalism"), which means:

"...[it] has to remove itself from both the optimization of advanced technology and the ever-present tendency to regress into nostalgic historicism" in order to "cultivate a resistant, identity-giving culture while at the same time having discreet recourse to universal technique". 50

He declares that critical regionalism neither should be related to nor it should take as a reference vernacular architecture <sup>51</sup>. In contrast to Populism, it should provoke indirectly the consciousness of the users by construing modern structures into elements and exchanging them with comparable ones, appropriated from remote cultures <sup>52</sup>. This is exemplified with Jorn Utzon's Bagsvaerd Church, where the contrast between the outside and inside juxtaposes universal civilization with the rooted culture. While at first sight the building represents the "rationality" through its outer form and composition, its uniqueness becomes tactile in its interior. Utzon defines the sacred space, not by utilizing the usual set of sacral attributes, but by spanning concrete shell vaults. On one hand these distinctive elements symbolize the achievements of modern architecture, while on other hand they deliver the necessary

religious value, while being adopted from Chinese pagodas. As result the church is both inscribed and unique in the given context.<sup>53</sup>

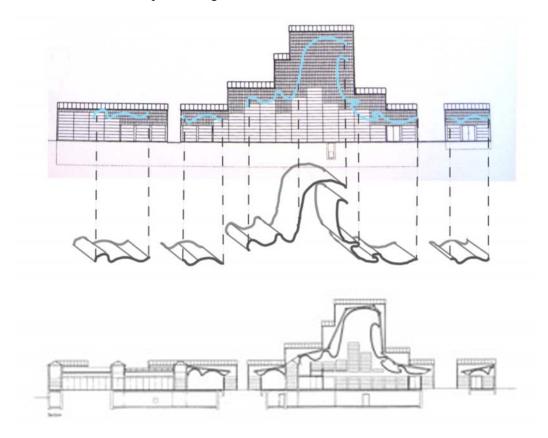


Fig. 4: Jorn Utzon's Bagsvaerd Church. Section.

Frampton explained that architecture can resist universal civilization within a given domain. Only in a place, which determines a certain context, can arise a critical practice. Of essential importance, according to him, is the dialogue between the building and its environment. Buildings should adapt to assets of the location, instead of seeking "placelessness" by shaping the given topography by reason of convenience and rationality. In addition, each site treasures the local culture and history of place, which, Frampton believes, have to be reflected by the built structure. Further, the architectural design should consider and respond adequate to the various climate conditions and light situations, before having a recourse to the universal techniques, such as controlled lighting and ventilation. The "interaction between culture and nature" should result in "place-conscious poetic". Special attention must be also assigned to the tectonic of a building, where form and construction should be assumed

as two inseparable and interdependent parts, molded to an "art form". For Frampton, critical practice should stimulate and appeal to all human senses, instead of only create a visual impression. On the contrary, it should invite the viewer to experience it.<sup>54</sup>

According to Frampton the application of the theories of critical regionalism was a personal initiative of certain number of architects, such as Jorn Utzon, Vittorio Gregotti, Gino Valle, Carlo Scarpa, Louis Kahn, Luis Barragan, Oscar Niemeyer, Hamilton Harwell Harris and others, instead of being a common practice.<sup>55</sup>

In contrast to Frampton, Aris Konstantinidis - a Greek architect, who also made a stand against the impersonal character of modern architecture, asserted that "true contemporary architecture" should be in accordance not only with its time and with the physical conditions of the environment, but also with the culture of a given region. Architects should not be allured by the brilliance of modern buildings, since only new-fashioned becomes old-fashioned. They should approach design self-consciously and relate it to their own culture. Further, Konstatinidis suggested that design should be based on values and traditions rooted in indigenous structures, which resisted the changes of the time and thus proved to be timeless. While building traditions cannot be inherited, but rather appropriated, they should be translated in and expressed through means of contemporary architecture.<sup>57</sup>

Therefore, studies on indigenous architecture aim "to find "the reasons for the built things", rather than to copy its morphology and to revive old forms with new materials"<sup>58</sup>. Similar to Frampton, he suggested that buildings should establish a relationship with the nature, by becoming part of the topography and merging with the landscape. The Greek architect defined current architectural trends and the desires of clients as temporary and stressed that the preserving of the cultural richness is crucial for the identity of regions, such as "the Balkans, India, China and others".<sup>59</sup>

"What gleams is the moment's, born to be soon lost; true gold lives for posterity".<sup>60</sup>

#### Learning from China

Since the confrontation of local and universal is an actual topic in the global architectural discourse, it finds its place also in China – a country on one hand symbol of modern economic, technological and scientific development and on the other hand – famous for its rich culture and ancient traditions and history. Similarly, Bulgaria is one of the oldest countries in Europe, but its contemporary architecture seems to have lost the connection to its old building traditions. Therefore, studying the practice of critical regionalism in China is reasonable and would provide helpful and useful information for the research.

Li Xiaodong<sup>61</sup> shares that China has experienced a rapid modernization in the last 30 years. Its built environment changed significantly by importing architecture from the West. The introducing of various architectural styles changed the contemporary architecture of China in a way, which distanced it from its traditional one. He noted that the time came "to look at the mistakes we have been making"<sup>62</sup>. According to him:

"Cultural diversity is just as important as biodiversity. We can't build our whole world in the same way. We're living in a different world, with a different culture and different conditions to respond to." 63

Contemporary architecture could benefit from the achievements and further advancement of building technologies and constructions, but it should not ignore its past.

As a lesson, which could be learnt from Chinese building traditions, he pointed out the balance between natural and built environment. Further, he noted that traditional Chinese architecture was not dealing so much with certain forms, but rather with ambience. Architecture should be experienced through all senses and not only by looking at it. People should feel the "energy of the space" and understand the intangible, rather than the tangible<sup>64</sup>. This he exemplified with his thoughts on the design of a Buddhist temple, for which the Chinese architect is in charge. He asserted

in an interview for "Perspective Global" that it is not important to create a building with pitched roof resembling all other temples. At the heart of the project is to apprehend the essence of the Buddhist beliefs and to find a way how architecture can provide a material shape, which can "accommodate these beliefs"<sup>65</sup>:

"What is contained is more important than the container".66

Compared to Western culture, where there is a clear distinction between subject and object, in Chinese culture subject and object are two parts of one whole. Li Xiaodong stressed the importance of using local materials and textures. If in a given context there are features, which showcase the indigenous culture, which are rooted in the history of the place, architects should take advantage and make use of them, not by copying them, but rather implementing them in a reasonable way. In the example of the Liyuan Library, Huairou, China, he applied a material, typical for the local village, in an unfamiliar way – as a cladding of the structure. On one hand, the wooden sticks inscribed the Library in the surroundings, while on other hand they have protected the inner space from excessive amount of sunlight and created a pleasant atmosphere for reading. Thus, the strong relationship between the library and the natural environment achieved an inseparable unison of subject and object.<sup>67</sup>



Fig. 5: Liyuan Library. The cladding of the building is extracted from textures, found in the local villages, and merge the Library with the environment.

Thorsten Botz-Bornstein explains that in Europe, despite the various number of wars on the continent, the cultural and, in particular, the architectural heritage is being physically preserved and it still can be considered as authentic, while in China the attitude towards it is different. In contrast to the "Western civilization of buildings" 68, which creates a concrete form of reference, is opposed the "Chinese civilization of writings"<sup>69</sup>, which does not leave many material evidences for the architecture of the past times and which raises the question, whether critical regionalism can exist in China, due to the manner of architectural preservation. Botz-Bornstein comments in his article "Wang Shu and the Possibilities of Architectural Regionalism in China" that as a consequence of the economic boom and rapid modernization in China, "destroy and rebuild" became the current "tradition" in the architectural realm. The architectural heritage is virtual and elusive, rather than factual and material. Western scholars are criticizing that Chinese keep their culture in "monuments of the mind". As an example, Botz-Bornstein gives the Maple Bridge in Suzhou, which exists in poems, while its concrete physical structure is less important. The information about it is spiritual and thus demonstrates "moments of experience or of reflection involving the bridge"<sup>70</sup>, while the written materials do not contain any certain details about the material or the structure of the bridge itself. Consequently, according to the article, a reconstruction of buildings from the past is synthesized through the own interpretation of the Chinese architects. Despite the doubts of the author and although he claims that current architecture in China is influenced by the "international style" or the Disneyland syndrome" and there is less authentic architectural heritage, he reckons that critical regionalism still finds its place in the country and identifies it in the works of Wang Shu, head of Architecture School and a professor of China Academy of Art in Hangzhou City<sup>71</sup>, laureate of the Schelling Architecture Prize 2010<sup>72</sup> and Pritzker Prize 2012.<sup>73</sup>

Professor Wang Shu, due to his "obsession with traditions", recognizes himself as a "houfeng" – the contrary of avant-garde and coming from the Chinese "後鋒"<sup>74</sup>, literally meaning arriere-garde as Frampton called it.

He develops his projects by applying a "free design process", which borrows concepts from the design approach of Chinese garden. It is "a design able to adapt itself constantly in response to the conditions of the environment as they appear during the building phase"<sup>75</sup>.

Analyzing the works of Wang Shu, a study at the University of Melbourne stated that the main characteristics of his design method are, namely, "experimentation, localism, involvement with traditions, social response, and self-consciousness"<sup>76</sup>.

As experimentation, it can be identified for instance his work on the Ceramic House in Jinhua in terms of both concept and materials. The alternative way of using materials is also observed in the tile/brick façades of the Xiangshan Campus and the Ningbo History Museum. The reuse of salvaged materials expresses Wang Shu's opposition towards the destructive construction methods overwhelming the developed Chinese cities. His protest against the fast-urban development and its devastating effect does "not only revitalizes traditional craftsmanship, but also exemplifies Chinese vernacular sustainable construction approach" 77. Incorporating various artisanship, he endeavors to preserve local building traditions and to safeguard their continuity. Buildings become time capsules, containing traces of distinct historical periods 78.

The Chinese architect criticizes contemporary Chinese architecture that it has lost its relationship to the nature, which was not the case of traditional structures. He attempts to revive it and to establish a sense of regionalism on one hand by integrating elements appropriated from Chinese landscape paintings such as the "mountain" for the Ningbo History Museum<sup>79</sup>. Further, on other hand, he composes the built structures in accordance to the topography and the assets of the site. For instance, he comments for the design of the Xiangshan Campus that:

"As slopes, twists, and turns occur on site, the building twists and transforms accordingly, and thus addresses uniformity and variability at the same time".80

The facilities of the campus react to the surrounding scenery by emphasizing certain

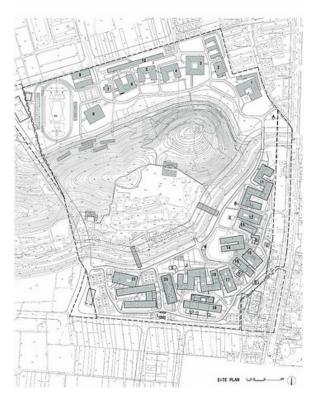


Fig. 6: Wang Shu's Xiangshan Campus. Facilities react according to the topography.

views and thus creating various dialogues with the natural environment. The built form is subordinated to the nature, by leaving it to be dominant, while the careful selection of materials contributes further the harmonious inscription and merging of the campus in the landscape.81

Additionally, he recalls the memory of the place by implementing elements found and related to the local environment, which in the case of the Ningbo History Museum are the "water,

courtyard and tile/brick mixed construction" - distinctive traits of the old Ningbo villages.

Another characteristic feature of Wang Shu's work is his social engagement. In the Xiangshan Campus, for example, are provided fields for agricultural commodities and thus local occupations and crafts are incorporated into the built environment. Similarly, the Vertical Apartments in Hangzhou, suggest the feeling of community living by allocating areas, which are encouraging and supporting the social cooperation and communication among the residents.

In general, Wang Shu's architecture demonstrates a self-conscious response to the current situation of China's architecture and therefore his designs, as he also shares, are "more thoughtful than simply "built" <sup>83</sup>.

#### Studies on Bulgarian Revival house

Central topic in the current research is the reconciling of the contemporary architecture with the traditional one in the case of single family houses in Bulgaria. As an example of traditional architecture is regarded the Bulgarian Revival house. Taking it as an outgoing point for the present work, studies on it will be analyzed, in order to illustrate its importance and significance for the Bulgarian architecture.

Due to the less remained evidences about the Bulgarian medieval architecture, the buildings from the Revival period and in particular the Bulgarian traditional house became main subject for literature researches. The Bulgarian Revival house is regarded as a valuable heritage and it is considered to be a repository for the traditions, culture, customs and religion of the Bulgarian ethnos. While the country was occupied by the Ottoman Empire the house symbolized and embodied the Bulgarian identity. At the present time, almost one and half century after the end of the Revival period, this epoch still remains of interest for many architects and historians.

Although most of the publications regarding the Bulgarian Revival architecture occurred mainly after 1944, when the Bulgarian communist party came into power, in 1925 Anton Torniov<sup>84</sup> published the first book about the Bulgarian architecture – "Architectural Motives from Bulgaria"<sup>85</sup>. However, the edition was a collection of architectural elements characteristic for the Revival architecture, but without providing any detailed information about their function and meaning.

The Bulgarian Revival house was mostly reviewed by Bulgarian authors and scholars. Its essence and peculiarities were discussed by Hristo Peev, Todor Zlatev, Anton Torniov, Peter Berbenliev, Georgi Arbaliev, Margarita Koeva, Milko Bichev and others. During the Communist regime, the government enforced the design of "architecture, national by form, socialist by content"<sup>86</sup>. In the search for an own architectural language the focus fell on the Bulgarian Revival house. Efforts to investigate and establish this style as nation-wide, were also induced by the celebration of 1300 years' anniversary of the foundation of the Bulgarian country in

year 1981. Aim was to represent the culture and traditions of Bulgaria and by thus – its architecture. As a result, many city centers of historical significance were reconstructed in the style, known from the Revival period.<sup>87</sup>

With the fall of the Communist party the interest regarding the Bulgarian Revival architecture still remained, but the discourse about it revealed facts, which proclaim in the public was inconceivable during the totalitarian regime. In addition, publications of foreign authors emerged and enriched the topic with different, non-Bulgarian point of view.

A recent publication of the book "Architektonische Fragmente Bulgarien" in Vienna, Austria gives an overview of the Bulgarian architecture from the formation of the first Bulgarian state up to present days. Despite the long-time span, there are three topics, to which it is payed special attention: the Bulgarian Revival architecture, the various ideological influences of the political events afterwards and the contemporary Bulgarian architecture after year 1989. Summarizing each fragment, which has marked the development of the Bulgarian architecture, the work attempted to foresee its future course as well.

A significant number of publications concerning the Bulgarian Revival house are recording, describing and systematizing its various types in different categories. In this regard, a very comprehensive contribution is Stefan Stamov's book "Architecture of the old Bulgarian villages"<sup>89</sup>. Through drawings and pictures Stamov documented the preserved Revival houses in more than 20 Bulgarian cities. He endeavored to establish a link between the geographical location of a given city with its indigenous craft of goods and the look of the house with its spatial organization and construction. In regions, where the local houses differed significantly from the ones in other places, especially in terms of appearance and construction, they were further analyzed and studied. Such regions are the Rhodope mountain, the city of Plovdiv and the Black Sea coastal area. In Rhodope mountain, the distinctive character of the residences was derived from the steep topography, while in Plovdiv the houses represented the

city-dwelling and also the climax in the development of the typology. Also called Baroque houses of Plovdiv, they were considered as product of local mastership mixed with Baroque influences coming from Italy.<sup>90</sup>

The strong interest regarding the Revival houses extended even to studying of specific details of the Bulgarian Revival house such as furniture<sup>9192</sup> and wooden carving patterns<sup>93</sup>.

Yet, while most of the publications were dealing with the mere collection of factual data, in many of them the question about the origin of the house remained under-discussed and occasionally even pushed into the background. Eyal Ginio and Karl Kaser reported in their article "Towards a Comparative Study of the Balkans and the Middle East" that in the years after the Liberation of the Bulgarian state, the single-family houses were considered as remains and reminders of the Ottoman Empire. Bulgarians displayed their antipathy and looked at them contemptuously, regarding them as "Turkish".

According to Milko Bichev, that time ago "there were three different centers of architectural influence: Odessa, Vienna and Istanbul", while Christo Peev was of the opinion that:

"...influences coming both by way of following examples from Istanbul, according to the desire of house-owners, or the building style developed by the master-builder, who travelled through the whole Balkan peninsula (including Istanbul)..."<sup>95</sup>.

This attitude changed abrupt with the rise of communist party, when suddenly it was accepted that the houses have Bulgarian background and the possibility for impact coming from the Ottoman Empire was excluded. Government's strong intervention has altered the public opinion to such an extreme, that after the fall of socialist party some of the books and works about the Bulgarian Revival house were revised, since some of them were regarded as untrustworthy and unreliable, due to the lack of evidences.<sup>96</sup> However, authors, such as Georgi Kojuharov and Rashel Angelova, still supported the statement that the house represented local traditions in architecture.<sup>97</sup>

A later work of "Lumley & Koller" stated that:

"based on the Ottoman dwelling, the Bulgarian house shows an adaptation of the former to Christian Balkan living as well as the impact of various outside influences from the Ottoman Baroque to Central European models" 98,

although prototypes of the Bulgarian traditional house were existing in the domestic architecture of the Second Bulgarian empire, during the Middle Ages:

"...There were two types of mass dwellings; semi-dug houses and overground houses. The latter were constructed in cities and usually had two stories; the lower floor was built with crushed stones soldered with mud or plaster and the second was built with timber" <sup>99</sup>.

Despite the obscure origin of the Bulgarian Revival house, in most of the publications there were three main opinions prevailing: the Bulgarian Revival house is a successor of the domestic architecture from the Second Bulgarian state; it is an original and distinctive creation of the Bulgarian master builders or it is a mixture of the latter one and foreign influences, penetrating from Western Europe.<sup>100</sup>

According to Chavdar Marinov there is no assimilation of the Ottoman house on account of many common aspects between the latter one and the Bulgarian Revival house. He recognized that other ethnicities blended their local culture with the Empire's influence and thus they have created their own architectural language, which was not the case in Bulgaria. <sup>101</sup>

Maurice Cerasi explained that the Ottoman's impact over the indigenous architecture eases with distancing from the empire's core<sup>102</sup>. Still, Bulgarian cities, such as Plovdiv, were vital trade centers in the Middle Ages, as well as during the domination of the Ottoman Empire on the Balkan Peninsula. Therefore, they have continued to be important sub cores of the Empire, which clarifies the tactile presence of similarities between the architecture of the Bulgarians and the Ottomans. In his work "The Formation of Ottoman House Types: A Comparative Study in Interaction with Neighboring Cultures" Cerasi asserted that the Ottoman house should not be understood in the strict sense of the word, but rather as a phenomenon created in the

given epoch. He described it as an aggregate of elements, typical and existing in the domestic architecture of various ethnicities. In his opinion the Balkan folks have further filtered and developed the typology through their own cultural prism.

Taking into account the different religion, culture, lifestyle and the social position of the Bulgarians towards the Ottoman authorities it can be demonstrated that Bulgarian and Ottoman houses are dissimilar and that there are specifics belonging either to the first or the latter habitat. In her article "Architecture of Residential Buildings in Bulgaria from the Revival Period" Regina Raycheva stated that distinctions between the two residencies occur on both typological and visual level.

The continuity of the peculiarities, characteristic for the Bulgarian Revival house, in the time after the Liberation of the Bulgarian state were traced down by Alexander Koller and Jess Koller Lumley<sup>105</sup>. Limiting the features of the Revival house only to the treatment of the façade and the volume of the house and taking into consideration only public buildings built in the 20<sup>th</sup> century, the authors have illustrated the presence of architectural traditions and emphasized their importance for the national identity of the Bulgarian architecture. Yet, there is no evidence whether or not the continuity of the same traditions is available in the case of single family houses as well as the study stops with the end of the socialist era - it does not pay any attention to the period after the political changes in year 1989.<sup>106</sup>

One of the questions raised in the current research is concerned with the transformation of the single-family houses in the recent years. Bulgarian authors and architects, such as Anton Torniov and Konstantin Dzhangozov<sup>107</sup>, stressed the importance of the Revival architecture and its meaning for the formation of national architectural language. They encouraged and appealed to architects to use the Revival house as a foundation for future projects, but however the product should balance between the traditional and the modern. With approaching the 21<sup>th</sup> century the attempts of architects to establish a connection between contemporary buildings and the architecture from the Bulgarian Revival gradually fade out "in favor of a global architectural language" The already mentioned "Mafia Baroque" became the new

reality of Bulgaria's architecture.

A primary literature source for contemporary Bulgarian architecture is the national periodical magazine "Architecture", published by the Chamber of Architects in Bulgaria. 110 Yet its architecture criticism is restricted to reevaluation of the socialist architecture and comment of competitions conducted in the country, while for projects designed by Bulgarian architects, in particular single-family, it gives an overview of the state of the art. Articles in the periodical are reviewing mostly projects of foreign architects and biographies of Bulgarian architects. Often, articles of older issues are republished in newer ones. An online association, called "WhATA" 111, follows and criticizes present architectural events in the country. Recently, it gained importance among the professional society as an independent association, which publicly participates in the organization of competitions and thus it struggles against corruption practices. Occasionally, it reviews projects re-creating the Bulgarian Revival house. Although the authors reserve their judgement, whether it is good to recall the past by simply re-building it, they regard some of the examples as "very successful copies". 112 On one hand this phenomenon is apparently accepted by the public and professionals without a comment as to its merit, while on the other hand, it devaluates the traditional houses by making them disappear among the continuously emerging false ones.

## 2.2.Summary

From the literature reviewed above, it can be stated that blending the modern with the traditional induced a discussion on a global scale. Undoubtedly, following the theories of Tzonis, Lefaivre and Frampton could be created architecture, which gets off the rails of universalization. The information about critical regionalism provides strategies and methods, how to achieve modern, but authentic architecture. Establishing a clearly expressed relation between a building and its surrounding environment could result in a design, specific for a certain region and distinct from the overwhelming universal style of the globalization. Important aspect are the

topography of the site, lighting and climate conditions, the appeal to the viewers as well as the reflection of the local culture. In addition, the overview of Li Xiaodong's and Wang Shu's works illustrates, how to implement in buildings also traditional and cultural values. By involving local craftsmanship, recalling the history of a place through certain shapes, elements or even materials and using them in an alternative way, it could be acquired a specific architectural image with relation to a given context, society or even nation. The design approach should be thoughtful, but with a certain degree of experimentation, and critical to both the design task and itself.

In Bulgaria, beyond all questions, the Revival house is the one considered to be carrier of national identity. In the years after the Ottoman domination architects endeavored to integrate elements of the Revival architecture in their current projects, in order to establish and solidify a nationwide architectural language. Welding the past and the present was a primary stimulus for architects during the socialist regime. However, political changes in post-socialist Bulgaria led to reassessment of the Bulgarian traditional architecture. Regarded as a valuable heritage, the Bulgarian Revival house is still taken as an inspiration, yet for projects, which only simulate its visual character. Researches on translating and incorporating this architecture in present time are not conducted and the professional assessment or critique, whether it is good or not to simply copy the latter architectural language, is not available. In the same time, architects are looking towards foreign contemporary styles and their work gradually becomes part of a globalized architecture. Thus, the Bulgarian architecture is bisected towards the appropriation of foreign architecture and the synthetic reconstruction of old traditional structures. According to Stela Tasheva<sup>113</sup>:

"it is important not only to define templates and examples of national architecture but rather to interpret them adequately. And studies in this direction are yet to come"<sup>114</sup>

## 3. Methodology

The present research aims to identify how contemporary architecture blends with traditional one, in order to create single family houses with identity specific for Bulgaria and the culture of its nation. The theoretical part above discovered and suggested an approach for designing an architecture, specific for a given region and reflecting the local culture. Further, it identified the Revival house as an example of traditional structure and as a symbol of national identity in Bulgaria.

Taking into account these findings, the study will explore which are the peculiarities shaping the Bulgarian house, what are the elements, of which it consists and which could be sought in the contemporary houses, namely the ones built after 1989. It will be examined, whether contemporary houses can be regarded as carrier of the Bulgarian identity or not.

For the analysis of the Bulgarian traditional house it will be taken in consideration only houses, for which there is enough information that are designed for Bulgarian families like, the Lyutov house<sup>115</sup> the Karavelov<sup>116</sup> house and others.

"only the houses and the architecture of some "Bulgarian Revival towns" like Koprivshtitza, the Old Plovdiv, Arbanasi... and the "old Bulgarian monasteries" are "mainly recognized as purely authentic Bulgarian artefacts". 117

Famous examples such as Mavridi house, Koyumzhiev house, Mesrobovich house in Plovdiv and the Kordopulov house in Melnik as well as others will be excluded from the study. Various Bulgarian authors admit that, despite being heirs of "ethnic Bulgarians"<sup>118</sup>, their owners are Turks, Greeks or Armenians. As Chavdar Marinov asserted these people can be "barely related to the Bulgarian National Revival"<sup>119</sup> and therefore their houses are not of interest for the current research.

In order to analyze the Bulgarian Revival house, the elements of the typology must be

examined, which appear in all stages of its mature process. It is also important to trace the development of the typology over the centuries and the factors, which have influenced it. Further, the relationship between the socio-economic status of its inhabitants and the house as well as the reaction of the habitat to the lifestyle and daily routines of the family must be identified.

Once collected, the peculiarities will be organized in categories according to their character: typological, stylistic and constructional. Their specifics will be carefully assessed, for which of them it could be found a contemporary interpretation and which of them are already obsolete and therefore their recreation is not reasonable to be sought. After filtering the criteria an evaluation list will be elaborated, which will serve to prove whether or not there is a relationship between the contemporary single family houses and the ones from the Bulgarian Revival and in terms of which aspects this resemblance is achieved.

The evaluation list in question should not be seen as a "to do list", which will strictly check the presence or absence of each one of the criteria. It will rather provide a domain for assessment, within it the various interpretations of the elements, constructing the Bulgarian Revival house, will be graded. To each one of these features could be given a grade from 0 to 5, where 0 will mean the absence, while 5 will evidence for the clearly expressed presence of a given peculiarity. The interim values will demonstrate how strong or not a certain element is hinted in a given project. Consequently, each group of characteristics will have its own mark. For the formation of the final result, the points of the typological, stylistic and constructional groups will be collected and summed together.

The so created evaluation list will be applied to selected projects as case studies, executed after year 1989 and planned and designed by Bulgarian architects. Further, it will be taken in consideration only houses, which have gained publicity through articles, discussions or other publications in architectural journals, periodical magazines, books or online architectural platforms. This approach will guarantee that these houses enjoy a certain degree of confidence and acceptance by architects, critics

and non-professionals. Therefore, taking them into note is reasonable and justifiable.

#### **Instruments**

A comprehensive literature research will be carried out, in order to make a deep analysis of the features of the Bulgarian Revival house. As sources, it would serve books of Bulgarian and foreign authors, related to the topic. Original plans and drawings of old traditional structures will be studied and discussed. Publications regarding Ottoman's domestic architecture will be also taken into consideration, since the Bulgarian Revival house emerged in the time, when the country was occupied by the Ottoman Empire. In addition, conducted dialogues with architects and scholars will be also integrated in the current work. The case studies will be discussed and illustrated by photographs and plans, which will be elaborated to explanatory diagrams. Whether or not contemporary houses contain specifics, characteristic to the Bulgarian Revival house, will be assessed through the already mentioned evaluation list.

The suggested methods are assumed to identify the main features and elements of the Bulgarian traditional house. Using these peculiarities as key references and combining them with the theory and practice of critical regionalism, it is aimed to establish a solid foundation, upon which to provide suggestions and solutions for the possible interpretations of traditional features in the design of contemporary houses and thus to create architecture, which is modern, but which maintains the cultural traits of its region and nation.

# 4. The traditional Bulgarian house – Essence and Peculiarities



Fig. 7: Bulgarian Baroque house - Lyutov house.

## 4.1. The Bulgarian Revival House

The Bulgarian Revival, also called Bulgarian Renaissance, is a relatively short, but very dynamic fragment of the Bulgarian history. Taking place, when the Renaissance in the Western European countries was fading out, it marked the transition of the country from feudalism to bourgeoisie, followed by the formation of intelligentsia and liberation movements against the Ottoman domination. Starting in the 16<sup>th</sup> century and ending in 1878 with the Russo-Turkish war, during this period intense socio-economic and political changes took place. Regarded also as a cultural revolution and enlightenment of the people, the main reason for the upsurge of the Bulgarian folk was the dissolution of the Ottoman Empire.

The progress of the Bulgarians towards the liberation of the country was associated with the developing of handicraft and industrial production, engaging in commercial activities and thus with increasing of their wealth. Improving the social position resulted in emerging of commercial centers and reflected on the development of the city's street network and the built environment. The formation of the Bulgarian bourgeoisie imposed the distancing from the Ottomans architecture. Aim was to establish an own national style of architecture and to make the "awakening" of the Bulgarians visible. Acquiring church independence was a prerequisite for the building of churches and monasteries, followed later by schools, clock towers and small trade shops – all symbolizing the advancement of the Bulgarians. Gradually the architecture transformed from simple forms to more complex, from small to big size and from modest to monumental. 120

One of the most remarkable evidence for the Revival period is its domestic architecture, still preserved and observed in many Bulgarian cities. The Bulgarian traditional house, also called Bulgarian Revival house, is an aggregate of the customs of the people, their culture and their own concept and knowledge about aesthetics and construction<sup>121</sup>. Therefore, the houses are "highly valued as national heritage" As already mentioned, in its form preserved up to the present day, the dwelling dates back to the time, when the country was occupied by the Ottoman empire <sup>123</sup>.

The administration of the Ottoman empire dispersed and relocated the Bulgarians into small villages, in order to avoid conflicts against the authorities in the cities. Those places have become a source for the Bulgarian culture and traditions<sup>124</sup>.

Depending on the conqueror's political and military strength, the domestic architecture underwent several transformations. Each transformation was accompanied by transition from one place to another, from small villages to big towns and urban centers. With the weakening of the empire's power, the Bulgarians could gradually prosper, achieve wealth and afford better housings. Therefore, instances of the Bulgarian traditional house could be found in specific locations, originating from a specific period of time<sup>125</sup>.

Although self-taught, due to the cultural isolation during the Ottoman domination, the master-builders developed a rich variety of houses typical for specific regions. Each city was having its own type of house, which was evolving through the time together with its inhabitants, mainly in terms of its architectural concept, volumetric shape, proportions and functionality. Stylistic differences occurred in relation to the local craft or natural environment. Therefore, mention worth are the plain, the Black Sea, the mountain and the Plovdiv houses. Since there were no strong borders between the individual regions, a smooth merging of the types took place. This induced the creation of new ones by borrowing and exchanging aesthetic principals and constructional techniques 126.

The primary criteria to distinguish one type of house from another are based on their:

- Geo-location rural or urban environment;
- Siting semi-dug or over ground;
- Building materials in accordance to the region mountain, plain or sea coast;
  - Type of construction;
  - Total number of rooms and number of hearths single or multiple;
  - Spatial organization asymmetric or symmetric;
- Plan composition grouping the rooms around one particular a room with a fireplace ("v'kashti"), a service room ("prust") or distribution room ("odar", "poton", "chardak", "salon", "otvod");
  - Type of balcony opened or closed.

Table 2: Table with primary criteria to distinguish the types of the traditional Bulgarian house. Adapted from "Architecture – Bulgarian Revival house". 127

Despite their different look and the existing variety of criteria, all houses shared common characteristics and were belonging to the same typology. While the ground floor was accommodating handicraft services or workshops, the first floor was used for living, supplied with big windows and balcony, both oriented towards the garden. Growing in size and quality the traditional house converted from single habitat to a mean of representation, reaching its final symmetric shape in the city of Plovdiv.

Regardless, how strong was the influence of the ruling power, the indigenous architecture remained an act of the local master builders.

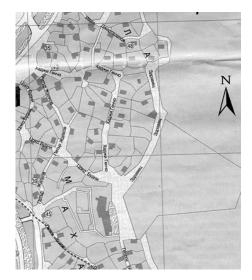


Fig. 8: Urban fabric of Koprivshtitsa.

#### 4.1.1. Urban characteristics

In the Ottoman empire, in particular in Western Anatolia and in the Balkan peninsula, urban patterns were low dense with free situated buildings on them, oriented towards the sun or a beautiful view. Compared to West European cities, where house typology and town morphology were synchronized, in the empire the relationship house-to-street was not so strong, which

supplied the houses with individual character, despite their role as a part of the whole city<sup>128</sup>.

The Bulgarian Revival period made an impact on the urban planning. Places, which were lit well from the sun and protected from strong winds, were preferred as plots for the houses. Hardly accessible areas were also desired, due to the higher security they had offered against the conqueror. An important issue for the image of the cities was the merging of buildings' appearance in the surrounding environment, without destroying the picturesque landscape. On higher locations were placed community buildings such as schools and town-halls, in order to enjoy better recognition. The street network ("kaldirim") allowed a pleasant and easy approach of the sites, despite the rocky and hilly character of the terrain<sup>129</sup>.

Typically, the houses were situated either free on the plot or on the plot's border<sup>130</sup>, adapted to the topography. In the latter case, the narrow side was perpendicular to the street front. The long side of the façade, the one with the main stair and the veranda, is oriented to the garden, which underlined the strong relationship to the nature. Due to the irregular lines of the plot's boundaries, the upper floors were straightening the

shape of the house to a regular one by protruding over the streets and over the ground level<sup>131</sup>. Thus, they were increasing the living area as well as protecting the walls underneath from rainfalls. This strategy for solving the so-called "corner issue", known from Roman times<sup>132</sup> became one of the signs of the traditional Bulgarian

#### house133.

## 4.1.2. The Courtyard

Each courtyard looked like a green oasis, since an integral part of it were different type of trees, fruit and vegetable garden, spread according to the assets of the site.

For the sake of privacy, the whole yard was surrounded by thick stone walls ("duvar"). By approaching the house, a series of spaces with gradational level of openness and closeness was experienced, which interrupted the monotony and let

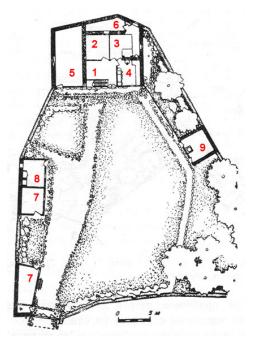


Fig. 9: Plan layout - Toromanov House, ground floor: 1: Distribution space; 2: Wine cellar; 3: V'kashti; 4: Soba, 5: Shop; 6: Hiding place; 7: Cattle-shed; 8: Washing area; 9: Well.

the outdoor and indoor spaces to blend and merge together by making them very pleasant to bide awhile. Important element in this sequence was a pergola, covered with flowers or trellis vine and stretched along the pathway towards the house<sup>134</sup>. By creating an outdoor room, it served as a smooth transition from the outside inwards as well as offered a pleasant sitting area. Sometime courtyards were having fountains or small openings in the "duvar" between two houses, called "komşulik", serving for gossiping or exchanging of goods<sup>135</sup>.

Even Le Corbusier, on his trip through the Orient, was excited by the spatial arrangement and the correlation between the house and the courtyard garden of the Bulgarian house. His fascination he had documented in the sketches and photographs

he did<sup>136</sup>. As a symbol of individuality and self-identifying each one of the houses had its own name, inherited by the family name of the owner.

## 4.1.3. Spatial configuration and functions

Despite the diversified examples of the Bulgarian traditional house, determined by the various criteria mentioned above, they all have shared some common features and traits, especially in terms of its spatial configuration and functions, which are evidencing their homogeneity and uniformity. Integral parts of each house are the spaces with specified function<sup>137</sup>, such as "v'kashti", "soba", "prust" and "chardak" with a designated "kiosk".

#### <u>"V"kashti"</u>

V'kashti was the first room to be built. Therefore, it persists in all formations of the house layout and it was one of the most important. From the word "v'kashti", literally meaning "at home" derived the word "house" – "kashta". In the middle of the room was situated the fireplace on a level, lower than the floor level in the room. It served for cooking and heating of the space, consequently the room had a square shape. There was no chimney and the smoke percolated through the roof. Since the fireplace is related to many customs and beliefs in the Bulgarian culture, it is a common used synecdoche in the literature as an embodiment of the home and the family. Some of the houses, especially in the South-west and Black sea coast areas, possessed more than one rooms with fireplaces. V'kashti was in connection with the "prust" or the "soba". In western parts of Bulgaria, "v'kashti" was the central element in the composition surrounded by a "prust" and a "soba".

#### <u>"Soba"</u>

"Soba" was a bedroom, usually located next to "v'kashti". Its emerging could not happen, if the problem about its heating was not solved. By moving the fireplace from the middle of "v'kashti" to one of the walls, it was possible to use the fireplace as a heating for both of the rooms. Important for the spatial organization of "soba" were

the location of the connection to "v'kashti" and of the fireplace 139

#### "Prust"

The "prust" served either as a transitional space, connecting "v'kashti" with the "chardak", or it was used for farming purposes – a space for production and store of goods. When it was necessary, it was extended and supplied with additional larders, in order to fulfill the needs of the family<sup>140</sup>.

#### "Chardak"

Essential part of the plan layout took the "chardak", which did not only give access to the rest of the rooms, but served as an outdoor extension of the living space in summertime and as a working area. It was always oriented to the garden and never to the street. With the maturing of the house type and becoming an urban residential unit, it was enclosed and transformed in a representative hall<sup>141</sup>.

#### "Kiosk"

The "kiosk" hanged over the ground floor towards the yard and it was separated from the floor level by couple of stairs. It was partially isolated from the veranda by wooden railing. This autonomous and representative corner was the place, where meetings with honorable guests were held as well as the place for rest. In summer, when seasonal workers were hired to support the domestic manufacture, the "kiosk" was used for supervision and as controlling point<sup>142</sup>.

Applying these five essential spaces in different combinations, had developed a variety of plan layouts and thus it had showed the evolution of the house from its initial to final stage.



Fig. 10: Traditional Bulgarian house.

#### 4.1.4. Interior

From the inside, the spaces were furnished in a humble way. There were couple of shelves for the utensil<sup>143</sup>, built-in cupboards ("dolap") and coaches ("minder") along the walls used for sleeping<sup>144</sup>. The "dolaps" were covering the whole height and length of a wall in the space. Similarly, the "minders" were stretching also along the walls. In the initial stage of house, the floors consisted of a layer of clay. Later, clay or bricks were used for transitional areas, usually wide around 1m, while the floor for living space, raised up to 15cm, were covered by wooden planks, on the top of which were laid rugs. The walls were furnished sometimes with arched niches in a delicate and subtle way, without destroying their clearness. <sup>145</sup>. Where the means were insufficient, the walls were whitewashed or left without any surface treatment, with the natural color and texture of the construction materials <sup>147</sup>.

The Baroque houses in Plovdiv evidenced a higher level of the interior decoration, being provided with free and artistic ornaments. The richness of details was found in the wall's and ceiling's motifs, as well in the friezes and the niches. Usually, the walls were painted, "dividing the surface into decorative panels with landscape paintings" late. By increasing the floor height, the rooms were given a more generous spatial feeling and impressiveness, where the wooden carvings of the ceilings could have multi-levels late. Ceilings with wood-carving were the most attractive and decorative form of the interior space - a central motif was a rosette with a sun "with plant ornaments, round patterns, flowers, undulating rays etc." late.

#### 4.1.5. Façade treatment and plasticity

The Bulgarian traditional house was also characterized by its façade's plasticity. Its attractiveness was expressed by the impression of lightness and affability <sup>151</sup>. Expanding the upper floors over the ground floor and capping them with the roof's eaves created the remarkable silhouette of the Bulgarian Revival architecture.



Fig. 11: Plovdiv - The old town.

In the asymmetric houses, the differentiation of the façade was achieved by the means of contrast, which stressed the elongate shape of the building. The deep shadow of the balcony underlined the clear surface of the walls. Placing wooden posts on the outer side of the "chardak" unified the front plain of the house, by retaining the distinction of the two volumes. Depending on the location of the

stair, it could either be part of the house's face or not. Accentuated by jutting out of the façade, the "kiosk" had become another tool for ornamenting and braking up the regularity of the house's front. As a unifier of the multi-layered facade had served the roof by giving through its eaves a harmonic end of the whole structure<sup>152</sup>.

Later in the Baroque house the enclosed "kiosk", together with the portico, played central role in the façade's composition. Slightly recessed from the main plain, the convex shape of the "kiosk" together with a bow pediment<sup>153</sup> created a small porch and thus it highlighted the entrance<sup>154</sup>.

Painting the walls from the outside and supplying them with floral motifs, was a signature of the Bulgarian master-builders<sup>155</sup>. Disposing the windows with an even rhythm gave the sense of coherence of the façade's planes and it declined their independent treatment. Further supplying the projecting floors with more openings, lightened the structure<sup>156</sup>.

#### 4.1.6. Additional features

There were couple of features, not typical for the prevailing general type of house, but characteristic for some regions. In the city of Koprivshtitsa, one of the centers for uprising movements against the Ottoman authorities, part of the inner space was a hiding place, concealed behind the built-in cupboards<sup>157</sup>.

An additional guest room occurred in some of Zheravna's houses. This one was situated next to the kitchen and supplied with a small opening on the wall between the two rooms, through which drinks and food were served<sup>158</sup>.

The same element appeared in northeast Bulgaria, in the region of Dobrudzha, but with an altered function. Since the houses were single-storied with a linear arrangement of the rooms, next to "v'kashti" was located the room for the cattle. The opening, again placed on the wall between the two spaces, served to illuminate the latter one, when it was necessary<sup>159</sup>.

In the southern parts of Bulgaria and as well again in Dobrudzha the dwellings often had more than one hearth. These were jutting out on the façade and thus they become structural part of it, instead of being completely inside the room<sup>160</sup>.

## 4.1.7. Constructional techniques

The traditional Bulgarian house consisted of three main parts, which formed its

distinctive silhouette: the stone masonry ground floor, the overhanging living floor and the sloped roof with long eaves. Each one of these elements had its own purpose and meaning and therefore it had its own constructional technique.

#### The ground floor

Almost all of the houses with multiple stories had a ground floor with massive masonry walls. They were built mainly of river or local rock stones on a clay composition with levelling timbers <sup>161</sup> and small openings, not higher than the distance between two wooden belts <sup>162</sup>.

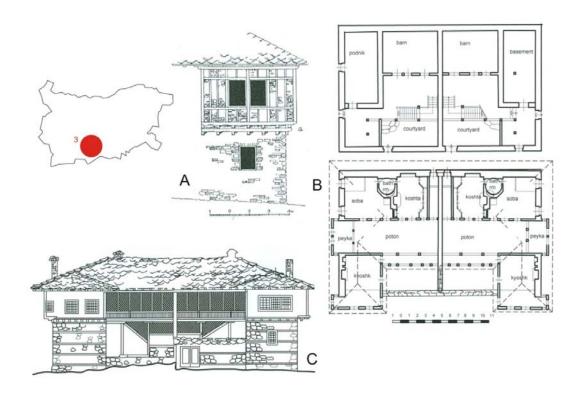


Fig. 12: A. Drawing of a wall with wooden skeleton and stone infill. B, C. Plans of basement and first floor and facade of a house in Smolyan (after T. Zlatev).

#### The living floor

Wood was used as the primary building material for the living floors. In the 17<sup>th</sup> century, while most of the houses were single-storied, a widespread construction technique was the log structure, where tree stems were stacked on the top of each other. In the corners the "joists were locked by "saddle notch" while on the bottom

side, a groove was securing the air tight sealing. Due to the devastating impact on the forest, this type of construction was substituted by a post-plank structure<sup>164</sup>. On a wooden joist, laid down on the stone masonry wall, posts with grooves were fixed, in which planks with approximately 1m width were inserted<sup>165</sup> and the walls were lagged by wooden cladding. A plastered on both sides wattle was used as a variation of the boards.

More sophisticated light-weight constructions were having both vertical and horizontal joists, stiffened by diagonal braces. The hollows were filled with "mud bricks, fired bricks, broken roof tiles, stone rubble" or any other inert material.

"Instead of making a filling, the wooden posts would also be nailed on both sides with weather-boarding, in-filled inside with cinder; in such cases, they could have diagonal members (braces) on top of the boarding to secure stiffness. The filled wall was plastered on both sides with a mixture of clay, lime and straw." <sup>167</sup>

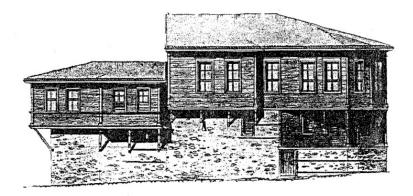


Fig. 13: Houses in Nesebar (Bulgaria). From Ivan Ivanchev, Nesebǔr in negovite kǔshti (Sofia 1957).

As a result, the clear distinction between load-bearing and filling elements was also tactile in the appearance of the house.

The wall construction of the Black Sea house introduced a slightly deviation from this general rule, where the living floor was enclosed by inner and outer wooden layer. To protect them from the climate conditions of the area, the façade was additionally cladded with horizontally nailed oak planks. Shorter roof's eaves and bigger number

of windows allowed better lighting of the interior<sup>168</sup>.

Seldom some two-storied town houses were built only by light-weight timber construction 169.

The advantage of using wooden constructions consisted in their resistance against horizontal forces, available on the Balkan peninsula, and in their good load-bearing and thermal properties. Further they were allowing an easy creation of curved walls or protrusions<sup>170</sup>.

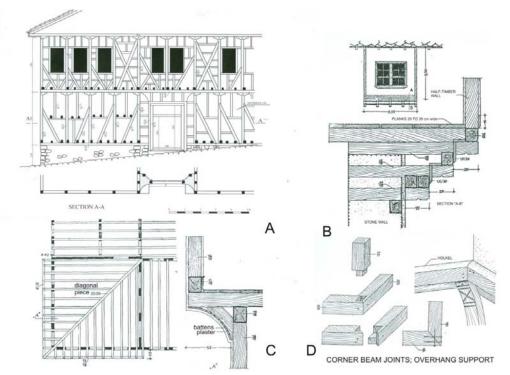


Fig. 14: A. Timber structure of a house in Plovdiv; B. Bay window overhang (Rhodope Mt.); C. Corner overhang with a diagonal timber; D. Carpenter joints (drawings Hr. Peev).

#### The roof

Depending on the location of the Bulgarian traditional house, the type of roof changed.

"In rural areas in planes, as well as in towns they featured a ridge to cover a rectangular plan, with traditional roof tiles ("Spanish tiles"). In mountain areas, roofs were hipped with four slope shape and had to be much heavier to resist strong mountain winds. Stone slabs were used, fixed over a heavy oak roof structures with a pitch of 20° to 22°, to keep them

from slipping."171

The overhanging roof's eaves were creating a transitional belt around the house. In addition, they were underlining the oblong shape of the house<sup>172</sup>, while protecting it from the sun and rainfalls<sup>173</sup>.

#### Interior

While the ground floor was adapting to the site's topography and therefore its height was variable, the living floor had a room height of 2,00m<sup>174</sup> in the Pre-Revival house, growing to 2,20m<sup>175</sup> in the Early-Revival type and reaching 3,00m in the Baroque house, which was a restriction for non-Muslims buildings in the Ottoman's empire<sup>176</sup>.

Trimmer joists, covered by a layer of clay, were used as a primary floor construction in the living floor, while the ground floor was usually void of any flooring<sup>177</sup>. The Plovdiv house, due to its representational purposes and comfort necessity was having wooden flooring, covered by rugs<sup>178</sup>.

Openings in the walls were framed by wooden planks, in order to hide the construction, since the plaster could not adhere on the posts<sup>179</sup>.

#### **4.1.8. Summary**

From the information collected above, it can be stated that the Bulgarian traditional house adapts to region, where it was built by taking in consideration the local climate and topography as well as by making use of local materials and adapting its spatial organization to the local occupation or environment – rural or urban. Therefore, in a sense, it can be regarded also as a vernacular structure which bears a certain identity. It changes its appearance from place to place, but it keeps belonging to the same typology.

The following list gives a summary of the features, which all collected together exemplify the Bulgarian traditional house.

#### Urban characteristics:

• Free situation on the plot, without a strong relationship house-to-street

- Orientation towards sun, the courtyard or a view
- Merging with the surrounding environment
- Adaptation to the topography of the site
- Straightening the shape of house by the upper floors

#### Courtyard:

- Presence of garden
- Secured privacy
- A covered outdoor room (pergola/roof's eaves)

#### Spatial configuration and functions:

- Interweaving of indoor and outdoor spaces
- Smooth transition from the outside inwards
- Rooms with functional specification
- Entrance on the main façade
- Distribution of the living functions according to the season
- Service rooms in ground floor or basement
- Main living room "chardak" open or closed
- "Chardak" as a connection room
- "Kiosk" as a designated area and an extension of the "chardak"
- "Kiosk", oriented in the same direction as the house
- Semi-public rooms with bigger room height, compared to bedrooms and other spaces
  - A room with a hearth
  - Protruding bays
  - Asymmetric rural/symmetric urban dwelling
  - Minimized transitional area
  - A unified unit with an open plan and no gender differentiation

#### Interior:

- Built-in cupboards
- Perimeter seating
- Wooden ceiling and floor
- Floor covered with rugs/carpet
- Openings flanked with wooden planks
- Wall niches
- Walls painted, whitewashed or without treatment

#### Façade:

- A certain degree of plasticity
- Painted outer walls, eventually with floral motifs

#### Construction:

- Solid ground floor
- Overhanging upper floors
- Light-weight upper floors
- Sloped roof
- Roof with long eaves

In order to blend modern with traditional, a translation of the listed characteristics can be sought in contemporary architecture. Although already divided in groups, the features defining the Bulgarian Revival house can be further classified according to their background and thus to groups of typological, stylistic and constructional properties.

The groups of "Urban characteristics", "Courtyard" and "Spatial configuration and functions" refer to the typology of the house. They are void of any certain geometrical form and thus they have potential to be free interpreted, in order to achieve a typological resemblance. A characteristic, like "Distribution of the living functions according to the season", can be therefore omitted, since it is not of necessity

compared to present building standards. As the most important features, could be pointed out the following ones: the free siting of the dwelling on the plot along with interlacing spaces with various qualities and character. In a certain sense, the adaptation of the structure to the topography, taking advantage of the site's assets and thus creating a dialogue with the nature coincides with the theory of critical regionalism and the practice of Li Xiaodong and Wang Shu, which strive for "placeness". Further, introducing spaces like "chardak" with a designated "kiosk" and "v'kashti" could increase the similarity to the Bulgarian traditional house.

"Façade" offers stylistic suggestions, which can enhance the visual likeness to the Bulgarian Revival house, while the facets of "Interior" could transmit its ambience. Incorporating only some of the features would not achieve a strong effect, therefore the more features are included at once in a project, the greater the outcome would be. Although some of these aspects could have a strong optical impact, their application is a matter of taste and it depends on the personal preferences and thus their implementation is not necessary. Important is to achieve the sense of the place and to deliver the "geometry of the feeling" for which the typological features can play a significant role.

The constructional techniques used in the past are nowadays obsolete, consequently their execution in contemporary times is not worth. Although the Bulgarian traditional house has overhanging upper floors and a sloped roof, their recreation is also not a "must". However, a roof with long eaves or the use of materials, such as stones for cladding and construction of the ground level and the clear distinction between bearing and filling elements for the upper level, saddle stones or red roof tiles could contribute to the recreation the character of the Bulgarian traditional house. An alternative use of the listed materials could be also a possible approach for transmitting the history or essence of a given place and structure, as Wang Shu did at the Ningbo History museum.

Some of used strategies and house's features could be still adapted and applied in contemporary architecture, while others are behind the times and must give priority to new ones. On the basis of the following table can be proven, whether contemporary houses have crossing points with the Bulgarian Revival house and whether their resemblance is based on the typological or more stylistic aspects.

### Project name and data

## *Urban characteristics:*

Free situation on the plot, without a strong relationship house-to-street	00000
Orientation towards sun, courtyard or view	00000
Merging with the surrounding environment	00000
Adaptation to the topography of the site	00000
Straightening the shape of house	00000
<u>Courtyard:</u>	
Presence of garden	00000
Secured privacy	00000

00000

## Spatial configuration and functions:

A covered outdoor room (pergola/roof's eaves)

Entrance on the main façade	00000
Service rooms in ground floor or basement	00000
Main living room - "chardak" - open or closed	00000
"Chardak" as a connection room	00000
"Kiosk" as a designated area and an extension of "chardak"	00000
"Kiosk", oriented in the same direction as the house	00000
Semi-public rooms have bigger room height	00000
A room with a hearth	00000
An overhanging upper floors	00000
Protruding bays	00000
Asymmetric rural/symmetric urban dwelling	00000
Compact plan	00000

#### *Interior:*

Built-in cupboards 00000

#### 4. The traditional Bulgarian house

Perimeter seating	00000
Wooden ceiling	00000
Wooden floor	00000
Floor covered with rugs/carpet	00000
Openings flanked with wooden planks	00000
Wall niches	00000
Walls painted, whitewashed or without treatment	00000

## Façade:

Plasticity	00000
Painted outer walls, eventually with floral motifs	00000

## Construction:

Solid ground floor	00000
Light-weight upper floor	00000
Sloped roof	00000
Roof with long eaves	00000

## **General evaluation:**

00000

## 4.2. Development of the traditional Bulgarian house

Initially, the Bulgarian traditional house was a simple village structure, which during its development obtained the common name Bulgarian Revival house. It underwent three different stages of maturing, starting from the 16<sup>th</sup>-17<sup>th</sup> century and reaching its climax in the last decades of the 19<sup>th</sup> and in the first ones of the 20<sup>th</sup> century<sup>181</sup>:

- 16th 18th century: The Bulgarian traditional house (The Pre-Revival house)
- a simple single floor dwelling; found in Koprivshtitsa, Zheravna and Katunishte;
- 18th 19th century: The Early-Revival House an elongate two-story dwelling with an asymmetric spatial organization and accentuated balcony, opened to the garden; found in Koprivshtitsa, Tryavna, Zheravna and others;
- 19th beginning of the 20th century: The Plovdiv Revival house a closed urban symmetric dwelling with Baroque nuances and representative character; found mostly in Plovdiv<sup>182</sup>.

## 4.2.1. Living towers - a retrospect



Fig. 15: Living tower from the Arapov monastery, built in the middle of the XIXc., during the Bulgarian revival. The entrance is on the level of the terrain.

One of the first residential structures on Bulgarian soil, were the so-called living towers, which appeared during the Middle Ages. They were either dwellings of local feudal lords with permanent use or part of monastery complexes with a temporary use. The protection of the family and the household's belongings was the main motive for building them, especially since men were

absent from their homes for a long period of time. Securing the safety of the inhabitants was even more important than their own comfort and therefore the entrance was placed high above the terrain, instead of on the ground level. Supposedly entering the structure happened through a mobile stair. The square-shaped living towers had massive stone-masonry walls with thickness between 1,50m and 2,00m and wooden floors. Transition between the levels took place only in vertical direction via stone stairs. From overall four to five floors only the last one served as a residence, while the others were having a service function. Interior spaces were lit by small windows, adapted for battle operations. By approaching the 16th and 17th century, the height of the tower decreased significant and the last floor, usually having the biggest area and protruding over the solid body, changed from a single space to a plan with couple of rooms and axis of symmetry. Both, structure and plan layout, altered in a way resembling the Bulgarian traditional house later on. The beginning of the Revival period set an end in the development of the living towers and they were not built further less.

#### 4.2.2. The Pre-Revival house



Fig. 16: Elevation of the Pavlikyanski house from 1961.

The Pre-Revival houses were one floor dwellings, small and compact, with a humble look. They had a pronounced recumbent character, strengthened by the sloped roof and its long eaves<sup>184</sup>.

Consisting of mainly two rooms, the rectangular house was accessed through a veranda from the narrow side. In one of the rooms was located the fire place, provided usually with wall cupboards, iconostasis and shelves, while the other room was a premise, which sometimes served as distribution area<sup>185</sup>.

In accordance to the limited financial capabilities of the Bulgarians in the 17<sup>th</sup> century, the general height of the ceiling was not more than 2,00m. Wooden walls, situated on low stone foundations, enclosed the volume<sup>186</sup>.

By introducing a veranda, called "chardak", along the longitudinal side of the house, the entrance moved as well, finding its place underneath the roof's eaves. The two-partition of the enclosed space remained for the time being. Symmetric or asymmetric the plan configuration differed according to the needs of the family. Sometimes the "chardak" was shortened due to the increased size of one of the rooms<sup>187</sup>.

In some of the preserved examples, the area under the eaves was enriched by a small place for resting or sleeping, called "odar", an early version of the "kiosk".

This stage of the spatial configuration marked the end of the Pre-Revival dwellings and created the basis for the houses of the Early-Revival period.<sup>188</sup>

## 4.2.3. The Early-Revival house

The asymmetric traditional house was a two-story rectangular building. Its yard was divided in two zones - one for farming and one for representational purposes. In the ground floor were accommodated a store room, a room for the livestock, which later were detached from the house and converted to a separate unit in the yard. However, this level provided living spaces and sometimes a wine-cellar and a small shop. The ground floor, without a connection to the upper one, had its own entrance and therefore was used for living in the cold winter months, while the first level found its application in the hot summer. An outdoor stair established the correlation between the garden and the balcony, serving as an entrance area for the rest of the rooms. In its

simplest form the first floor had only two rooms - "prust" and "v'kashti" 189.

The size of the "prust" corresponded to the family's necessity and, if it was needed and possible, it was extended.

Over the time a new room, in front of "vkashti", was added to the plan layout. Its outside wall appeared in the facade and it shorted the length of the veranda. Later another room was also added on the other side of the "prust". Both of these spaces were used for sleeping and both of them had separate entrances from the "chardak". Thus, the kitchen was the only room, which could not be accessed straight from the outdoor space. The doors of the "prust", "vkashti" and the first bedroom were collected at one point, in order to minimize the transition area and make easier the



Fig. 17: Facade of a typical house in Koprivshtitsa fomr the 30s and 40s of the XIXc. - Dragiiski house, Koprivshtitsa, Photo from 1961.

connections between the different sectors of the unit. 190

The "chardak" was extended together with the size of the "prust" and the second bedroom. It was the working space for the domestic manufacture of goods. In one of its inner corners was situated the "odar", elevated from the level of the veranda. Later

this element was replaced by the "kiosk", which was shifted to the outer side of the "chardak". 191

The usual height of the rooms was around 2,00m to 2,20m.

In the region of Rhodope mountain, in south-west Bulgaria, the layout of the house differed from the general type. Due to the hilly terrain, most of the dwellings were void of courtyard. As a compensation, they grew in height by accommodating the service functions in the lower levels, in a so-called inner court. In a contrast to the massive enclosed body of the house, the last floor, having the living spaces, was opened towards the surroundings and enjoyed the sunlight and the picturesque landscape of the area.<sup>192</sup>

#### 4.2.4. The Plovdiv Revival house

The Plovdiv Revival house represented the last stage of the development of the Bulgarian traditional architecture and evidenced the high living culture of the Bulgarian folk. Also called the Bulgarian or Plovdiv Baroque house, after the city



Fig. 18: Ethnographic Museum in Old Town Plovdiv, Bulgaria.

where a lot of examples are preserved up to present day, it was a symmetric habitation unit with shades of Western European Baroque.

The transition from the predecessor to the symmetric solution went smooth and in stages. In the first steps, the symmetry emerged in the facade, without being continued in the plan behind it. Couple of transformational phases were needed until the Baroque house

reached its final and mature form<sup>193</sup>.

In terms of the relation to the outdoor space, it kept the same rules and thoughts as the asymmetric houses did. Motives for the new appearance was the changed owner's mentality. Instead of earning his living with production of craft, he became already a well-off tradesman. The livestock units were removed from the yard, which was transferred completely and only to a flower and fruit garden. As a main mean for expressing the wealth and the social status of the family, the house was gaining more and more representative importance. It was not a pure living organism anymore, but rather a stage for social and public events. Consequently, the increasing of the volume and the number of rooms was necessary<sup>194</sup>.

Detaching the ground level from the terrain and thus making it the first living floor was a key feature of the new habitat. Underneath was placed a cellar, accessible from a small door located, under the main stately entrance<sup>195</sup>.

An essential element of the house was its axis of symmetry. The spaces were organized in a strict way - a portico with two-sided stair translating the guests to a vestibule with a three-flight stair at its end, which played a noble role in the interior. With one descending and two rising flights the stair shifted the people to the big hall in the second floor. This spatial sequence ended with the "kiosk", located over the entrance and supported by the portico<sup>196</sup>.

The reception hall on the ground floor replaced the "prust" and it was the first room accessed by the visitors. As a main hall served the one on the upper level, positioned between the stair and the kiosk, where the kiosk again was raised from the general floor level. Due to its representativeness, the central hall was having a bigger room height than the adjoining rooms<sup>197</sup>.

The kiosk, oriented towards the garden, was the most important space in the house, since it was meant for meetings with important guests. Both the hall and the kiosk were having wavy Baroque outlines and thus their decoration was the richest in the house 198.

On the both sides of the main axis were located the bedrooms and the rooms with the fireplace. Their position created a secondary axis of symmetry, perpendicular to the central one<sup>199</sup>.

## **4.2.5. Summary**

Although there were common features and certain resemblance between the living towers from the Middle Ages and the Plovdiv Revival house, their connection could not be proven, due to not enough evidences. However, by following the development of the Bulgarian traditional house in its three stages is discernible, that each stage inherits the features from previous and improves them further. This indicates the presence of traditions in the Bulgarian Revival architecture, established and evolved over the time. The single-story house is upgraded by a second level with a bigger area and later these two independent floors were unified as a whole unit with an internal circulation in the Plovdiv Revival house. Gradually not only the shape altered, but also some of the spaces, while some functions were removed or replaced by others, as in the case of the "chardak", which from an open living room changed to a closed representative guests' hall, yet maintaining the designated "kiosk". The implemented strategies and their features remained as fundamental design rules.

Typical for the Bulgarian traditional houses is the silhouette with the expanded first floor and the roof with its long leaves. This general shape kept its existence up to the end of the Bulgarian Revival, although in the house of Plovdiv, it shifted to a slightly more plastic volume.

The role of the house was converted from a simple habitation to a symbol of social status and a mean for expressing the personal artistry and creativity.

Built before more than 100 years these houses are still good examples for the living culture and building traditions of the old times. They impress with their structure, shape and design and thus they possess a unique character.

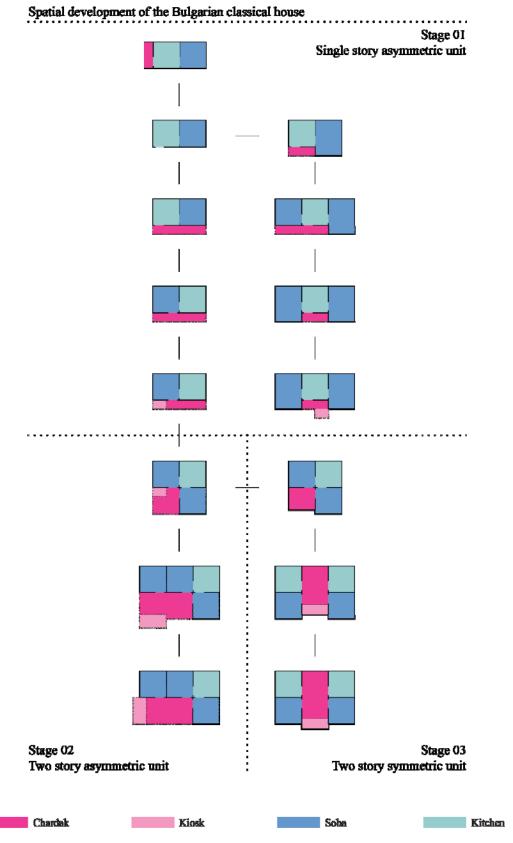


Fig. 19: Evolution of the traditional Bulgarian house.

# 4.3. Domestic architecture of ethnicities around Bulgaria – common aspects and differences

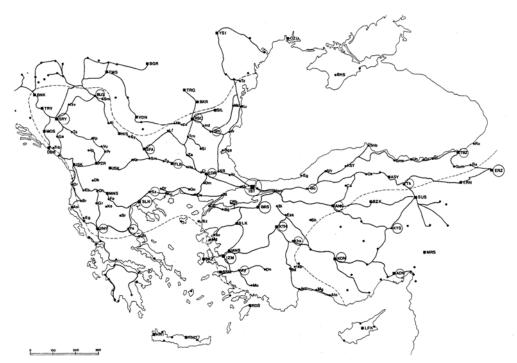


Fig. 20: The core area of the Ottoman Empire where the Ottoman type house and town prevail. Towns with continuous eyalet and sancak functions in the eighteenth and nineteenth centuries are indicated.

For many, the Balkans are a group of nations with almost identical mentality, culture and also architecture. In fact, the domestic architecture of the Balkan countries shares many common aspects, but still there are some essential differences.<sup>200</sup>

In order to crystallize the identity of the Bulgarian traditional house, it is necessary to take a closer look at a general type of house, which was spread for hundreds of years over the whole Balkan peninsula and parts of the Turkey.

Although it has "Hellenistic, Roman, Byzantine, Slavic and even Caucasian" traits<sup>201</sup>, there are not enough evidences about the origin of this common type of housing, known nowadays as Turkish-Ottoman house. It is unknown whether the typology is an invention of the empire or not<sup>202</sup>, but it is assumed to serve as a fundamental model, upon which the invaded Balkan countries had developed their own vernacular residential units.

The dwellings differed according to the culture and traditions of the ethnicities and not according to the political borders of the empire. The Ottoman empire could not change fully the domestic architecture of the occupied nations. but could strongly influence them, which is one of the reasons for the many common aspects among the habitations in Balkans, including the the Bulgarian Revival house. The result of mixing foreign

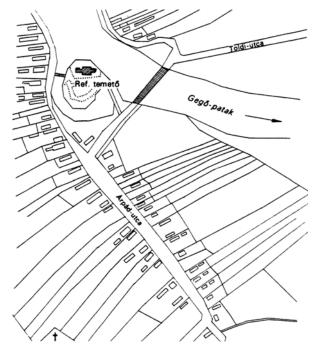


Fig. 21: Traditional rural Hungarian settlement patterns.

tendencies with indigenous traditions is a diverse palette of examples for domestic architecture<sup>203</sup>.

# 4.3.1. Common aspects

Common for the dwellings is their free situation on the plot<sup>204</sup> and that, they are with a few exceptions two-story houses in the villages, while in the cities they could grow up to three or four stories. The ground floor, built mostly by stone masonry walls, was a solid foundation for the upper levels, which had a light wooden frame construction, in filled with crude or adobe bricks and plastered. Often the last floor was jutted over the ground floor and "supported by beams or posts"<sup>205</sup>. Differences in the construction occurred, depending on the climate conditions and local building techniques and materials.

Main element in the spatial configuration was the "chardak" – balcony on the main floor, also called "hayat". It served as a working and gathering place and as a circulation area. In many cases, it had a specified area for resting either as a "eyvan"

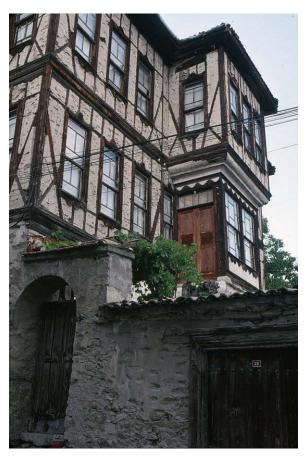


Fig. 22: Karaüzümler evi viewed from Mescit sokak, Safranbolu.

(a recess) or "kiosk" <sup>206</sup>. Regardless open to the garden or enclosed and included in the house's volume, all other rooms were organized around it. This spatial aggregate was capped by a four-sloped roof<sup>207</sup>.

In general, the Ottoman's architecture prevailed in the cities of importance for the empire and it was represented by "konak" – a residence of the Ottoman's authorities<sup>208</sup>. Although the way of life in different parts of the empire was quite similar to each other<sup>209</sup>, the small villages were the places, where the vernacular

architecture of the ethnicities could preserve and develop its own character and identity.

### 4.3.2. The Ottoman house

The term "Ottoman house" is used as a general name for a diversity of housings, built throughout the existence of the Ottoman empire. Yet, in some publications the term is interchangeable with designations like "traditional Turkish house", "Turkish house" and "Turkish hayat house", where it stresses its ethnical belonging. Found in Central and Western Anatolia, the house altered by its distancing away from the heart of the Empire<sup>210</sup>.

In the core area, the architecture and its products were subordinate to the traditions of the Islam<sup>211</sup>. The public space was the men's territory, while the house with garden

courtyard was reserved for the women<sup>212</sup>. Privacy was one of the most important aspects, considered in the dwellings. The house had an introverted character with spatial segregation for men and women. With a mute façade to the outside, from the inside it opened towards the garden and its rooms' configuration was developed in accordance with the women's daily activities ("harem")<sup>213</sup>. Although the women had a limited access to the public realm ("selamlik"), they could participate in it, by observing the streets through jutted windows with shutters ("kafes") on the upper floor, without being seen at the same time<sup>214</sup>.

Important role in the spatial composition was devoted to the garden, which surrounded the house and where the daily life happened. Service rooms were situated in it, although sometimes they were accommodated also in the ground floor<sup>215</sup>.

"The spaces such as avlu, ayaz (courtyard of harem), çardak (garden pavillion), kuyu (well), çeşme (fountain), ark, çörten (gargoyle), ocaklık, tandır, firin (oven) ... and hayat (gallery on the main floor), which were outside and ahır (stable), örtme (shed), kameriye (garden kiosk), eyvan (recess in hayat), işevi (kitchen), konukevi (guest house), bahçe odası (garden room) which are indoors, were the places where various activities took place."



Fig. 23: Traditional houses viewed from Yokuşbaşi sokak, Safranbolu.

The first level was used to adapt to the topography of site or sometimes to the contours of the plot. On the upper floor were placed rooms without specific use<sup>217</sup>. Usually the plan layout of the Ottoman's house was divided in four parts with a cross-shaped hall between them<sup>218</sup>. This common space, called also "sofa" was disconnecting the rooms from each other. This kind of relations among the units was inherited by the tribes' dwellings, where the tents or yurts were organized around a central space. Since the "sofa" was the main element in the house, it determined the plan layout<sup>219</sup>.

In each corner was located a unit, independent from others, comprising all daily necessities and functions, which a family needed. Their entrance area was designed in a way, that no one from the adjacent hall or "sofa" could see the interior space. Next to that zone was located the main living area, where the hearth was placed, while the rest of the room served for sleeping<sup>220</sup>.

From the inside the rooms were humble provided with walled cupboards, perimeter seating, used for sleeping as well, and niches<sup>221</sup>. A shelf at a height of 2,20m was defining the top end of the interior furniture. Place for creative work was the decorated ceiling<sup>222</sup>. "Stars" and geometrical patterns were the main motifs in the wood-carving work. In accordance with the ceiling height of around 3,60m, a double row of windows appeared in the façade<sup>223</sup>, which contributed in general to the bigger height of the house<sup>224</sup>. "Wall-painting as exterior decoration was not common in Turkish houses"<sup>225</sup>.

#### 4.3.3. The Greek house

As "Greek house" are regarded the houses mostly spread around the Mediterranean and the Aegean Sea. The volume of the house, in general, a two-story building with thick masonry walls and narrow windows, gives the impression to be carved out of a whole piece, instead of becoming a shape defined by the geometry of the rooms.

"It is sometimes court-centered and almost always built in continuous urban textures with few free-standing houses".

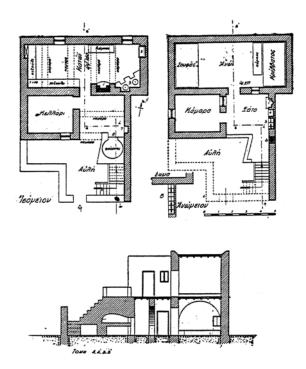


Fig. 24: The Mediterranean type house in the Greek islands.

Affinities with the Turkish house appear in the treatment of the garden, supplied with pergolas and fountains<sup>226</sup>.

In the northern parts of the country and in the region of Macedonia the indigenous architecture of the villages showed completely different type of housing, strongly influenced by the Byzantines' and the prevailing Ottoman's empire house type<sup>227</sup>.



Fig. 25: Santorini vernacular architecture, Greek islands.

Those dwellings shared features typical for the housings in whole Balkan peninsula. Construction techniques and spatial organization did not differ from the prevailing rules. The only differences with houses from other regions occurred on a superficial level and namely in the aesthetic treatment of the columns' wooden carving and window frames<sup>228</sup>. However, Greeks had higher social status, compared to Bulgarians, and therefore their houses had an appearance similar to the Turkish-Ottoman's. Consequently, some of them were having also a double row of windows, but they were free of the Islamic peculiarities.

#### 4.3.4. The Bosnian house



Fig. 26: Nurija Pozderca house, Konak, Cazin, Bosnia.

Domestic architecture in Bosnia varied depending on the strength of the Ottomans influence.

Sarajevo and Mostar, located in the east part of the country, were important cities during the rule of the Ottomans. The preserved houses there were very similar to the ones, built in the empire's core area, especially in terms of the differentiation of zones for men and women. Compared to the dwellings in other towns, Sarajevo's houses were much bigger and with a higher amount of rooms, which required more complex

spatial organization<sup>229230</sup>.

Certain features were common for the all urban dwellings:

"a typical Bosnian residence from the 17th century consisted of five main elements: a fence that faced and defined the street and clearly differentiated private from public, a courtyard usually built of pebble or flat stone pattern for easier maintenance, an outdoor fountain (Šadrvan) for hygienic purposes, a lower level "semi-public" private space called the Hajat where the family would gather, and the Divanhan, an upper-level semi-private/private space used for relaxation and enjoyment." 231

In the west part of the country the domestic architecture was still showing some affinities to the Ottoman's houses, but the empire's influence eased. Significant for this housing was the compact spatial configuration and the steep-roof – "kula" (tower), covered with wooden shingles. The Ottoman's nuances were evidenced in the construction of the walls by "timber-and-infill techniques", although the region was



Fig. 27:View of Jajce around 1920.

famous for its ancient "fine stone-cutting traditions" 232. Wooden frame constructions were used not only in the first floor, but also in the ground floor. The walls were plastered, in order to protect the construction. In contrast to typical Ottoman houses, the upper level jutted only slightly over the lower one, except for the veranda, which was accentuated. Regarding the functional configuration service rooms were accommodated in the ground floor and living in the first floor $^{233}$ .

#### 4.3.5. The Romanian house

Romania's dwelling architecture is found in rural areas and manifests the relationship between the people and the nature in a humble way:

"No monumental architectural style has emerged in Romania, but there is no need for it: the spirit of the country's architecture is fully revealed in a simple farmhouse or a church overrun with nettles" 234

Homestead, the main unit representing the indigenous architecture, was a complex entity, which included the house, a cellar, a larder, cattle's facilities and sometimes workshops. The room with the hearth was the primary living space and central element in the plan layout<sup>235</sup>.

Being at the outer border of the Ottoman empire, the Romanian house was less influenced by the ruling power. However, there were some areas, where main element

of the house remained, such as the "chardak" (veranda). Difference with the prevailing empire's house type occurred in the kula (tower) like roof, specific also for the Bosnian house.

Yet the solid ground floor's walls were not always built by stone masonry, but by interlocking log construction. The latter was sometimes used in the upper level as an exchange of the wooden frame construction<sup>236</sup>.



Fig. 28: Cula Cornoiu, massive Ottoman house in Curtișoara, Romania.

#### 4.3.6. The Serbian house

The preserved residential architecture of Serbia was illustrated by a rich variety of elements, combined in a different way<sup>237</sup>.



Fig. 29: Konak at Manastir Sveta Đorđa, view from north in Temska, Serbia.

Depending on the environmental conditions and the geographical location, there are three prevailing vernacular house types in Serbia:

(1) a log cabins, observed in the West part of the country, (2) the rammed earthed house, linked to the Danube area and (3) the "bondruk" house – being the most widely spread dwelling type in the Eastern regions, half-timbered, built by "light timber posts and wattle and daub filling"<sup>238</sup>.

In rural areas, in accordance to the terrain – flat or sloped – the structures were one or two floors respectively. The entrance, marked by a porch, was located on one of the sunny side and led straight to the room with the hearth, which was the main element in the spatial configuration. In its primary form, the house had a compact ground plan, consisting of one or two rooms, and later extended by additional rooms or enclosing the veranda. As a protection against rainfalls and overheating served the protruding roof's eaves<sup>239</sup>.

Bigger residencies were found in the cities, represented by the Ottoman's "konaks", where again the veranda was accentuated, by slightly jutting out of the façade plane. In general, the second level of the houses was rarely protruded over the ground floor

and thus its volume remained very compact. Typical for the Serbian house, regardless of its location, was the upper end of the "chardak's" posts, which were framed by wooden arches, covered with plaster<sup>240</sup>.

## **4.3.7. Summary**

The domestic architecture of each ethnicity on the Balkan peninsula has a certain level of common aspects with the wide-spread type of Ottoman's house. The influence varied in relation to the remoteness from the empire's core area and from the local authority's centers. Consequently, the near location of Bulgaria to the heart of the Ottoman empire explains why the Bulgarian Revival house is very akin to the Turkish traditional house.

It is also to be noted, that each conquered country adapted the typology of the house to its own culture, social status, necessities and regional characteristics. By bringing into use the existing local building techniques was attempted to preserve and make a show of the own identity. Even small differences in stylistic treatments were sign for the desire of each ethnicity to be distinguished from the others.

# 5. Development of the Bulgarian architecture after the Liberation in 1878

After the Liberation of the Bulgarian state, the nation strived to break off any relationship with Ottoman empire, in order to clear itself from the conqueror's remains and to define and show its own identity.

Although the process of Europeanization of the cities and the culture had started before the Russo-Turkish War, due to the established contacts with the Western world, its pace in the Bulgarian lands grew drastically after the end of the war in 1878.

Determining the cultural identification was directly affected by the events in the socio-economic life. Creating plans for urban development and changing existing structures, imposed by the Ottomans, constructing public buildings and churches were requisite not only because of their necessity, but they had to emphasize Bulgaria's new political orientation. The spread of the foreign architecture was firstly intentionally imported and further supported and continued by the Bulgarian architects, which inevitably wiped off the authenticity of the national building traditions.

The post-liberation period, the inter-war times and the Soviet Union are historical periods, through which the country passed in its development up to present days. Each one of them had a strong impact on the local built-environment, since architecture was always part of the spiritual, intellectual and material culture of the land, its growth and the prosperity of its folk<sup>241</sup>.

1878	Russo-Turkish war – Liberation of Bulgaria	
1881	14.08.1881 - Temporary rules for building of private and public	
	structures in the cities of Principality of Bulgaria <sup>242</sup>	
1898 – 1903	Transitional period	
1903 – 1918	Intensive social, economic and cultural development	
1903 – 1912	Cultural upsurge, induced by the declaring of Bulgaria's Independence	
	(1908);	
	Intense construction works: Secession and Art Nouveau Style	
1912 – 1918	Stagnation during the Balkan wars and the World War One	
1919 – 1944	Between the two World Wars	
1919 - 1928	Economic crisis; influx of refugees from the former ethnic Bulgarian	
	territories; housing shortage;	
	Art Deco style	
1928 – 1939	Getting back on track in the Depression (1929); raising the standard of	
	living and intensive construction works;	
	Mature Modernism	
1934 - 1944	Political and economic stability as a prerequisite for intensive urban and	
	architectural activities, dominated by the government:	
	Rise of Nationalism; modernized Neoclassicism	
1943	Foundation of the first school for architecture at Sofia	
	Polytechnic	
1945 – 1989	People's Republic of Bulgaria – Socialist regime	
1945 – 1947	Multiparty system; post-war reconstruction; adoption of a new	
	Constitution and the Bulgarian Communist Party's government ultimately	
	sets in. Transition from capitalism to socialism following a referendum,	
	abolishing the monarchy;	
1040 1050	Nationalization of banks, large industrial and urban property	
1948 – 1958	The cult of personality period;	
	Stalin's death (1953); BCP's plenary meeting (April 1956);	
1050 1060	Socialist Realism is firmly established	
1959 – 1969	Government eases up on social environment; early attempts at massed	
1070 1090	industrialized construction works using Soviet technologies  "Daysland socializer" a pay years of Détants Industrialized construction	
1970 – 1989	"Developed socialism", a new wave of Détente; Industrialized construction of big housing complexes in the suburbs of the cities;	
	Brutalism, late modernism, etc.	
1990 – present day	End of the Socialist regime. Democratization of the country	
2007 – present day	Bulgaria entered the European Union	
2007 – present day	Duigana chicrea ine European Omon	

Table 3: Table with chronological development of the Bulgarian architecture. Adapted from "The 20th century architecture in Bulgaria: a possible historiographical approach". <sup>243</sup>

#### 5.1. The first decades after the Liberation - 1878-1920



Fig. 30: Sofia University, Main building, H. Breason, N. Lazarov, I. Milanov, 1906-34.

The Liberation of the Bulgaria revealed the opportunity for the Bulgarian architecture to develop its scale by participating in the new formation of the country. Yet the newly elected prince Alexander I of Battenberg issued a decree, which had to ensure the quality of the buildings in terms of concept, planning and construction. Thus, it required from the builders a license for professional qualification, which at that moment no one in the country was having. While the first generation of Bulgarians received its schooling abroad, this enforced an import of foreign architects, who, coming mainly from the Austro-Hungarian Empire, applied their knowledge in Bulgaria<sup>244</sup> and created the new image of the Bulgarian architecture<sup>245</sup>.

A series of cities acquired representative character, borrowing concepts and ideas from architectural masterpieces in Europe. Some of the most remarkable public buildings were designed by foreign architects such as the Austrian architects Viktor Rumpelmayer, Friedrich Grünanger, Adolf V. Kolař, P. P. Brang and K. Heinrich. Changes were introduced not only in the architectural style, but also in the planning and constructive fields<sup>246</sup>.

Returned to their home country, the Bulgarian architects sought their break-through on the architectural stage, by applying their skills, appropriated in the classes of famous professors like Otto Wagner, Max Fabiani, Gottfried Semper, Karl. F. Schinkel. Thus, they strengthened the presence of the penetrated foreign architecture, which raised the question, whether the local built environment was still having a Bulgarian character or not. Having stated the extinction of the identity, the Association of the Bulgarian engineers and architects endeavored to make professionals aware of the coming risk. Therefore, for a short time emerged the so-called "national romanticism", which attempted to demonstrate a national interpretation of the prevailing in Western European styles<sup>247</sup>.



Fig. 31: National Theatre "Ivan Vazov", F. Fellner & H. Helmer, Sofia 1904.

## 5.2. The Bulgarian architecture between the two World Wars

Since there was no architectural school in Bulgaria until the middle of the century, the training of upcoming Bulgarian architects still remained abroad. Main educational centers were the universities of Vienna, Munich, Berlin-Charlottenburg and Dresden.

In the 20s architects united around the "Art Deco" style, which became dominant in

the design of future buildings, especially in the public sector<sup>248</sup>. However, architects were still concerned about the scale of appropriating foreign styles. Their efforts to create a Bulgarian national style of architecture, "which can compete with the "requirements of the new times"<sup>249</sup> encountered the passion for Western European architecture and thus they could not come fully into force<sup>250</sup>.



Fig. 32: Residential building, Hristo Berberov, Sofia 1939; An attempt to straighten the geometry of the building in the corners.

As a consequence of the World War I, immigrant influx caused an uncontrolled expansion of cities<sup>251</sup>. This turned to be a catalyst for the building of apartment blocks with communal use. Despite the risen demands for comfort, the new residential units had a rational plan layouts and thrifty spatial configuration. Their façades were reduced to horizontal division of the planes. Gradually the new structures became the primary living unit for Bulgarians and thus they displaced the single-family houses<sup>252</sup>.

At the beginning of the 30s a decisive impact on the architecture in the country had the prevailing in Europe Modern architecture. The new movement distinguished itself with its multi-functionality and originality, convex and concave volumes<sup>253</sup>. Yet, the

end of the decade was marked by the transition to the Neo-Classicism, expressed by its verticality<sup>254</sup>.

### 5.3. The Soviet Union - From the end of World War II until 1989



Fig. 33: Monument of the Bulgarian Communist Party at Buzludhza Peak, Georgi Stoilov, Bulgaria 1981.

After the end of the second World War the Bulgarian communist party came into power and thus it became the primary investor in the construction sector. The first four years after 1944 depicted a transition from the neo-classical era to the socialist architecture. Projects, which begun before the war, were finalized until 1948, while in 1949 the communist party enforced its philosophy and ideology in the architectural realm.<sup>255</sup> Subsequently private practices were replaced by state design organizations. In parallel, the government commenced the preservation of the architectural heritage.<sup>256</sup>

Due to the political situation, the school for architecture at Sofia Polytechnic, founded in 1943<sup>257</sup>, followed the trends and models coming from the Soviet Union. Of importance was the urban development and the exposed monumentality and solidity

of the buildings, by emphasizing the relation "government-person"<sup>258</sup> and thus depriving the people from individuality.

By conducting studies on the old Bulgarian architecture, the government initiated the quest for a national style of architecture. The Bulgarian Communist Party lunched the Stalin's principle for the design of the buildings – architecture must be "national by form and socialist by content"<sup>259</sup>. As typical for Bulgaria elements were recognized: "roofs with eaves, chardaks, bay protrusions".<sup>260</sup>.

At the beginning of the 60s, after the death of Joseph Stalin, occurred changes in the socio-economic life. The strictness of the Soviet ideology weakened, which gave the chance to a new generation of Bulgarian architects to develop and unleash their creative spirit. Newly built structures altered the conventional functionality by enriching it with decorative elements and by adding more plasticity and dynamics to the volume. As a result, the architects enjoyed public appreciation and confidence<sup>261</sup>.

In the 70s continued the tendency of breaking up the volume, where input for free spatial interpretations gave the new precast concrete slabs<sup>262</sup>. New achievements in construction allowed the growth of the residential buildings in height by reaching the impressively for that time 14 to 16 stories. Another trend was the partial implementation of design strategies and elements used in the time of the Bulgarian Revival period and determined as Bulgarian at the beginning of the 50s. Protruding bulks, long eaves or typological spatial configurations of monastery complexes were evidenced in the resort architecture, especially on the sea coast side. A bright example, unifying and recalling some of the design strategies from the past, was the state residential complex "Boyana" in Sofia, which introduced the jutting out last floor, having a monolithic and formal character, symbolizing the authority.<sup>263</sup>

The interest about the Bulgarian traditional architecture continued to grow and it revived in beginning of the 80s<sup>264</sup>. Reason for it was the 1300<sup>th</sup> anniversary<sup>265</sup> of the foundation of the Bulgarian state. Due to the national cultural politics, many architectural memorials from the time of the Bulgarian Revival were restored and

enlivened. Further newly constructed buildings received bay windows and bulging last floors. However, mainstream in the architectural realm remained the socialist modernism, which by staking on the quantitative achievements, deprived the buildings of quality by producing monotony and uniformity, especially in the residential sector<sup>266</sup>.



Fig. 34: Residential buildings for diplomats, Frederique J. Curie Street, Sofia 1970-73.

Despite this fact, one of the most remarkable buildings in Bulgaria, preserved until today were built during the socialist regime. Buildings such as hotel "Balkan", the Council of Ministers and the Home of the Party in Sofia, are still impressing with their representativeness, design and spatial organization<sup>267</sup>.

# 5.4. Summary

Since the formation of the third Bulgarian state up to the end of the Socialist regime, the country underwent a dynamic process of development. The socio-economic and political life took disparate turns, which immediately reflected on the built-environment and led to fundamental changes, in terms of design philosophy and construction.

The mass construction of buildings, especially of apartment blocks, decreased their value and resulted in monotony or users' dissatisfaction.

In all periods of the new Bulgarian history can be observed the penetrating foreign architecture. Although architects recognized the disappearing identity of the Bulgarian architecture, they have attempted to create a Bulgarian version of the foreign art and only once in a while they were implementing design strategies from the Bulgarian Revival period in their projects. A tactile recall of old building traditions happened during the Socialist regime, where the reference to the Bulgarian traditional house was established through the use of the bay windows and protruding volumes or last floors. Despite these efforts, the general course of the architecture remained towards alienating from the own architectural image, known from the Bulgarian Revival.

# 6. Case Studies

The following case studies are representing projects designed by Bulgarian architects and located in Bulgaria. Although they are an eased and later version of "Mafia Baroque", mixed with influences from Western Europe, they are projects, for which there is accessible public information. On the basis of the features of the traditional Bulgarian house, concluded from the present conducted research, it could be assessed, whether these contemporary structures have crossing points with the ones from the Bulgarian Revival period and in terms of which peculiarities this is achieved. The results can be examined as interpretations of the specifics of the Bulgarian traditional house in a contemporary way. Further, they can be considered as suggestions for future projects and as an input for other possible solutions.

Regarding the already mentioned "Mafia Baroque" style, there is no available information in professional literature, but rather in newspapers, since most of its brightest examples are private houses of politicians or nouveaux riches. Therefore, due to privacy reasons, plans of these homes are obscured.

The existing scarce amount of date only describes in general the design of the private spaces. Some of them were spreading on plots with sizes up to 25 000m², surrounded by high walls and provided with guards and security cameras. From the inside, the courtyards were featured with exotic plants and swimming pools, while the houses were accommodating large garages, several bedrooms, guestrooms, stores, fitness rooms with saunas, closets and wine-cellars.<sup>268</sup>

The next pictures are believed to illustrate couple of residencies, considered to exemplify the initial stage of the "Mafia Baroque" style.



Fig. 35: The house of a leader of political party in Bulgaria, built as a castle.



Fig. 36: House of a business man.



Fig. 37: House of two business men, former special operation forces. It is surrounded by high walls and security camera.



Fig. 38: House of famous singer in Bulgaria. A strong call for attention is achieved, not only by the imposing size of the house, but also by the striking color.



Fig. 39: House of a business man with approximately 50 rooms and additional facilities for maids.



Fig. 40: House of a business man, combining elements and features of various architectural styles.

# 6.1.Large home tree

Architects: Ignatov Architects | Location: Varna, Bulgaria | Area: 780.0 m<sup>2</sup>

Year: 2010

Urban characteristics	●●●○○
Courtyard	●0000
Spatial configuration and functions	00000
Interior	●0000
Façade	●●000
Construction	00000
General evaluation	•0000



Fig. 41: Large home tree.

#### After the architects:

"The Home Tree concept is an attempt for defining contemporary, adaptable rural architecture. Its strategy is based on learning from existing trees on site recognizing their natural optimization for the given location and climate. The aim is to align architecture with nature and deliver site-conscious, clean, energy-independent and feasible buildings." <sup>269</sup>

The location of the residence on the hill side allowed it to utilize the sun light and therefore marked its orientation to it. The multi-floor solution does not really merge with the topography. It rather stands out in an autonomous way, than to live in

harmony with the surroundings. Despite the willing of the architects to inscribe the house in the nature, this was not achieved, due to the mixing and using of materials with different properties. Façade's composition is in a way frivolous than subordinated to the function. A small garden was introduced inside the house, while the outer available area is sealed with tiles.

Central element of the interior is the circulation core and thus the main living space does not play the role of a distribution room, in a correlation with the others. It is an independent premise, attached to staircase. In contrast to the design strategies of the Bulgarian revival house, this one offers single independent spaces, connected through corridors, which inevitable increased the circulation area. The architect's ambition to supply the house with contemporary technical features led to the result of outlining a shape, which restricts and dictates the spatial configuration, instead of this to be done the other way around.<sup>270</sup>

Because of the project, the architects were nominated by the Union of the Bulgarian Architects for the price "Architect of the year 2010", while the project itself won the price for innovation in  $2010^{271}$ .

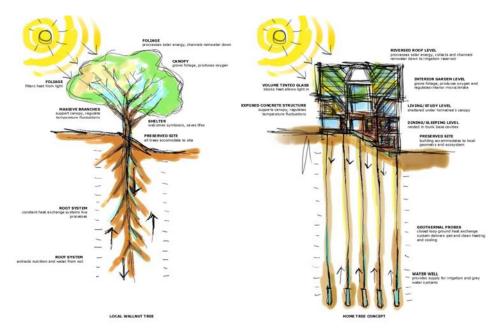


Fig. 42: Large home tree, Concept diagram.



Fig. 43: Large home tree, Floor layouts, Analytic diagrams.

# 6.2. Single-family House 2

Architects: miodesign | Location: Sofia, Bulgaria | Area: 430.0 m<sup>2</sup>

*Year:* **2013** 

Urban characteristics	●●000
Courtyard	●●000
Spatial configuration and functions	●0000
Interior	00000
Façade	••••
Construction	00000
General evaluation	●●○○○



Fig. 44: Single family House 2, miodesign. South Elevation.

Situated in the foothills of Vitosha mountain near to Sofia, the house springs up with its radial shape. According to Ass. Prof. Lyudmil Dimitrov, the spatial form is fully justifiable, since it mediates between two important aspects. While the wider side opens towards the panoramic mountain view, the narrow one is pointing to the city. The characteristic expressiveness of the house has its "own philosophy", but despite this fact, prof. Dimitrov shares the opinion that in the project "form, function and construction are united in artistic symbiosis" and the design approach is traceable in each of its steps.

The local environment is overwhelmed by low-rise buildings with pitched roofs, which is in contrast to the current house. Its volume achieves a perceptible level of

plasticity through the two protruding bay windows on the east and west sides. However, central element in the project is the wall on the south side with the floral pattern, implemented also in the doorway. By approaching the house from the street, the main entrance remains obscured, behind the artistic wall, while the door of the garage appears as a primary one. From the inner side, the house has a rational plan layout, with less amount of transitional areas, but the core is not the living room as it is the case in the Bulgarian Revival house.

Undoubtedly, the project of "miodesign" has a distinctive appearance and design, yet it cannot be really related to the traditional Bulgarian houses.



Fig. 45: Single family House 2, miodesign. Southeast Elevation. Main Entrance

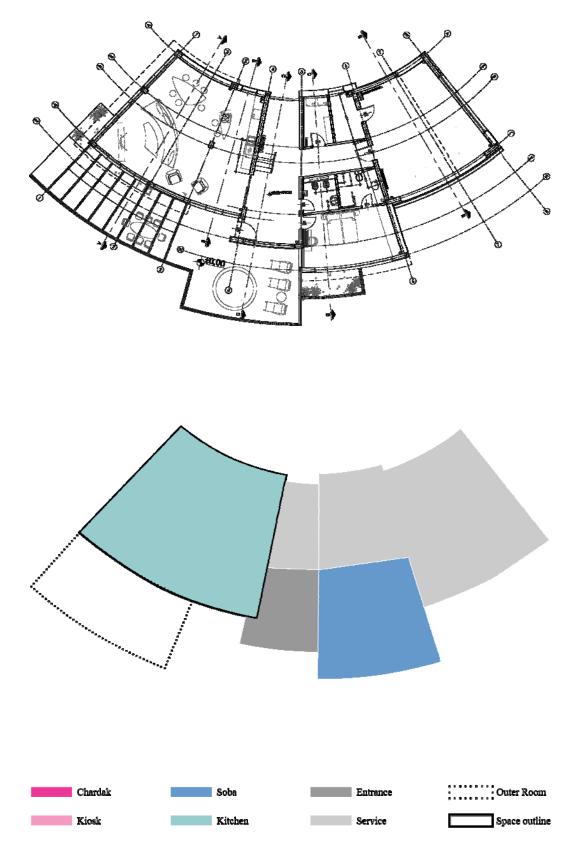


Fig. 46: Single-family House 2, miodesign. Ground floor, Analytic diagram

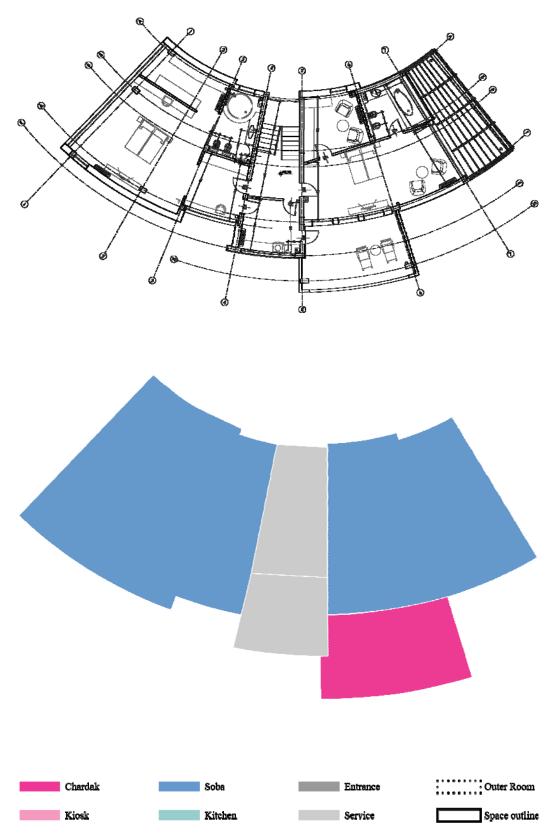


Fig. 47: Single-family House 2, miodesign. First floor, Analytic diagram

# 6.3. Pagoda House

Architects: I/O architects | Location: Sofia, Bulgaria | Area: ---- m<sup>2</sup>
Year: 2014

Urban characteristics	●●●○○
Courtyard	••••
Spatial configuration and functions	••••
Interior	●●000
Façade	●●000
Construction	●●000
General evaluation	●●●○○



Fig. 48: Pagoda house, I/O Architects.

Located on the outskirts of the Bulgarian capital city, Sofia, the "Pagoda" house not only impresses with its contemporary and cozy design, but also is showing the social status of the client by exposing his retro automobile to the public.

The volume is blended with the steep slope and shape the corner of the plot. Although contrasting with the surroundings, the residence does not disturb the environment. The plasticity of the façade is leveled up through the roof's eaves.

Combining the black metal panels with glass and wooden laths supplied the house with a pleasant character.

By accommodating the service functions in the ground level, the second floor became the primary living floor, open to the garden and enclosed by hedges. The interior is neatly organized by separating the private from the public spaces. Central position in the spatial configuration has the living room, which is establishing both physical and visual connection to all other rooms. The stair splits the area in two zones and thus defines the kitchen. An outdoor room extends the dining room and invites the residents to abide awhile during the hot summer days.<sup>272</sup>

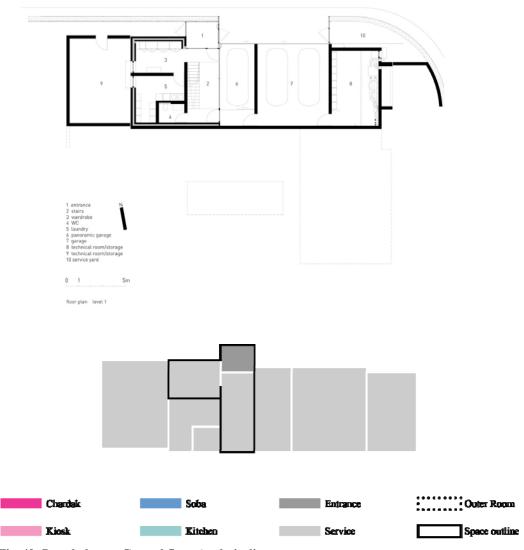


Fig. 49: Pagoda house, Ground floor, Analytic diagram.



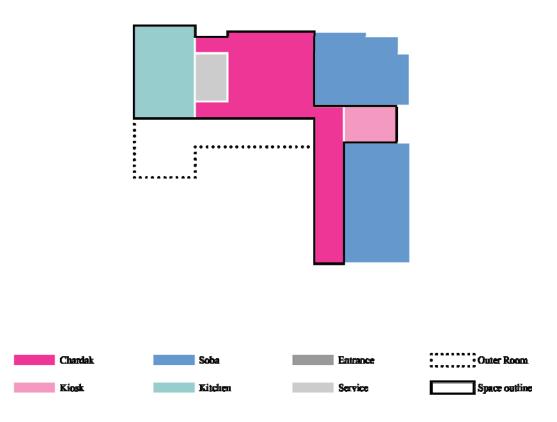
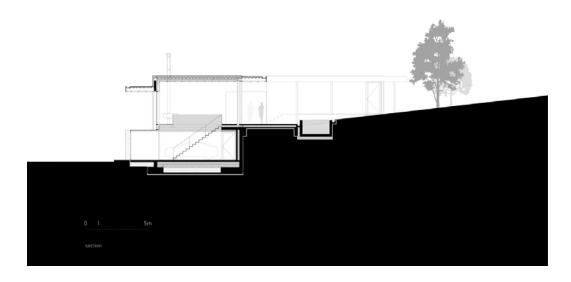


Fig. 50: Pagoda house, First floor, Analytic diagram.



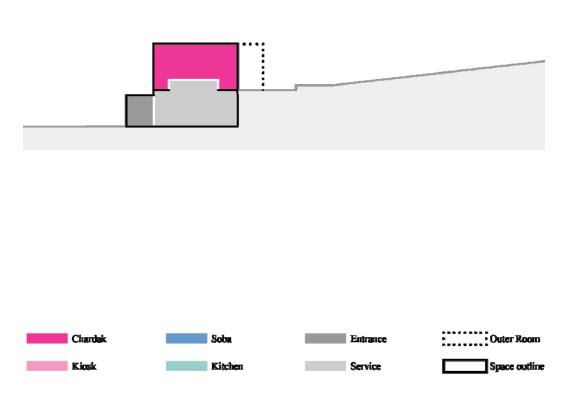


Fig. 51: Pagoda house, Section, Analytic diagram.

# 6.4. Slightly sloped long House

Architects: I/O architects | Location: Targovishte, Bulgaria | Area: 672.0 m

Year: 2014

Urban characteristics	••••
Courtyard	••••
Spatial configuration and functions	••••
Interior	●0000
Façade	●0000
Construction	●0000
General evaluation	●●●○○



Fig. 52: Slight slope long house, I/O Architects.

Slightly sloped long house of I/O Architects was nominated for the "Mies Van der Rohe" architectural price in  $2015^{273}$ .

The volume of the house is adapted to the plot's topography and by taking advantage of its free position is oriented to the southeast and thus to the sun. Almost fully closed on three sides it established a strong relation to the yard, by preserving the privacy of the spaces. On the open side, an outdoor living space was created, covered by the jutting flat roof. Approaching the entrance from the narrow side shortened the link

between the house and the street. Straight after the entry, one gets in the living room, from where the kitchen and the owner's working space are accessed, while the rest bedrooms are left behind in a subtle way. Room height adapts to the level of privacy and thus the living area is dominating over the secondary rooms.

Wooden floors and white walls are suggesting a cozy feeling, supported by built-in cupboards and shelves, which deprive the spaces of too much ornaments. Despite the use of local stones for the cladding, the house does not merge with the surrounding nature. However, it creates a harmonious image and it impresses with its solitude.<sup>274</sup>

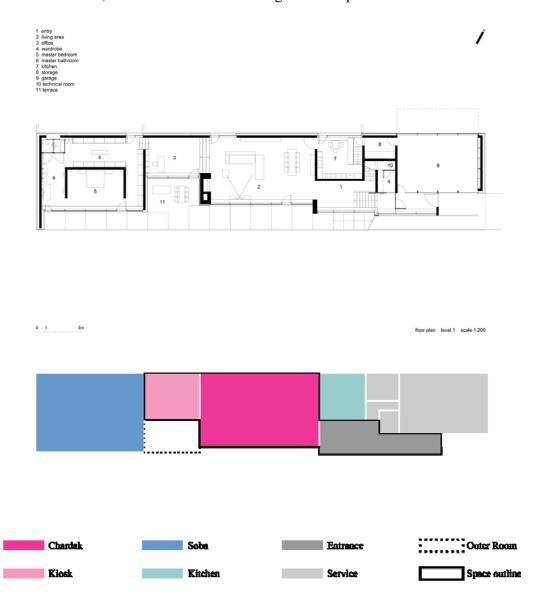


Fig. 53: Slight slope long house, Ground floor, Analytic diagram.

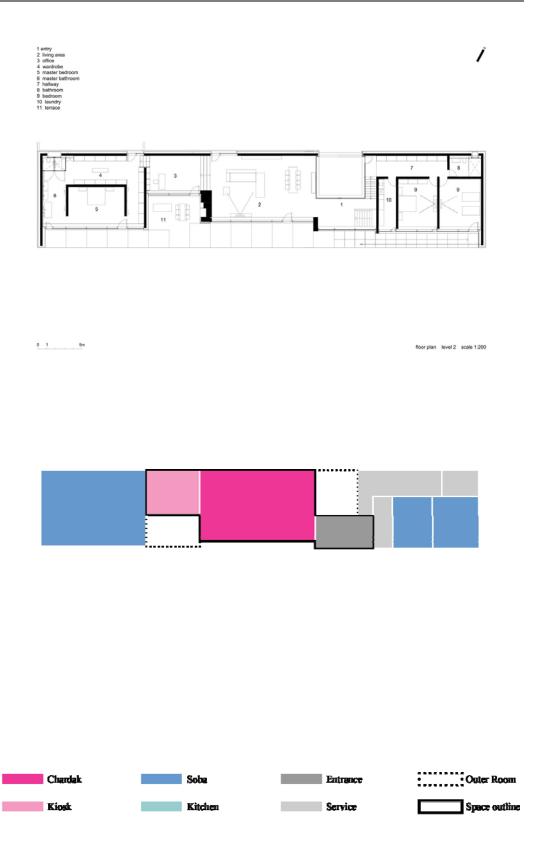


Fig. 54: Slight slope long house, First floor, Analytic diagram.

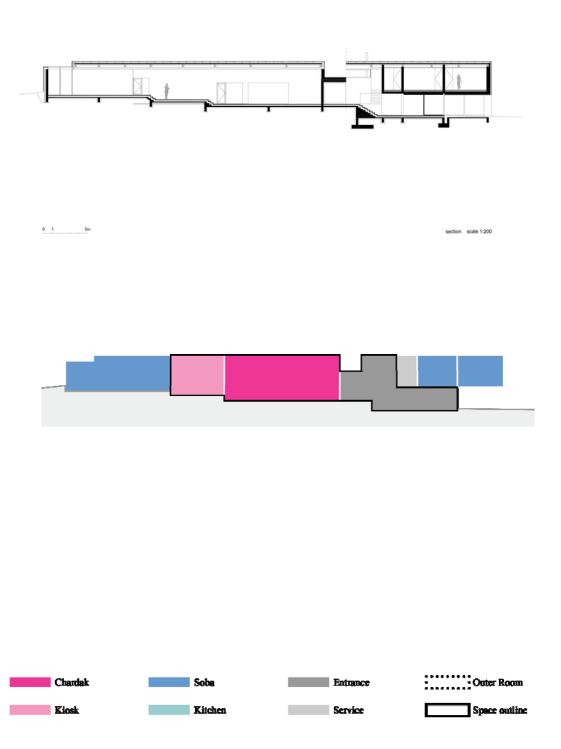


Fig. 55:Slight slope long house, Section, Analytic diagram.

### **6.5.Observation House**

Architects: I/O architects | Location: Sofia, Bulgaria | Area: 980.0 m<sup>2</sup>

*Year:* **2015** 

Urban characteristics	●●●○○
Courtyard	••••
Spatial configuration and functions	•••00
Interior	●●○○○
Façade	00000
Construction	••••
General evaluation	●●●○○



Fig. 56: Observation house, I/O Architects: Second floor.

With its unambiguous appearance of a stronghold, the house emphasized its location at the edge of a village, near to Sofia, Bulgaria. It is sticking out due to the massive stone walls, which are suggesting the feeling of unruffled calm and solitude. Hedging the courtyard with trees, it prevented the sight of passers-by and secured the privacy.

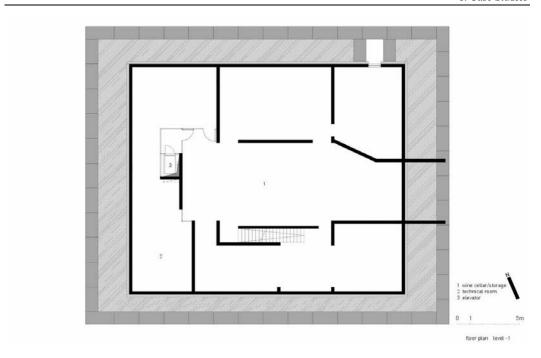
Behind the solid walls are housed the bedrooms, with a connection to the garden, and recreational spaces. A technical room and a wine cellar are comprising the area underneath the ground floor and thus defining the underground level.

Single and main public space is the living room on the top level. Through its openness to the surroundings, it is representing a completely opposition to the underlying solid structure. Offset from the house edges, this room adds a subtle end of the architectural composition, topped by the sloped roof. The long eaves are allowing the utilization of the outdoor space and are emphasizing the hovering effect. "Observation house" offers a vast 360° degrees view, made possible through the totally glazed façade<sup>275</sup>.

Prevailing material in the interior is wood, used for flooring, ceiling and cladding. It supplies the spaces with a feeling of warmth and coziness.



Fig. 57: Observation house, I/O Architects. First floor, view from the garden.



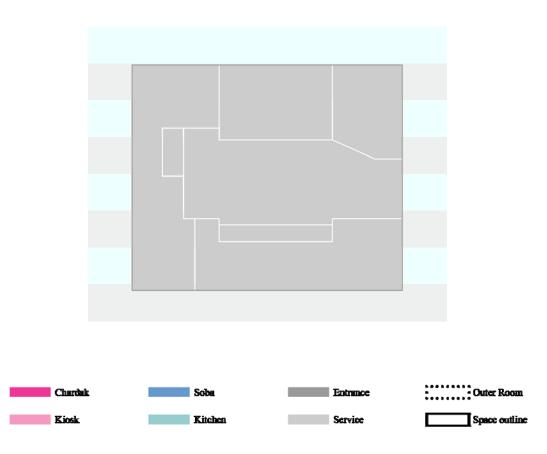


Fig. 58: Observation house, Ground floor, Analytic diagram.

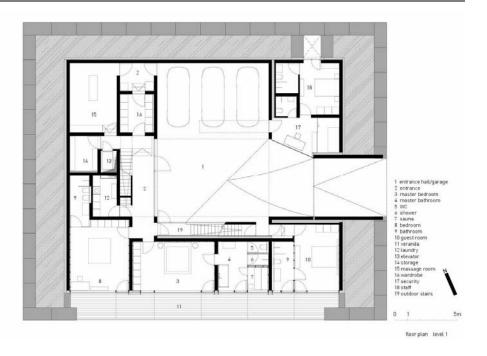
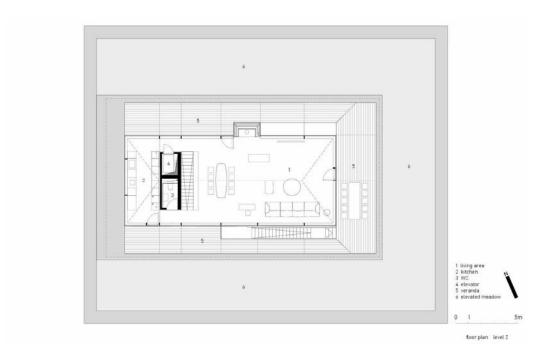




Fig. 59: Observation house, First floor, Analytic diagram.



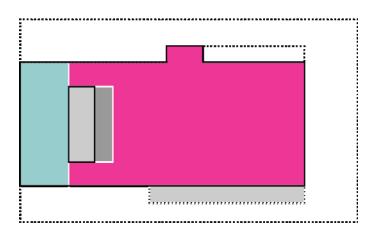
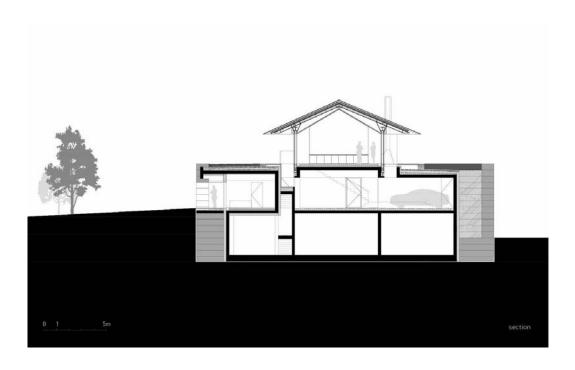




Fig. 60: Observation house, Second floor, Analytic diagram.



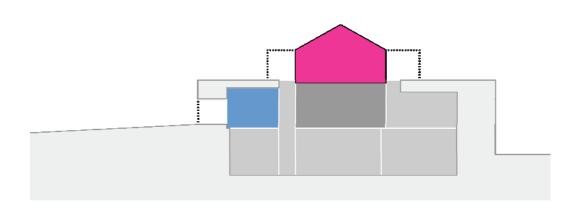




Fig. 61: Observation house, Section, Analytic diagram.

### 6.6. Summary

Over the time people's demands changed, the need for more private spaces and also for more public spaces grew. Old houses were being reconstructed in order to be adapted to the new necessities, while newly built residencies accept the current requirements as an outgoing point.

The "Large home tree" on the opposite was a product of both architect and client's creativity. Free of any tradition, it strived uniqueness not only by means of extravagant look, but also by incorporating a series of technical appliances such as geothermal probes, solar panels etc. Such design could pose the question, whether it is reasonable or not that, contemporary architecture, in order to be modern and to offer comfortable living, should recall building traditions from old times at all. Although interesting conception, the project approached the extreme of universality. Its alienated character is excessively untypical for the Bulgarian architecture and consequently, due to its autonomous presence, which is rather disturbing the surroundings, the house could be placed anywhere, without changing its impact.

The "Single-family House 2" is a simple house with an interesting shape, derived from the location of the project between the mountain and the city. Despite the obscured entrance area, the project is well organized spatially in accordance to the living function. Yet, its design lacks originality, except for the floral pattern on the front wall, which however is just an artistic element, without any certain function.

I/O Architects are impressing with their high architectural quality and therefore the deserved international appreciation. Their projects resemble partially the traditional Bulgarian house both on typological and stylistic level. Merging the spaces in each other, minimizing the transitional area, utilizing roof's eaves and by this creating outdoor rooms, implementing wood as prevailing material in interior and exterior are some of the design principles and techniques used for achieving a certain similarity with the Revival houses. Their architecture has a clearly pronounced contemporary character, which made the buildings to stand out and to be distinguished from the

surroundings, while preserving the harmony of the place, without creating tension and balancing between the natural and the built-environment.

Both typological and visual aspects can be applied to projects, if their implementation is well-grounded and reasonable. However, no house can recall fully and all features of the traditional Bulgarian house. According to each single project, it must be found out, how to interpret the typological features of the Bulgarian Revival house and which further features are necessary in order to create architecture, which is contemporary and traditional at the same time.

# 7. Conclusion

The expansion of globalization is identified as a reason for the universalization of architectural styles and the loss of cultural traits. Being an international issue, this phenomenon is also observed and reflected in the contemporary Bulgarian architecture. With the fall of the Socialist regime in 1989, in the country emerged the so called "Mafia Baroque", which was induced by the opening of Bulgaria to the Western world and which changed abrupt the notion of architecture. After more than two decades the eclectic of that particular style seems to be partially normalized. However, this phenomenon distanced perceivably the Bulgarian architecture from its own building traditions, while Western influences are gradually appropriating it to a universal style.

In fact, since the Liberation of Bulgaria from the Ottoman domination in 1878, foreign influences became common for the architectural reality in the country. While in the first half of the 20<sup>th</sup> century, architects attempted to "Bulgarianize" the imported styles, in the second half these endeavors evolved to the reviving of old building traditions, typological features and elements, extracted from the traditional Bulgarian houses, also known as Bulgarian Revival houses, regarded as national symbol of recognition. However, the used design strategies were applied in planning of public buildings and not of single family houses. After 1989, the several efforts to implement traits and peculiarities of traditional houses into contemporary ones, were limited to the mere replication of the appearance of the Bulgarian Revival house. Yet, such an approach neither could reproduce the typology of that historical building, nor it could constitute and solidify its important role as a bearer of national identity.

Therefore, the present research aimed to find out the traits and peculiarities, which turned out to be crucial for the identity the Bulgarian Revival house. Their translation

into contemporary architectural language and application in new housing projects are expected to revive the typology of the traditional Bulgarian house and to supply modern houses with identity, specific for the Bulgarian society.

### 7.1. Findings

The studies on critical regionalism revealed strategies, how to design contemporary architecture, which despite the overwhelming universalization still remains authentic and which could at the same time be both modern and traditional. Key feature is the relation of the building to a specified context and taking in consideration the peculiarities of the surrounding environment such as topography, sunlight, local materials and building traditions. Exploring the work of the Li Xioadong and Wang Shu exemplified, how engaging local people in the building process and taking into account indigenous textures, materials, and structures, integrates cultural traits in a project and it preserves and recalls the history and atmosphere of a given place. From the stance that subject and object belong to one whole, the Chinese architects achieve a harmonious balance between built form and nature.

Based on the collected data regarding the Bulgarian traditional house were identified couple of features, recognized as vital for its identity.

Starting from the urban point of view, it is worth mentioning the free-way of siting the house on the plot. Without having a strong connection to the street front, the house could be oriented in accordance to the sunlight or to a particular view. Important part is the garden, which accommodated a covered outdoor room. Further peculiarity is the indiscernible transition from outside inwards, accompanied by the interweaving of spaces, gradually becoming from open to closed, from public to private, and smoothly flowing into each other: street – garden – outdoor room – semi-public room ("chardak") – private rooms.

The exterior of the house was distinguished by its remarkable shape, built upon three main parts: a solid ground floor, an overhanging living floor and a pitched roof with long eaves. Protruding bays and "kiosk" or juxtaposed open and closed surfaces have

additionally increased the plasticity of the Bulgarian house.

In terms of its spatial organization, the Bulgarian house is a good example for organizing spaces in a rational way, without having a redundant transitional area. The plan layout was built upon the daily routines of its inhabitants, where the first space to be encountered was the "chardak", extended with the designated private zone of the "kiosk". Representing a type of a living room, the "chardak" offered short connections to the rest of the rooms and thus it set a border between semi-public and private spaces. There was no gender segregation in the house and therefore each room had a specific function. Mainly, the plan layout consisted of "v'kashti" (the kitchen), "cahrdak" with "kiosk", bedrooms and a store. All other additional rooms were depending on the family occupation or local craft and were situated in the ground floor, while living function took place in the upper floor. Exception is the Plovdiv Revival house, which was an urban dwelling and served for representation of the social status. The living spaces of this type of housing were distributed in both of the levels, while the "chardak" was fully integrated in the house volume. On the first floor, it served as entrance hall and on the second as a guest hall, again with attached to it "kiosk".

Specific elements of the interior space were the built-in wall cupboards, the hearth in "v'kashti" and the "minders" (coaches), which served for beds. Usually the floors were made of wooden planks, covered by rugs, while the walls were whitewashed. Only in the Plovdiv Revival house, walls were eventually painted and the ceiling, together with other wooden elements received carving due to representational purposes.

A comparison with the domestic architecture of surrounding ethnicities showed that, the houses of the Balkan countries and the Turkish Ottoman house shared some common aspects such as, for example, the way of siting and the "chardak". However, the Ottoman houses, due to the higher social status of their owners and the different religion, were usually larger homes, with separated units for men and women. Similar was also the case of the Greek houses, while in the countries western from Bulgaria,

the volume of the houses was less plastic and with less protrusions. Modifications occurred in the appearance as well, due to the different building material and techniques. Further, the influence of the Ottoman empire over countries, such as Romania, Serbia and Bosna, was less tactile compared to Bulgaria, which was located closer to the core of the empire.

By tracing down the development of the Bulgarian architecture over the time, it was identified that only protruding floors and bay windows found their continuity and application. In particular, this was a design strategy of the Socialist government, implemented in public buildings and aiming to achieve somewhat architecture with Bulgarian identity, implemented in public buildings.

The reviewed case studies demonstrated, that in a certain sense, contemporary houses in Bulgaria have crossing points with the typology of the traditional one, while there are also examples which do not have any common aspects with the Bulgarian Revival house. Yet, taking the traditional Bulgarian house as a reference point for contemporary projects, seems to be an act of particular architectural offices and not a common practice.

### 7.2. Suggestions

After describing and analyzing the traits and peculiarities of the Bulgarian Revival house, a set of suggestions will be provided on how it could be restored the identity of the traditional Bulgarian house in contemporary house design. The proposals should not be seen as strict rules to follow, but rather they would focus on strategies and ideas for possible contemporary interpretations of traditional characteristics and elements, essential for the Bulgarian Revival house. The suggestions are based on not only on the collected information, but also on author's observations.

#### "Placeness"

Although a small country, Bulgaria offers a variety of terrains, starting from the Black Sea coast and continuing over plain, urban, rural and mountainous areas. For any new structure to be somewhat authentic, it is important for it to be designed in relation to its context. As it has been already mentioned in the analysis of Critical Regionalism, buildings should achieve harmony with their local environment. Thus, they can exist only in a specified place and they cannot be taken and relocated somewhere else. For this purpose, new structures should react reasonable to the given topography. The climate in Bulgaria, which consists of four clearly defined seasons, could be also taken into consideration, since it builds a prerequisite for various light situation within a period of a year.



Fig. 62: Ideas for house's shape and volume in different contexts: a) mountainous, b) plain area with low-density and c) urban with high density housing.

Further by following the design approaches of Professor Li Xioadong and Professor Wang Shu, creating a "placeness" could happen also by retelling local history of a given region. Both of the Chinese architects are looking for specific textures, which bear the identity of the place. Such patterns could be also found in Bulgaria and applied in new structures, if their use is considered to be reasonable. Implementing local materials or construction techniques would not only link a house to its context, but it will also revive and preserve building traditions from an old time, whereas their alternative application will add more value to their authenticity, as in the examples of the façades of both LiYuan Library and the Ningbo History Museum.



Fig. 63: Textures, extracted from Bulgarian villages: a) adobe bricks on stone foundation, b) wall with rock stones on a clay composition with levelling timbers and c) wattle fence elements.

### Zones of transition

One of the essential feature for the traditional Bulgarian house is the presence of various transitional zones. As architect Klaus Wailzer<sup>276</sup> noted, in the Bulgarian Revival house, there was no strict defined threshold between outer and inner space, in contrast to the Western spatial understandings. Shifting from outside to the inside meets several interim spaces, starting from the street as a public space and continuing through an open space, such as the garden, and followed by semi-open space ("chardak" or entrance area) until semi-private and private spaces. Using this typological approach of spatial organization and overlapping in the design of contemporary houses will recall an ambience, specific for the old Bulgarian houses. Therefore, special attention must be paid to the design of the courtyard, an eventual outdoor room or a room with relation to the outside space. Common for the old Bulgarian houses are the trellis vines, which have either demarcated a transitional area or have created an outdoor room, used in summer times as living or dining room. Similar effect can be acquired with the use of pergolas with various forms or with protruding volumetric parts of the house, which define a shaded area.



Fig. 64: Sequence of spaces with different qualities of openness.

To a certain extent, the interweaving of spatial situations could be implemented also in the design of residential blocks. By leaving the staircase exposed to the outside or at least the access to the vertical connection core open to the outdoor space, a semi-public zone will be created, which penetrates the structure and connects it the street. Thus, each unit will have its own access from an open-air space, common for the traditional Bulgarian houses.





Fig. 65: Studio Toggle, Edges Apartments. Ground floor entrance is open to the street. Thus, the public space flows and transform into semi-public space, which leads further to the vertical circulation core.

### Roof with eaves

A characteristic feature of the Bulgarian Revival houses is the roof with long eaves. The eaves provide another solution for creating a transitional belt around the house and in some cases, they can exchange the pergolas or the trellis vines. For this purpose, it is not necessary that the eaves follow strictly the whole outline of plan layout, but rather they can be implemented there, where they are needed. Such areas, for instance, could be the entrance of the house or the room, which has access to the garden.

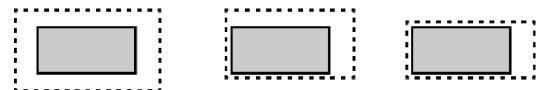


Fig. 66: Suggestions for areas covered by roof's eaves: a) on four sides, b) on two neighbor sides and c) only on one side.

From another point of view, the roof, regardless its shape and form, can also suggest the feeling that the house has a more elongated volume. By doing so, it stresses the horizontality of the building, which could be a useful tool in merging the structure with its environment, for example in plain areas with low-density housing.

### Spatial organization

The minimization of transitional area will result in less construction costs. In the traditional Bulgarian house, there are almost no transitional areas, except for the stairs. The Plovdiv Revival house transformed the "corridors" on the first and second level to entrance hall and guest hall respectively. Even the "prust" in the older houses, which served partially as a passage, was used at the same time as a store of goods. Creating a core in the spatial organization, which gives access to the rest of the spaces, will decrease the transitional area. Such a core could be the living room or/and the dining room, where other functions could be also attached to them. Similar solutions offer lofts and loft-like plan layouts. Additionally, a spatial design with a dominating core area stimulates the feeling of living together, which was tactile in the traditional Bulgarian houses.

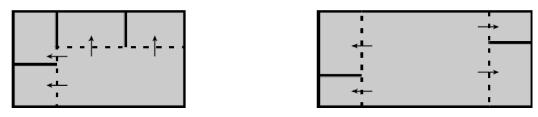


Fig. 67: Suggestions for core space, which gives access to other rooms and minimizes the transition area.

#### "Chardak" and "Kiosk"

Despite the advantages of the open plan layout, there is still the need of more private and isolated areas. Taking as an example the "chardak" from the Bulgarian Revival house, it can fully substitute the living room in a house, where the attached to it "kiosk" offers the necessary secluded space. The demarcation of the two areas could be done in the same way as in the old Bulgarian houses - by difference in the levels. Separating the two spaces with a couple of steps will strengthen the contrast in the functions as well as it will suggest the feeling of a strict defined threshold. A subtler solution would be the use of dissimilar flooring materials. The choice could vary among materials with various levels of hardness or softness, colors, surface treatment and sound properties, in order to create a more intimate atmosphere. Further, the area of the "kiosk" could be located also between other rooms, by preserving its link to the "chardak". Thus, it becomes a quiet and remote place, which is also used as a physical separation of the adjacent parts of the house.

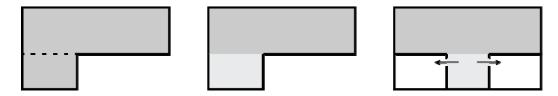


Fig. 68: Suggestions for separating the "kiosk" from the "chardak" - a) by couple of steps, b) by different flooring of c) by using it for separating two other areas. Thus, it is secluded by the small transitional area between the doors of the two other rooms.

### **Interior**

Although the design of the interior space is more or less a matter of a personal taste, it can still contribute in a certain sense for recreation the character of the traditional Bulgarian houses. The cupboards in the old houses were merged in the walls and thus they became part of the room's envelope, instead of being treated as additional objects. Such approach of integration of the furniture can find easily its application in contemporary houses. Another object, significant for the interior, is the fireplace. In the culture of Bulgarians, the fireplace played an important role in the house, since it

always symbolized the family and the home. Therefore, although the suggestion about this feature might look superficial, its value should not be underestimated.

### 7.3. Final words

The endeavor of Bulgarian architects to ascend on the world's architectural stage, does not require the import, copy and imitation of modern architectural tendencies from the West. Being part of the globalization processes, leading towards universalization, and abandoning the own building traditions also does not promise the achievement of valuable architecture. However, through creating architecture specific for the context of Bulgaria, which takes into consideration the geographical location, climate conditions and especially the peculiarities of the culture and customs of the Bulgarians, could be reached certain authenticity and originality, which would outline the Bulgarian architecture and which would be respected. The building traditions from the Bulgarian Revival period should not be neglected, but rather used as a tool towards esteemed contemporary architecture, which reconciles the modern with the traditional.

# Glossary

**Bulgarian revival**, (Bulg. "Българско Възраждане") – The period of socio-economic development and national integration among Bulgarian people under Ottoman rule;

**Сеşme**, (Bulg. "чешма") – A fountain in the garden<sup>277</sup>;

**Chardak**, (Bulg. "чардак") – It means veranda and thus it is the main living area, representing an outdoor room, oriented towards the garden. It is used also as working space and as a distributional space, establishing connection to the other spaces in the house. Although being the most spread name, in some regions of Bulgaria, the veranda is called also "Poton" (Bulg. "потон") and "Otvod" (Bulg. "отвод"). In the Turkish Ottoman's house "chardak" is a garden pavilion;<sup>278</sup>

**Duvar**, (Bulg. "дувар") – A massive stone masonry wall, surrounding the courtyard and thus securing the privacy;

**Eyvan**, (Bulg. "айван/ейван") – A recess in the gallery of the Turkish Ottoman's house<sup>279</sup>;

Harem, (Bulg. "xapem") – Women's quarter. The private spaces in the house are regarded as harem, since in Turkish Ottoman's house they were devoted to the women;<sup>280</sup>

**Hayat**, (Bulg. "xaят") – In the Turkish Ottoman's house this is a gallery on the main floor<sup>281</sup>, while in the Bulgarian house this is the "chardak";

**Kafes**, (Bulg. "καφε3") – Wooden shutters installed on the windows of Turkish Ottoman's houses, allowing the sight from the inside outwards, but preventing it in the opposite direction;<sup>282</sup>

**Kaldirim**, (Bulg. "калдъръм") – A street, paved with cobblestones;

**Kiosk**, (Bulg. "кьошк") – A designated place on the "chardak", detached by couple of stairs and isolated by wooden railing. It is a place for hosting honorable guests, as well as a place for controlling and supervising seasonal workers, supporting the domestic manufacture;

**Komşulik**, (Bulg. "комшулък") – Deriving from the Turkish word "Komşu", meaning neighbor, "komşulik" is a small opening in the wall, between two houses, serving for the exchange of goods and news;

**Konak**, (Bulg. "конак") – The konak is the residence of Ottoman's authorities, representing also the local power;

Minder, (Bulg. "миндер") – Perimeter seating, also used for sleeping;

**Odar**, (Bulg. "одър") – A small area, under the roof's eaves, designated for resting or taking a nap during the summertime;

**Prust**, (Bulg. "πρуст") – A service room for storing the domestic manufacture, sometimes used as a working space or as an internal circulation area;

Šadrvan, (Bulg. "шадраван") - A fountain in the garden;

Salon, (Bulg. "салон") - Reception hall for receiving guests in the Plovdiv

Baroque house. It is an enclosed distributional space and thus replaces the "chardak";

**Selamlik**, (Bulg. "селамлък") – Men's quarter. As "selamlik" is considered also the public space, since it was the realm of men;<sup>283</sup>

Soba, (Bulg. "coбa") – A bedroom;

**Sofa**, (Bulg. "coφa") – In the Turkish Ottoman's house the sofa is the common area between the separate units, where social events took place. It serves as a distributional area among the rooms in the house;<sup>284</sup>

V'kashti (Bulg. "в'къщи") – It means "at home" and thus represents the room with the hearth. It serves as a kitchen or as living space, during the cold winter months. Further names are "u'izhu" (meaning: in the hut; Bulg. "у'ижу") and "U'kolibu" (meaning: in the shelter; Bulg. "у'колибу")

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# **Bibliography**

### Books:

- [1] Arbaliev, G., Architectural elements and details of Bulgarian Revival houses (Sofia: State Publishing "Technic", 1959)
- [2] Arbaliev, G., *Building and artistic traditions of the Bulgarian Architecture* (Sofia: State Publishing "Technic", 1977), p. 193-195, p. 307-320
- [3] Berbenliev, P., The Architectural Heritage on the Lands of Bulgaria (Sofia: Publishing "September", 1987), p.156-162.
- [4] Bulgarian Academy of Science, *Short History of the Bulgarian Architecture* (Sofia: Publisher of Bulgarian Academy of Science, 1965)
- [5] Dzhangozov, K., Bulgarian National Architecture (Sofia: ABV, 1943)
- [6] Kate ed. Nesbitt, 1996. Theorizing a New Agenda for Architecture: An Anthology of Architectural Theory 1965 1995. 2nd Edition. Princeton Architectural Press
- [7] Prof. Dr. Stamov, St., Architecture of the old Bulgarian villages (Sofia, 2006)
- [8] Stiller, A. Bulgarien: Architektonische Fragmente (Vienna 2007), Pustet Anton
- [9] Stoyanov, Iv., *History of the Bulgarian Revival* (Veliko Tarnovo: Abagar, 1999),TXT e-book, http://chitanka.info/text/5773/61, accessed March 17, 2016
- [10] Zlatev, T., Spaces in the Bulgarian Revival house, (Sofia: State Publishing "Technic", 1958), p. 9-44.

### Articles and Publications:

- [11] Aleksova, D., "The Magic of Rhodopes, illustrated through the Revival architecture. Existing traditions and folklore of Shiroka Laka" (PDF file), downloaded from New Bulgarian University, nbu.bg, http://eprints.nbu.bg/1655/1/18.pdf, accessed April 9, 2016
- [12] Alexander Koller & Jess Koller Lumley (2014) "Strategies of the Bulgarian vernacular: continuity in Bulgarian house design from National Revival times to the present day", *The Journal of Architecture*, 19:5, p.740-778, Available: http://dx.doi.org/10.1080/13602365.2014.968187, accessed March 24, 2016
- [13] Ana Radivojević, Mirjana Roter Blagojević & Aleksandar Rajčić (2014) The issue of thermal performance and protection and modernisation of traditional half-timbered (bondruk) style houses in Serbia, Journal of Architectural

- Conservation, 20:3, 209-225, DOI:http://dx.doi.org/10.1080/13556207.2014.984508, accessed March 24, 2016
- [14] Bardzinska-Bonenberg, T. (2009) "Romanian rural architecture Diversity of homesteads", Architecture, Civil engineering, Environment, Vol. 4, p.11-18, Available: http://acee-journal.pl/cmd.php?cmd=download&id=dbitem:article:id=99&fiel d=fullpdf, accessed April 2, 2016
- [15] Botz-Bornstein, Th., "WANG Shu and the Possibilities of Architectural Regionalism in China", *Nordic Journal of Architectural Research*, Vol. 21, No1 (2009), http://arkitekturforskning.net/na, accessed June 2016
- [16] Boyadzhiev, K., National Conference, 15-16.12.2008 National review of the Bulgarian Architecture 2008, quoted in "Where does the Bulgarian Architecture goes?", *Architecture* 5-6 (Sofia: Union of Architects in Bulgaria, 2014)
- [17] Boyadzhiev, K., "The achievements of the Bulgarian architecture in the 20<sup>th</sup> century", *Architecture* 3 (Sofia: Union of Architects in Bulgaria, 2014), p. 50-52 and *Architecture* 4 (Sofia: Union of Architects in Bulgaria, 2014), p. 97-99.
- [18] Bratkova, R., "House with two faces", *Architecture* 1 (Sofia: Union of Architects in Bulgaria, 2016), p. 4-9.
- [19] Cerasi, M. (1998) "The Formation of Ottoman House Types: A Comparative Study in Interaction with Neighboring Cultures", *Muqarnas*, Vol. 15, p. 116-156, Available: http://www.jstor.org/stable/1523280, accessed March 2, 2016
- [20] Dengiz, E. Burçin (2001) "Boundaries of gendered space: Traditional Turkish house", Available: http://www.thesis.bilkent.edu.tr/0001734.pdf, accessed March 2, 2016
- [21] Fessas-Emmanouil, H., "Reconciling Modernity and Tradition. The Universal Relevance of Aris Konstantinidis' Architectonic Philosophy", in *Architecture* 1 (Sofia: Union of Architects in Bulgaria, 2010), p. 34-39.
- [22] Frampton, K., "Lessons on Authentic Modernity" in *Domus* (Milano: May, 2016), p. 16-21
- [23] Frampton, K., "Prospects for a Critical Regionalism", in Perspecta, Vol. 20 (1983): p. 147-162.
- [24] Frampton, K., "Ten Points on an Architecture of Regionalism: A Provisional Polemic", in Vincent B. Canizaro, *Architectural Regionalism: Collected Writings on Place, Identity, Modernity, and Tradition* (San Francisco: Chronicle Books, 2012), p. 374-385.

- [25] Frampton, K., "Towards a Critical Regionalism: Six Points for an Architecture of Resistance", in Hal Foster, *Anti-Aesthetic* (Washington: Bay Press, 1983)
- [26] Georgiev, L., "Modernism in Bulgarian magazines in the period between the two World Wars (1920-1945) Architecture history thesis TU Deflt, 2007" (PDF file), downloaded from LjuboGeorgiev.eu, http://www.ljubogeorgiev.eu/files/LjuboGeorgiev-Modernism%20in%20BG% 20magazines.pdf, accessed May 24, 2016
- [27] Ginio E. and Kaser K., "Introduction: Towards a Comparative Study of the Balkans and the Middle East" (PDF file), downloaded from The Hebrew University of Jerusalim, http://www.cas.huji.ac.il/Ottoman%20Legacies\_Introduction.pdf, accessed July 18, 2016
- [28] Gugov, A., "About the appearance of the Bulgarian Architecture at the end of the XX century", in *Architectural Readings* 2007-2008 (Sofia: Academic publisher "Prof. Marin Drinov", 2011), p. 98-101.
- [29] Gugov, A., "Multi-family residential buildings in Bulgaria in the second half of the XX century (1950-1990). Façade", in *Architectural Readings* 2007-2008 (Sofia: Academic publisher "Prof. Marin Drinov", 2011), p. 104.
- [30] Hing-Wah Chau, "City, Tradition and Contemporary China. From Wang Shu's Works to Review his Critical Practice with the City" (PDF file), downloaded from Research Gate, https://www.researchgate.net/publication/271559737\_City\_Tradition\_and\_Contemporary\_China\_From\_Wang\_Shu's\_Works\_to\_Review\_his\_Critical\_Practice\_with\_the\_City, accessed June 2016
- [31] Hing-wah Chau, Xianfeng? Houfeng? Youfeng?—An analysis of selected contemporary Chinese architects, Yung Ho Chang, Liu Jiakun, and Wang Shu (1990s-2000s), Frontiers of Architectural Research, Volume 4, Issue 2, June 2015, Pages 146-158, ISSN 2095-2635, http://dx.doi.org/10.1016/j.foar.2015.03.005, accessed May 2016
- [32] Holleran, M. (2014), 'Mafia Baroque': post-socialist architecture and urban planning in Bulgaria. The British Journal of Sociology, 65: 21–42. doi:10.1111/1468-4446.12052
- [33] "House with winter garden", *Architecture* 6 (Sofia: Union of Architects in Bulgaria, 2010)
- [34] Kaleva, Em., "The Socialist heritage A heritage in risk", Architecture 5/2015. Union of Bulgarian Architects, p. 23-25.
- [35] Kozhuharov, G., *The Bulgarian house over five centuries* (Sofia: Bulgarian Academy of Science, 1967), p. 165-188
- [36] Lefaivre, L., "Critical Regionalism. A Facet of Modern Architecture since

- 1945" (PDF file), downloaded from Harvard.edu, http://isites.harvard.edu/fs/docs/icb.topic34807.files/9-5A\_Lefaivre.pdf, accessed May 28, 2016
- [37] Marinov, Ch., "Whose is this house? The invention of the Bulgarian Revival Architecture" (Word file), downloaded from BoinaSlava.net, forum.boinaslava.net/attachment.php?attachmentid=22434&d=1390636447, accessed May 22,2016
- [38] Mateev, St., "The preservation of the architectural heritage in the light of the socio-political changes in Bulgaria" (PDF file), downloaded from ICOMOS international council on monuments and sites, http://www.icomos.org/monumentum/vol15-16/vol15-16\_32.pdf, accessed May 22, 2016
- [39] Napoleon Ono Imaah, "Towards Globalization through Architecture" (PDF file), downloaded from ResearchGate.org, https://www.researchgate.net/publication/275354554\_TOWARDS\_GLOBALI ZATION THROUGH ARCHITECTURE, accessed June 2016
- [40] Ong Yan, Gr., "The Infinite Spontaneity of Tradition" (PDF file), downloaded from PritzkerPrize.com, http://www.pritzkerprize.com/2012/essay, accessed August 24, 2016
- [41] Oris House of architectre, "A Fortress Besieged by Critical Regionalism" (PDF file), downloaded from Oris.hr, http://www.oris.hr/files/pdf/zastita/7/Oris.61\_Wang.Shu\_Ningbo.pdf, accessed August 22, 2016
- [42] Patrascu, Gh. (2008) "Vernacular heritage in Romania", *The rural vernacular habitat, a heritage in our landscape*, Vol. 1, Available: http://www.unimi.it/img/news/Futuropa 1 EN.pdf, accessed April 2 2016
- [43] Prof. Popov, St., "When in Bulgaria will emerge valuable buildings?", *Stefan Popov* (blog), May 23, 2015, http://www.stefanpopov.org/blog/2, accessed June 2016
- [44] Quentin Yu, "Critical Regionalism in Contemporary China: Transcending meanings through the use of repurposed material" (PDF file), downloaded from https://www.academia.edu/10316756/Critical\_Regionalism\_in\_Contemporary \_China\_Transcending\_meanings\_through\_the\_use\_of\_repurposed\_material, accessed June 2016
- [45] Raycheva, R., "An Empire Style Furniture Set ant Nedkovich House, Old Town Plovdiv" (PDF file), downloaded from ResearchGate.net, https://www.researchgate.net/publication/297594651\_An\_Empire\_Style\_Furniture\_Set\_at\_Nedkovich\_House\_Old\_Town\_Plovdiv?ev=prf\_pub, accessed April 8, 2016

- [46] Raycheva, R. (6/2012) "Architecture of Residential Buildings in Bulgaria from the Revival Period", *Architecture and Urban Planning*, p.17, Available: https://www.researchgate.net/publication/272809098\_Architecture\_of\_Reside ntial\_Buildings\_in\_Bulgaria\_from\_the\_Revival\_Period, accessed April 2, 2016
- [47] Raycheva, R. (2015) "Wooden structure of historic 19thC houses in Bulgarian lands", *Pro Ligno*, Vol. 11:4, p.440-449, Available: http://proligno.ro/en/articles/2015/4/Raycheva\_final.pdf, accessed April 3, 2016
- [48] Scavuzzo, G., "Wang Shu: Façades as Material and tactile Stratifications" in *Screencity Journal Issue #2 Colour, Environment, Interactive Media* (PDF file), University of Trieste, Department of Engineering and Architecture, downloaded from ScreenCityLAB.net, http://www.screencitylab.net/journal/issues/journal-2/42-wang-shu-facades-asmaterial-and-tactile-stratifications.html, accessed August 22, 2016
- [49] Stanishev, G., "Slightly sloped long house", *Architecture* 3 (Sofia: Union of Architects in Bulgaria, 2015), p. 4-7.
- [50] Stoilova, L., "Regionalismus contra Moderne", *Der Architect* (Zeitschrift des Bundes Deutscher Architekten BDA: January, 1998), accessed June 6, 2016
- [51] Stoilova, L., "The 20<sup>th</sup> century architecture in Bulgaria: a possible historiographical approach" in *Rethinking histories of Arts in the 20<sup>th</sup> Century* (Sofia: Institute of Arts Studies, BAS, 2015), (PDF file) downloaded from Acadmia.edu, https://www.academia.edu/24998067/The\_20th\_century\_architecture\_in\_Bulg aria a possible historiographical approach, accessed June 3, 2016
- [52] Tasheva, St., "The quest for national art and style in Bulgarian architecture during the 20th century", June 2015, Conference: Rethinking Histories of Arts in the 20th Century, Sofia, https://www.researchgate.net/publication/301635319\_The\_quest\_for\_national \_art\_and\_style\_in\_Bulgarian\_architecture\_during\_the\_20th\_century, May 21, 2016
- [53] Tzonis, Al. and Lefaivre, L., "Why Critical Regionalism Today?", in Kate Nesbitt, *Theorizing a New Agenda for Architecture: Anthology of Architectural Theory*, 1965-95 (Princeton: Princeton Architectural Press, 1996), p. 483-492.
- [54] Vodenova, P.M. and Lozanova, S.S., "The Baby Cradle in the traditional Bulgarian home: The 15<sup>th</sup>-19<sup>th</sup> century" (Word file), downloaded from ResearchGate.net, https://www.researchgate.net/publication/280601745\_LULKATA\_V\_TRADIC IONNOTO\_BLGARSKO\_ZILISE, accessed April, 8, 2016
- [55] Zahariev, A., "Architectural competitions in Bulgaria in the last 10 years",

Architecture 5 (Sofia, Union of Architects in Bulgaria, 2015), p. 32-34

### Online Interviews:

- [56] Dobrev, St., "Crisis in Bulgarian architecture", Union of Architects in Bulgaria, (June 17, 2013), http://www.bularch.eu/index.php?option=com\_content&view=article&id=741 %3A2013-06-17-09-41-58&catid=50%3A2013-04-05-19-05-27&Itemid=107 &lang=bg, accessed July 3, 2016
- [57] Kate Goodwin, "Meet the architects: Li Xiaodong. Sensing Spaces", RoyalAcademy.org.uk, December 12, 2013, accessed May 2016
- [58] Perspective Global, "An Interview with Li Xiaodong", Inspiring Architecture & Design, April 12, 2016, webcast, http://www.perspectiveglobal.com/architecture/an-interview-with-li-xiaodong, accessed May 2016
- [59] Royal Architectural Institute of Canada (RAIC), "An interview with Li Xiaodong", https://www.raic.org/raic/interview-li-xiaodong, accessed June 2016
- [60] Stoyanova, St., "Mafia Baroque is the pop-folk music in the Arhictecture", Dnes.bg (September 27, 2012), http://www.dnes.bg/obshtestvo/2012/09/27/mutrobarokyt-e-chalgata-v-arhitekt urata.169251, accessed July 3, 2016

### Websites:

- [61] Archdaily, "Observation House / I/O Architects", http://www.archdaily.com/776001/observation-house-i-o-architects, accessed February 11, 2016
- [62] Balkan Vernacular Architecture, http://balkanarchitecture.org and subpages, accessed March 27 2016
- [63] Forma-1 Architects, "Architecture in Bulgaria", http://www.forma1bg.com/bulgarian-architecture/modern-bulgarian-architecture.html, accessed February 5, 2016
- [64] Nauka, "The European architecture of the Bulgarian city at the end of the XIX century", http://nauka.bg/a/европейската-архитектура-на-българския-град-в-края-на-хіх-век, accessed April 24, 2016
- [65] Ottoman rule, "Bulgarian Society under The Turks", http://countrystudies.us/bulgaria/8.htm, accessed March 4, 2016
- [66] Portal of the world and the people, "Architecture- Bulgarian revival house",

- http://www.bgjourney.com/Architecture/arh.html and subpages, accessed February 6, 2016
- [67] Wikipedia, "Architecture of Bosnia and Herzegovina", https://en.wikipedia.org/wiki/Architecture\_of\_Bosnia\_and\_Herzegovina, accessed March 27, 2016
- [68] Wikipedia, "Konak (residence)", https://en.wikipedia.org/wiki/Konak\_%28residence%29, accessed March 25, 2016
- [69] Wikipedia, "Second Bulgarian Empire", https://en.wikipedia.org/wiki/Second\_Bulgarian\_Empire, accessed January 26, 2016

# **Appendix A: Evaluation lists of the Case Studies**

# **Case Study 1: Large Home Tree**

# *Urban characteristics:*

Free situation on the plot, without a strong relationship house-to-street	••••
Orientation towards sun, courtyard or view	••••
Merging with the surrounding environment	00000
Adaptation to the topography of the site	••••
Straightening the shape of house	00000
<u>Courtyard:</u>	
Presence of garden	00000

Presence of garden	00000
Secured privacy	••••
A covered outdoor room (pergola/roof's eaves)	••000

# Spatial configuration and functions:

Entrance on the main façade	••••
Service rooms in ground floor or basement	••••
Main living room - "chardak" - open or closed	00000
"Chardak" as a connection room	00000
"Kiosk" as a designated area and an extension of "chardak"	00000
"Kiosk", oriented in the same direction as the house	00000
Semi-public rooms have bigger room height	•0000
A room with a hearth	00000
An overhanging upper floors	00000
Protruding bays	00000
Asymmetric rural/symmetric urban dwelling	•0000
Compact plan	••000
Minimized transitional area	00000
An unified unit with an open plan and no gender differentiation	••••

#### *Interior:*

Built-in cupboards	••••
Perimeter seating	00000
Wooden ceiling	00000
Wooden floor	00000
Floor covered with rugs/carpet	00000
Openings flanked with wooden planks	00000
Wall niches	00000
Walls painted, whitewashed or without treatment	••••

## Façade:

Plasticity	••••
Painted outer walls, eventually with floral motifs	00000

#### Construction:

Solid ground floor	•0000
Light-weight upper floor	00000
Sloped roof	•0000
Roof with long eaves	00000

#### **General evaluation:**

•0000

## Case Study 2: Single-family House 2

#### *Urban characteristics:*

Free situation on the plot, without a strong relationship house-to-street	••••
Orientation towards sun, courtyard or view	••••
Merging with the surrounding environment	00000
Adaptation to the topography of the site	•••00
Straightening the shape of house	00000
<u>Courtyard:</u>	
Presence of garden	00000
Secured privacy	•••00
A covered outdoor room (pergola/roof's eaves)	••••

## Spatial configuration and functions:

Entrance on the main façade	•••00
Service rooms in ground floor or basement	•••00
Main living room - "chardak" - open or closed	00000
"Chardak" as a connection room	00000
"Kiosk" as a designated area and an extension of "chardak"	00000
"Kiosk", oriented in the same direction as the house	00000
Semi-public rooms have bigger room height	00000
A room with a hearth	00000
An overhanging upper floors	●0000
Protruding bays	●0000
Asymmetric rural/symmetric urban dwelling	●0000
Compact plan	●●○○○
Minimized transitional area	•••00
An unified unit with an open plan and no gender differentiation	•••00

#### *Interior:*

Built-in cupboards	••000
Perimeter seating	00000
Wooden ceiling	00000
Wooden floor	00000
Floor covered with rugs/carpet	00000
Openings flanked with wooden planks	00000
Wall niches	00000
Walls painted, whitewashed or without treatment	••000

## Façade:

Plasticity	••••
Painted outer walls, eventually with floral motifs	••••

## Construction:

Solid ground floor	●0000
Light-weight upper floor	00000
Sloped roof	•0000
Roof with long eaves	00000

## **General evaluation:**

••000

## Case Study 3: Pagoda House

#### *Urban characteristics:*

Free situation on the plot, without a strong relationship house-to-street	••••
Orientation towards sun, courtyard or view	••••
Merging with the surrounding environment	••000
Adaptation to the topography of the site	••••
Straightening the shape of house	00000
Straightening the shape of house	
<u>Courtyard:</u>	
Presence of garden	••••
Secured privacy	•••00
A covered outdoor room (pergola/roof's eaves)	••••
Spatial configuration and functions:	
Entrance on the main façade	••••
Service rooms in ground floor or basement	••••
Main living room - "chardak" - open or closed	••••
"Chardak" as a connection room	••••
"Kiosk" as a designated area and an extension of "chardak"	••000
"Kiosk", oriented in the same direction as the house	••000
Semi-public rooms have bigger room height	••••
A room with a hearth	••••
An overhanging upper floors	00000
Protruding bays	00000
Asymmetric rural/symmetric urban dwelling	•••00
Compact plan	••••
Minimized transitional area	••••
An unified unit with an open plan and no gender differentiation	••••
Interior:	

Built-in cupboards	••000
Perimeter seating	00000
Wooden ceiling	•0000
Wooden floor	••000
Floor covered with rugs/carpet	•0000
Openings flanked with wooden planks	00000

	Master	

Wall niches	00000
Walls painted, whitewashed or without treatment	••••
Facado:	

#### <u>Façade:</u>

Plasticity	••••
Painted outer walls, eventually with floral motifs	00000

#### Construction:

Solid ground floor	••••
Light-weight upper floor	•••00
Sloped roof	00000
Roof with long eaves	•••00

## **General evaluation:**



## Case Study 4: Slightly sloped long House

#### *Urban characteristics:*

Free situation on the plot, without a strong relationship house-to-street	••••
Orientation towards sun, courtyard or view	••••
Merging with the surrounding environment	••••
Adaptation to the topography of the site	••••
Straightening the shape of house	00000

#### Courtyard:

Presence of garden	••••
Secured privacy	••••
A covered outdoor room (pergola/roof's eaves)	••••

#### Spatial configuration and functions:

Entrance on the main façade	00000
Service rooms in ground floor or basement	••••
Main living room – "chardak" – open or closed	••••
"Chardak" as a connection room	••••
"Kiosk" as a designated area and an extension of "chardak"	••••
"Kiosk", oriented in the same direction as the house	●●○○○
Semi-public rooms have bigger room height	••••

Appendix A: Evaluation lists of the Case Studies

A room with a hearth	••••
An overhanging upper floors	00000
Protruding bays	00000
Asymmetric rural/symmetric urban dwelling	••••
Compact plan	••••
Minimized transitional area	••••
An unified unit with an open plan and no gender differentiation	••••

#### *Interior:*

Built-in cupboards	●●●○○
Perimeter seating	00000
Wooden ceiling	00000
Wooden floor	•••00
Floor covered with rugs/carpet	00000
Openings flanked with wooden planks	00000
Wall niches	00000
Walls painted, whitewashed or without treatment	••••

## Façade:

Plasticity	••000
Painted outer walls, eventually with floral motifs	00000

#### Construction:

Solid ground floor	••••
Light-weight upper floor	00000
Sloped roof	00000
Roof with long eaves	•••00

## General evaluation:

## **Case Study 5: Observation House**

## *Urban characteristics:*

Free situation on the plot, without a strong relationship house-to-street	•••00
Orientation towards sun, courtyard or view	••••
Merging with the surrounding environment	•0000
Adaptation to the topography of the site	••••
Straightening the shape of house	00000
<u>Courtyard:</u>	
Presence of garden	••••
Secured privacy	••000
A covered outdoor room (pergola/roof's eaves)	••••
Spatial configuration and functions:	
Entrance on the main façade	••••
Service rooms in ground floor or basement	••••
Main living room – "chardak" – open or closed	••••
"Chardak" as a connection room	00000
"Kiosk" as a designated area and an extension of "chardak"	00000
"Kiosk", oriented in the same direction as the house	00000
Semi-public rooms have bigger room height	••••
A room with a hearth	••••
An overhanging upper floors	00000
Protruding bays	00000
Asymmetric rural/symmetric urban dwelling	••••
Compact plan	••••
Minimized transitional area	•••00
An unified unit with an open plan and no gender differentiation	••••

#### *Interior:*

Built-in cupboards	••••
Perimeter seating	00000
Wooden ceiling	••••
Wooden floor	••••
Floor covered with rugs/carpet	••000
Openings flanked with wooden planks	00000
Wall niches	00000

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General evaluation:

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http://images.adsttc.com/media/images/5012/96ae/28ba/0d67/1700/07ac/large_jpg/stringio.jpg?141448 5402, Own, accessed February 11, 2016
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accessed February 11, 2016
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Acadmia.edu,
https://www.academia.edu/24998067/The_20th_century_architecture_in_Bulgaria_a_possible_historio
graphical approach, accessed June 3, 2016

## **Endnotes**

http://www.oxforddictionaries.com/definition/english/globalization, accessed April 2016

https://www.researchgate.net/publication/275354554 TOWARDS GLOBALIZATION THROUGH ARCHITECTURE, accessed June 2016

- <sup>6</sup> Gugov, A., "About the appearance of the Bulgarian Architecture at the end of the XX century", in *Architectural Readings 2007-2008* (Sofia: Academic publisher "Prof. Marin Drinov", 2011), p. 98-101.
- <sup>7</sup> According to the Bulgarian finance information broadcast "Investor", the number of single family houses continues to increase after 2007 (joining the European union) and despite the world financial crisis. It even overruns the community housings and the residential blocks.

http://www.investor.bg/analizi/113/a/stroitelstvoto-na-ednofamilni-kyshti-nabira-skorost-189103/, accessed May 2016

<sup>&</sup>lt;sup>1</sup> Oxford Dictionaries, "Globalization".

<sup>&</sup>lt;sup>2</sup> Napoleon Ono Imaah, "Towards Globalization through Architecture" (PDF file), downloaded from ResearchGate.org,

<sup>&</sup>lt;sup>3</sup> Ibid.

<sup>&</sup>lt;sup>4</sup> James Stevens Curl, Oxford Dictionary of Architecture (Oxford, Oxford University Press), p.1198.

<sup>&</sup>lt;sup>5</sup> Gugov, A., "Multi-family residential buildings in Bulgaria in the second half of the XX century (1950-1990). Façade", in *Architectural Readings 2007-2008* (Sofia: Academic publisher "Prof. Marin Drinov", 2011), p. 104.

<sup>&</sup>lt;sup>8</sup> Holleran, M. (2014), '*Mafia Baroque*': post-socialist architecture and urban planning in Bulgaria. The British Journal of Sociology, 65: 21–42. doi:10.1111/1468-4446.12052

<sup>&</sup>lt;sup>9</sup> Ibid.

<sup>10</sup> Ibid.

<sup>11</sup> Ibid.

Gugov, A., "About the appearance of the Bulgarian Architecture at the end of the XX century", in *Architectural Readings* 2007-2008 (Sofia: Academic publisher "Prof. Marin Drinov", 2011), p. 98-101.

<sup>&</sup>lt;sup>13</sup> Prof. Popov, St., "When in Bulgaria will emerge valuable buildings?", *Stefan Popov* (blog), May 23, 2015, http://www.stefanpopov.org/blog/2, accessed June 2016

<sup>&</sup>lt;sup>14</sup> Prof. Stefan Popov, Professor at the International architectural academy in 1998, Laureate of the highest architectural Prize in Bulgaria – Dimitrov Prize for architectural achievements. Source: <a href="http://www.stefanpopov.org/about.html">http://www.stefanpopov.org/about.html</a>, accessed June 2016

<sup>&</sup>lt;sup>15</sup> Zahariev, A., "Architectural competitions in Bulgaria in the last 10 years", *Architecture* 5 (Sofia: Union of Architects in Bulgaria, 2015), p. 32-34.

<sup>16</sup> Ibid.

<sup>&</sup>lt;sup>17</sup> Popov, P., "The valuables in Architecture", *Architecture* 3 (Sofia: Union of Architects in Bulgaria, 2015), p. 10-13.

<sup>&</sup>lt;sup>18</sup> Holleran, M. (2014), '*Mafia Baroque*': post-socialist architecture and urban planning in Bulgaria. The British Journal of Sociology, 65: 21–42. doi:10.1111/1468-4446.12052

- <sup>19</sup> Gugov, A., "About the appearance of the Bulgarian Architecture at the end of the XX century", in *Architectural Readings* 2007-2008 (Sofia: Academic publisher "Prof. Marin Drinov", 2011), p. 98-101.
- <sup>20</sup> Holleran, M. (2014), '*Mafia Baroque*': post-socialist architecture and urban planning in Bulgaria. The British Journal of Sociology, 65: 21–42. doi:10.1111/1468-4446.12052
- <sup>21</sup> Boyadzhiev, K., National Conference, 15-16.12.2008 National review of the Bulgarian Architecture 2008, quoted in "Where does the Bulgarian Architecture goes?", *Architecture* 5-6 (Sofia: Union of Architects in Bulgaria, 2014), p. 126
- <sup>22</sup> Professor Todor Bulev, Vice-Chairman of the Administrative Board of the Union of Bulgarian Architects 2008. Source:

https://bg.wikipedia.org/wiki/1300\_%D0%B3%D0%BE%D0%B4%D0%B8%D0%BD%D0%B8\_%D0%91%D1%8A%D0%BB%D0%B3%D0%B0%D1%80%D0%B8%D1%8F, accessed May 23, 2016

- <sup>23</sup> Ass. Professor Anton Gugov in "Architecture" at the "Research Institute for Arts", Bulgarian Academy of Science. Source: <a href="http://www.baspress.com/autor.php?l=b&an=112">http://www.baspress.com/autor.php?l=b&an=112</a>, accessed June 8, 2016
- <sup>24</sup> Gugov, A., "About the appearance of the Bulgarian Architecture at the end of the XX century", in *Architectural Readings* 2007-2008 (Sofia: Academic publisher "Prof. Marin Drinov", 2011), p. 98-101.
- <sup>25</sup> Holleran, M. (2014), '*Mafia Baroque*': post-socialist architecture and urban planning in Bulgaria. The British Journal of Sociology, 65: 21–42. doi:10.1111/1468-4446.12052
- <sup>26</sup> Prof. Popov, St., "When in Bulgaria will emerge valuable buildings?", *Stefan Popov* (blog), May 23, 2015, <a href="http://www.stefanpopov.org/blog/2">http://www.stefanpopov.org/blog/2</a>, accessed June 2016
- <sup>27</sup> Angel Zahariev member of group "City" independent organization contending against the corrupt practices in the Bulgarian architectural realm. Source: <a href="http://www.grupagrad.com/-zanas">http://www.grupagrad.com/-zanas</a>, accessed May 7, 2016
- <sup>28</sup> Zahariev, A., "Architectural competitions in Bulgaria in the last 10 years", *Architecture* 5 (Sofia, Union of Architects in Bulgaria, 2015), p. 32-34
- <sup>29</sup> Hing-wah Chau, *Xianfeng? Houfeng? Youfeng?—An analysis of selected contemporary Chinese architects, Yung Ho Chang, Liu Jiakun, and Wang Shu* (1990s-2000s), Frontiers of Architectural Research, Volume 4, Issue 2, June 2015, Pages 146-158, ISSN 2095-2635, http://dx.doi.org/10.1016/j.foar.2015.03.005, accessed May 2016
- 30 Ibid.
- 31 Ibid.
- <sup>32</sup> Kenneth Frampton (born 1930 in Woking, UK), is a British architect, critic, historian and the Ware Professor of Architecture at the Graduate School of Architecture, Planning, and Preservation at Columbia University, New York. Source: https://en.wikipedia.org/wiki/Kenneth\_Frampton, accessed May 2016
- Frampton, K., "Towards a Critical Regionalism: Six Points for an Architecture of Resistance", in Hal Foster, *Anti-Aesthetic* (Washington: Bay Press, 1983), p. 16-30.
- <sup>34</sup> Tzonis, Al. and Lefaivre, L., "Why Critical Reginoalism Today?", in Kate Nesbitt, *Theorizing a New Agenda for Architecture: Anthology of Architectural Theory*, 1965-95 (Princeton: Princeton Architectural Press, 1996), p. 483-492.
- <sup>35</sup> Frampton, K., "Towards a Critical Regionalism: Six Points for an Architecture of Resistance", in Hal Foster, *Anti-Aesthetic* (Washington: Bay Press, 1983), p. 16-30.
- <sup>36</sup> Frampton, K., "Ten Points on an Architecture of Regionalism: A Provisional Polemic", in Vincent B. Canizaro, *Architectural Regionalism: Collected Writings on Place, Identity, Modernity, and Tradition*

(San Francisco: Chronicle Books, 2012), p. 374-385.

- <sup>37</sup> Frampton, K., "Prospects for a Critical Regionalism", in Perspecta, Vol. 20 (1983): p. 147-162.
- <sup>38</sup> Tzonis, Al. and Lefaivre, L., "Why Critical Reginoalism Today?", in Kate Nesbitt, *Theorizing a New Agenda for Architecture: Anthology of Architectural Theory, 1965-95* (Princeton: Princeton Architectural Press, 1996), p. 483-492.
- <sup>39</sup> Frampton, K., "Towards a Critical Regionalism: Six Points for an Architecture of Resistance", in Hal Foster, *Anti-Aesthetic* (Washington: Bay Press, 1983), p. 16-30.
- 40 Ibid.
- <sup>41</sup> Tzonis, Al. and Lefaivre, L., "Why Critical Reginoalism Today?", in Kate Nesbitt, *Theorizing a New Agenda for Architecture: Anthology of Architectural Theory, 1965-95* (Princeton: Princeton Architectural Press, 1996), p. 483-492.
- 42 Ibid.
- 43 Ibid.
- 44 Ibid.
- 45 Ibid.
- <sup>46</sup> Frampton, K., "Prospects for a Critical Regionalism", in *Perspecta*, Vol. 20 (1983): p. 147-162.
- 47 Ibid.
- 48 Ibid.
- <sup>49</sup> Frampton, K., "Towards a Critical Regionalism: Six Points for an Architecture of Resistance", in Hal Foster, *Anti-Aesthetic* (Washington: Bay Press, 1983), p. 16-30.
- 50 Ibid.
- <sup>51</sup> Frampton, K., "Ten Points on an Architecture of Regionalism: A Provisional Polemic", in Vincent B. Canizaro, *Architectural Regionalism: Collected Writings on Place, Identity, Modernity, and Tradition* (San Francisco: Chronicle Books, 2012), p. 374-385.
- <sup>52</sup> Frampton, K., "Prospects for a Critical Regionalism", in *Perspecta*, Vol. 20 (1983): p. 147-162.
- <sup>53</sup> Frampton, K., "Towards a Critical Regionalism: Six Points for an Architecture of Resistance", in Hal Foster, *Anti-Aesthetic* (Washington: Bay Press, 1983), p. 16-30.
- 54 Ibid.
- <sup>55</sup> Frampton, K., "Prospects for a Critical Regionalism", in *Perspecta*, Vol. 20 (1983): p. 147-162.
- <sup>56</sup> Fessas-Emmanouil, H., "Reconciling Modernity and Tradition. The Universal Relevance of Aris Konstantinidis' Architectonic Philosophy", in *Architecture* 1 (Sofia: Union of Architects in Bulgaria, 2010), p. 34-39.
- <sup>57</sup> Ibid.
- 58 Ibid.
- 59 Ibid.
- <sup>60</sup> V. Goethe, J.W., "Faust", First Part, Poet, Lines 73-74 in Luke, David (1987). Faust, Part One. Oxford: Oxford University Press. <u>ISBN 978-0-19-953621-4</u>
- <sup>61</sup> Li Xiaodong practicing architect, educator and researcher on architecture. Laureate of the RAIC Moriyama Prize, Aga Khan Award for Architecture in 2010, Honorary Fellowship by AIA and others. Source: http://www.lixiaodong.net/indax.html, accessed on August 24, 2016
- Royal Architectural Institute of Canada (RAIC), "An interview with Li Xiaodong", <a href="https://www.raic.org/raic/interview-li-xiaodong">https://www.raic.org/raic/interview-li-xiaodong</a>, accessed June 2016
- 63 Ibid.

- <sup>64</sup> Kate Goodwin, "Meet the architects: Li Xiaodong. Sensing Spaces", RoyalAcademy.org.uk, December 12, 2013, accessed May 2016
- <sup>65</sup> Perspective Global, "An Interview with Li Xiaodong", Inspiring Architecture & Design, April 12, 2016, webcast, <a href="http://www.perspectiveglobal.com/architecture/an-interview-with-li-xiaodong">http://www.perspectiveglobal.com/architecture/an-interview-with-li-xiaodong</a>, accessed May 2016
- <sup>66</sup> Royal Architectural Institute of Canada (RAIC), "An interview with Li Xiaodong", <a href="https://www.raic.org/raic/interview-li-xiaodong">https://www.raic.org/raic/interview-li-xiaodong</a>, accessed June 2016
- 67 Ibid.
- <sup>68</sup> Botz-Bornstein, Th., "WANG Shu and the Possibilities of Architectural Regionalism in China", Nordic Journal of Architectural Research, Vol. 21, No1 (2009), <a href="http://arkitekturforskning.net/na">http://arkitekturforskning.net/na</a>, accessed June 2016
- 69 Ibid.
- 70 Ibid.
- <sup>71</sup> China Academy of Arts, "School of Architecture", <a href="http://en.caa.edu.cn/?page\_id=6813">http://en.caa.edu.cn/?page\_id=6813</a>, accessed June 2016
- <sup>72</sup> Schelling Architekturstiftung, "Preisträger 2010", Source: http://schelling-architekturpreis.org/index.php?id=46, accessed June 2016
- <sup>73</sup> The Pritzker Architecture Prize, "Previous Laureates", <a href="http://www.pritzkerprize.com/laureates/2012">http://www.pritzkerprize.com/laureates/2012</a>, accessed June 2016
- <sup>74</sup> Hing-wah Chau, Xianfeng? Houfeng? Youfeng?—An analysis of selected contemporary Chinese architects, Yung Ho Chang, Liu Jiakun, and Wang Shu (1990s-2000s), Frontiers of Architectural Research, Volume 4, Issue 2, June 2015, Pages 146-158, ISSN 2095-2635, http://dx.doi.org/10.1016/j.foar.2015.03.005, accessed May 2016
- <sup>75</sup> Botz-Bornstein, Th., "WANG Shu and the Possibilities of Architectural Regionalism in China", *Nordic Journal of Architectural Research*, Vol. 21, No1 (2009), <a href="http://arkitekturforskning.net/na">http://arkitekturforskning.net/na</a>, accessed June 2016
- <sup>76</sup> Hing-wah Chau, *Xianfeng? Houfeng? Youfeng?—An analysis of selected contemporary Chinese architects, Yung Ho Chang, Liu Jiakun, and Wang Shu* (1990s-2000s), Frontiers of Architectural Research, Volume 4, Issue 2, June 2015, Pages 146-158, ISSN 2095-2635, http://dx.doi.org/10.1016/j.foar.2015.03.005, accessed May 2016
- Hing-Wah Chau, "City, Tradition and Contemporary China. From Wang Shu's Works to Review his Critical Practice with the City" (PDF file), downloaded from Research Gate,

https://www.researchgate.net/publication/271559737 City Tradition and Contemporary China From Wang Shu's Works to Review his Critical Practice with the City, accessed June 2016

- <sup>78</sup> Quentin Yu, "Critical Regionalism in Contemporary China: Transcending meanings through the use of repurposed material" (PDF file), downloaded from
- https://www.academia.edu/10316756/Critical Regionalism in Contemporary China Transcending m eanings through the use of repurposed material, accessed June 2016
- <sup>79</sup> Hing-Wah Chau, "City, Tradition and Contemporary China. From Wang Shu's Works to Review his Critical Practice with the City" (PDF file), downloaded from Research Gate,
- https://www.researchgate.net/publication/271559737 City Tradition and Contemporary China From
  Wang Shu's Works to Review his Critical Practice with the City, accessed June 2016
- 80 Botz-Bornstein, Th., "WANG Shu and the Possibilities of Architectural Regionalism in China",

Nordic Journal of Architectural Research, Vol. 21, No1 (2009), <a href="http://arkitekturforskning.net/na">http://arkitekturforskning.net/na</a>, accessed June 2016

- 81 Ibid.
- <sup>82</sup> Hing-Wah Chau, "City, Tradition and Contemporary China. From Wang Shu's Works to Review his Critical Practice with the City" (PDF file), downloaded from Research Gate,

https://www.researchgate.net/publication/271559737 City Tradition and Contemporary China From Wang Shu's Works to Review his Critical Practice with the City, accessed June 2016

<sup>83</sup> Quentin Yu, "Critical Regionalism in Contemporary China: Transcending meanings through the use of repurposed material" (PDF file), downloaded from

https://www.academia.edu/10316756/Critical\_Regionalism\_in\_Contemporary\_China\_Transcending\_m\_eanings\_through\_the\_use\_of\_repurposed\_material, accessed June 2016

Anton Mladenov Torniov – architect, pioneer in Bulgarian Romantic nationalism architecture after Liberation in 1878. Architect of the Bulgarian Pavilion in Liege, 1905. Source:

https://bg.wikipedia.org/wiki/%D0%90%D0%BD%D1%82%D0%BE%D0%BD\_%D0%A2%D0%BE%D0%BE%D0%BD\_%D0%A2%D0%BE%D0%BE%D0%BD, accessed May 22, 2016

85 Stela Tasheva, "The quest for national art and style in Bulgarian architecture during the 20th century", June 2015, Conference: Rethinking Histories of Arts in the 20th Century, Sofia,

https://www.researchgate.net/publication/301635319 The quest for national art and style in Bulga rian architecture during the 20th century, May 21, 2016

Marinov, Chavdar, "Whose is this house? The invention of the Bulgarian Revival Architecture" (Word file), downloaded from BoinaSlava.net,

forum.boinaslava.net/attachment.php?attachmentid=22434&d=1390636447, accessed May 22 ,2016

- 87 Stiller, A. Bulgarien: Architektonische Fragmente (Vienna 2007), Pustet Anton, p. 113.
- 88 Stiller, A. Bulgarien: Architektonische Fragmente (Vienna 2007), Pustet Anton
- <sup>89</sup> Prof. Dr. Stamov, St., Architecture of the old Bulgarian villages (Sofia 2006)
- Marinov, Chavdar, "Whose is this house? The invention of the Bulgarian Revival Architecture" (Word file), downloaded from BoinaSlava.net,

forum.boinaslava.net/attachment.php?attachmentid=22434&d=1390636447, accessed May 22,2016

<sup>91</sup> Raycheva, R., "An Empire Style Furniture Set ant Nedkovich House, Old Town Plovdiv" (PDF file), downloaded from ResearchGate.net,

https://www.researchgate.net/publication/297594651 An Empire Style Furniture Set at Nedkovich

House Old Town Plovdiv?ev=prf pub, accessed April 8, 2016

<sup>92</sup> Vodenova, P.M. and Lozanova, S.S., "The Baby Cradle in the traditional Bulgarian home: The 15<sup>th</sup>-19<sup>th</sup> century" (Word file), downloaded from ResearchGate.net,

https://www.researchgate.net/publication/280601745\_LULKATA\_V\_TRADICIONNOTO\_BLGARSK O\_ZILISE, accessed April, 8, 2016

- <sup>93</sup> Aleksova, D., "The Magic of Rhodopes, illustrated through the Revival architecture. Existing traditions and folklore of Shiroka Laka" (PDF file), downloaded from New Bulgarian University, nbu.bg, <a href="http://eprints.nbu.bg/1655/1/18.pdf">http://eprints.nbu.bg/1655/1/18.pdf</a>, accessed April 9, 2016
- <sup>94</sup> Ginio E. and Kaser K., "Introduction: Towards a Comparative Study of the Balkans and the Middle East" (PDF file), downloaded from The Hebrew University of Jerusalim,

http://www.cas.huji.ac.il/Ottoman%20Legacies\_Introduction.pdf, accessed July 18, 2016

<sup>95</sup> Raycheva, R. (6/2012) "Architecture of Residential Buildings in Bulgaria from the Revival Period", *Architecture and Urban Planning*, p. 17, Available:

https://www.researchgate.net/publication/272809098\_Architecture\_of\_Residential\_Buildings\_in\_Bulgaria\_from\_the\_Revival\_Period, accessed April 2, 2016

Marinov, Chavdar, "Whose is this house? The invention of the Bulgarian Revival Architecture" (Word file), downloaded from BoinaSlava.net,

forum.boinaslava.net/attachment.php?attachmentid=22434&d=1390636447, accessed May 22, 2016 <sup>97</sup> Ibid.

- <sup>98</sup> Alexander Koller & Jess Koller Lumley (2014) "Strategies of the Bulgarian vernacular: continuity in Bulgarian house design from National Revival times to the present day", *The Journal of Architecture*, 19:5, p.740-778, Available: http://dx.doi.org/10.1080/13602365.2014.968187, accessed March 24, 2016, p. 740.
- <sup>99</sup> Wikipedia, "Second Bulgarian Empire", https://en.wikipedia.org/wiki/Second\_Bulgarian\_Empire, accessed January, 2016
- Marinov, Chavdar, "Whose is this house? The invention of the Bulgarian Revival Architecture" (Word file), downloaded from BoinaSlava.net,

forum.boinaslava.net/attachment.php?attachmentid=22434&d=1390636447, accessed May 22 ,2016 lbid.

<sup>102</sup> Cerasi, M. (1998) "The Formation of Ottoman House Types: A Comparative Study in Interaction with Neighboring Cultures", *Muqarnas*, Vol. 15, p. 116-156, Available:

http://www.jstor.org/stable/1523280, accessed: March 2, 2016, p. 129-132.

- <sup>103</sup> Ibid.
- <sup>104</sup> Raycheva, R. (6/2012) "Architecture of Residential Buildings in Bulgaria from the Revival Period", *Architecture and Urban Planning*, Available:

https://www.researchgate.net/publication/272809098\_Architecture\_of\_Residential\_Buildings\_in\_Bulgaria from the Revival Period

- Alexander Koller & Jess Koller Lumley (2014) "Strategies of the Bulgarian vernacular: continuity in Bulgarian house design from National Revival times to the present day", *The Journal of Architecture*, 19:5, p.740-778, Available: http://dx.doi.org/10.1080/13602365.2014.968187, accessed March 24, 2016 lbid.
- <sup>107</sup> Dzhangozov, K., Bulgarian National Architecture (Sofia: ABV, 1943)
- Marinov, Chavdar, "Whose is this house? The invention of the Bulgarian Revival Architecture" (Word file), downloaded from BoinaSlava.net,

forum.boinaslava.net/attachment.php?attachmentid=22434&d=1390636447, accessed May 22 ,2016

- Alexander Koller & Jess Koller Lumley (2014) "Strategies of the Bulgarian vernacular: continuity in Bulgarian house design from National Revival times to the present day", *The Journal of Architecture*, 19:5, p.740-778, Available: http://dx.doi.org/10.1080/13602365.2014.968187, accessed March 24, p. 772.
- Chamber of Architects in Bulgaria founded in 1937, restored in 1991, institutionalized in 2003, http://www.kab.bg, accessed May 2016
- WhAT Association a group of contemporary architects: Aneta Vasileva, Zhana Stoilova, Nikolai Angelov, Hristo Govedarov, dealing with contemporary architectural projects in Bulgaria. <a href="http://whata.org/about">http://whata.org/about</a>, accessed June 6, 2016

- WhATA, "Successful imitation of Revival house", <a href="http://whata.org/blog/nedelen-p%D0%B0tepis">http://whata.org/blog/nedelen-p%D0%B0tepis</a>, accessed June 6, 2016
- Stela Tasheva Architect, Ass. Professor at Bulgarian Academy of Sciences, Institute for Arts Studies, <a href="https://www.researchgate.net/profile/Stela">https://www.researchgate.net/profile/Stela</a> Tasheva, accessed May 21, 2016
- Stela Tasheva, "The quest for national art and style in Bulgarian architecture during the 20<sup>th</sup> century", June 2015, Conference: Rethinking Histories of Arts in the 20<sup>th</sup> Century, Sofia, <a href="https://www.researchgate.net/publication/301635319">https://www.researchgate.net/publication/301635319</a> The quest for national art and style in Bulga rian architecture during the 20th century, May 21, 2016
- Lyutov house built in 1854 by Plovdiv master-builders in contract of the tax-collector and cattle-drover Stefan Topalov and later bought by the trader Petko Lyutov, <a href="http://koprivshtica-bg.com/page/%D0%BB%D1%8E%D1%82%D0%BE%D0%B2%D0%B0%D1%82">http://koprivshtica-bg.com/page/%D0%BB%D1%8E%D1%82%D0%BE%D0%B2%D0%B0%D1%82</a> %D0%B0-%D0%BA%D1%8A%D1%89%D0%B0, accessed June 20, 2016
- <sup>116</sup> Lyuben Karavelov Bulgarian poet, writer, national hero participating in the liberation movements against the Ottoman empire.
- 117 Stefan Dechev, "Intimation of the inventied. B: In the quest of the Bulgarian: Networks of national intimacy XIX-XXI century" (Sofia: Institute for Arts Studies, 2010) quoted in Stela Tasheva, "The quest for national art and style in Bulgarian architecture during the 20<sup>th</sup> century", June 2015, Conference: Rethinking Histories of Arts in the 20<sup>th</sup> Century, Sofia,
- https://www.researchgate.net/publication/301635319 The quest for national art and style in Bulga rian architecture during the 20th century, May 21, 2016
- Marinov, Chavdar, "Whose is this house? The invention of the Bulgarian Revival Architecture" (Word file), downloaded from BoinaSlava.net,
- forum.boinaslava.net/attachment.php?attachmentid=22434&d=1390636447, accessed May 22 ,2016 libid.
- 120 Stoyanov, Iv., *History of the Bulgarian Revival* (Veliko Tarnovo: Abagar, 1999),TXT e-book, http://chitanka.info/text/5773/61, accessed March 17, 2016
- <sup>121</sup> Arbaliev, G., Architectural elements and details of Bulgarian Revival houses (Sofia: State Publishing "Technic", 1959), p. 4-5
- <sup>122</sup> Raycheva, R. (6/2012) "Architecture of Residential Buildings in Bulgaria from the Revival Period", *Architecture and Urban Planning*, p. 17, Available:
- https://www.researchgate.net/publication/272809098\_Architecture\_of\_Residential\_Buildings\_in\_Bulgaria\_from\_the\_Revival\_Period, accessed April 2, 2016
- <sup>123</sup> Stiller, A. Bulgarien: Architektonische Fragmente (Vienna 2007), Pustet Anton, p. 32.
- Ottoman rule, "Bulgarian Society under The Turks", http://countrystudies.us/bulgaria/8.htm, accessed March 4, 2016
- 125 Stiller, A. Bulgarien: Architektonische Fragmente (Vienna 2007), Pustet Anton, p. 32.
- 126 Портал за земята и хората (Portal of the world and the people), "Архитектура Българска възрожденска къща" (Architecture- Bulgarian revival house),
- http://www.bgjourney.com/Architecture/vk/obshto.html, accessed February 6, 2016
- <sup>127</sup> Bulgarian Academy of Science, *Short History of the Bulgarian Architecture* (Sofia: Publisher of Bulgarian Academy of Science, 1965), p. 225.
- <sup>128</sup> Cerasi, M. (1998) "The Formation of Ottoman House Types: A Comparative Study in Interaction with Neighboring Cultures", *Muqarnas*, Vol. 15, p. 116-156, Available:

http://www.jstor.org/stable/1523280, accessed March 2, 2016, p. 119.

- <sup>129</sup> Bulgarian Academy of Science, *Short History of the Bulgarian Architecture* (Sofia: Publisher of Bulgarian Academy of Science, 1965), p. 210-219.
- <sup>130</sup> Raycheva, R. (6/2012) "Architecture of Residential Buildings in Bulgaria from the Revival Period", *Architecture and Urban Planning*, p.17-24, Available:
- https://www.researchgate.net/publication/272809098\_Architecture\_of\_Residential\_Buildings\_in\_Bulga ria from the Revival Period, accessed April 2, 2016, p. 19.
- Alexander Koller & Jess Koller Lumley (2014) "Strategies of the Bulgarian vernacular: continuity in Bulgarian house design from National Revival times to the present day", *The Journal of Architecture*, 19:5, p.740-778, Available: http://dx.doi.org/10.1080/13602365.2014.968187, accessed March 24, 2016, p. 752.
- <sup>132</sup> Ibid., p. 751.
- <sup>133</sup> Ibid., p. 764.
- <sup>134</sup> Stiller, A. Bulgarien: Architektonische Fragmente (Vienna 2007), Pustet Anton, p. 38.
- <sup>135</sup> Bulgarian Academy of Science, *Short History of the Bulgarian Architecture* (Sofia: Publisher of Bulgarian Academy of Science, 1965), p. 211.
- <sup>136</sup> Stiller, A. Bulgarien: Architektonische Fragmente (Vienna 2007), Pustet Anton, p. 36.
- <sup>137</sup> Raycheva, R. (6/2012) "Architecture of Residential Buildings in Bulgaria from the Revival Period", *Architecture and Urban Planning*, p.17-24, Available:

https://www.researchgate.net/publication/272809098\_Architecture\_of\_Residential\_Buildings\_in\_Bulga ria from the Revival Period, accessed April 2, 2016, p. 23.

- <sup>138</sup> Zlatev, T., *Spaces in the Bulgarian Revival house*, (Sofia: State Pubilshing "Technic", 1958), p. 9-44.
- 139 Ibid.
- <sup>140</sup> Ibid.
- <sup>141</sup> Ibid.
- 142 Ibid.
- <sup>143</sup> Bulgarian Academy of Science, *Short History of the Bulgarian Architecture* (Sofia: Publisher of Bulgarian Academy of Science, 1965), p. 196-210.
- 144 Ibid.
- <sup>145</sup> Zlatev, T., Spaces in the Bulgarian Revival house, (Sofia: State Publishing "Technic", 1958), p. 9-44
- <sup>146</sup> Forma-1 Architects, "Архитектурата в България" (Architecture in Bulgaria),

http://www.forma1bg.com/bulgarian-architecture/modern-bulgarian-architecture.html, accessed February 5, 2016

- <sup>147</sup> Bulgarian Academy of Science, Short History of the Bulgarian Architecture (Sofia: Publisher of Bulgarian Academy of Science, 1965), p. 196-210.
- <sup>148</sup> Ibid.
- <sup>149</sup> Zlatev, T., Spaces in the Bulgarian Revival house, (Sofia: State Publishing "Technic", 1958), p. 9-44.
- <sup>150</sup> Raycheva, R. (6/2012) "Architecture of Residential Buildings in Bulgaria from the Revival Period", *Architecture and Urban Planning*, p. 17-24, Available:
- https://www.researchgate.net/publication/272809098 Architecture of Residential Buildings in Bulga

- ria\_from\_the\_Revival\_Period, accessed April 2, 2016, p. 23.
- Alexander Koller & Jess Koller Lumley (2014) "Strategies of the Bulgarian vernacular: continuity in Bulgarian house design from National Revival times to the present day", *The Journal of Architecture*, 19:5, p.740-778, Available: http://dx.doi.org/10.1080/13602365.2014.968187, accessed March 24, 2016, p. 760.
- <sup>152</sup> Bulgarian Academy of Science, *Short History of the Bulgarian Architecture* (Sofia: Publisher of Bulgarian Academy of Science, 1965), p. 196-210.
- <sup>153</sup> Raycheva, R. (6/2012) "Architecture of Residential Buildings in Bulgaria from the Revival Period", *Architecture and Urban Planning*, p. 17-24, Available:
- https://www.researchgate.net/publication/272809098\_Architecture\_of\_Residential\_Buildings\_in\_Bulgaria\_from\_the\_Revival\_Period, accessed April 2, 2016, p. 23.
- <sup>154</sup> Bulgarian Academy of Science, *Short History of the Bulgarian Architecture* (Sofia: Publisher of Bulgarian Academy of Science, 1965), p. 196-210.
- <sup>155</sup> Raycheva, R. (6/2012) "Architecture of Residential Buildings in Bulgaria from the Revival Period", *Architecture and Urban Planning*, p. 17-24, Available:
- https://www.researchgate.net/publication/272809098\_Architecture\_of\_Residential\_Buildings\_in\_Bulga ria from the Revival Period, accessed April 2, 2016, p. 23.
- Alexander Koller & Jess Koller Lumley (2014) "Strategies of the Bulgarian vernacular: continuity in Bulgarian house design from National Revival times to the present day", *The Journal of Architecture*, 19:5, p.740-778, Available: http://dx.doi.org/10.1080/13602365.2014.968187 [Accessed 24 Mar. 2016], p. 751.
- <sup>157</sup> Bulgarian Academy of Science, *Short History of the Bulgarian Architecture* (Sofia: Publisher of Bulgarian Academy of Science, 1965), p. 196-210.
- <sup>158</sup> Ibid.
- <sup>159</sup> Ibid.
- <sup>160</sup> Ibid.
- <sup>161</sup> Raycheva, R. (2015) "Wooden structure of historic 19<sup>th</sup>C houses in Bulgarian lands", *Pro Ligno*, Vol. 11:4, p.440-449, Available: http://proligno.ro/en/articles/2015/4/Raycheva\_final.pdf, accessed April 3, 2016, p. 442.
- <sup>162</sup> Bulgarian Academy of Science, *Short History of the Bulgarian Architecture* (Sofia: Publisher of Bulgarian Academy of Science, 1965), p. 132-135.
- <sup>163</sup> Raycheva, R. (2015) "Wooden structure of historic 19<sup>th</sup>C houses in Bulgarian lands", *Pro Ligno*, Vol. 11:4, p.440-449, Available: http://proligno.ro/en/articles/2015/4/Raycheva\_final.pdf, accessed April 3, 2016, p. 440.
- <sup>164</sup> Ibid., p. 441.
- <sup>165</sup> Bulgarian Academy of Science, *Short History of the Bulgarian Architecture* (Sofia: Publisher of Bulgarian Academy of Science, 1965), p. 132-135.
- Raycheva, R. (2015) "Wooden structure of historic 19th Chouses in Bulgarian lands", *Pro Ligno*, Vol. 11:4, p.440-449, Available: http://proligno.ro/en/articles/2015/4/Raycheva\_final.pdf, accessed April 3, 2016, p. 441.
- <sup>167</sup> Ibid.
- <sup>168</sup> Ibid., p. 443.
- <sup>169</sup> Bulgarian Academy of Science, Short History of the Bulgarian Architecture (Sofia: Publisher of

Bulgarian Academy of Science, 1965), p. 132-135.

- <sup>170</sup> Raycheva, R. (2015) "Wooden structure of historic 19<sup>th</sup>C houses in Bulgarian lands", *Pro Ligno*, Vol. 11:4, p.440-449, Available: http://proligno.ro/en/articles/2015/4/Raycheva\_final.pdf, accessed April 3, 2016, p. 441.
- <sup>171</sup> Ibid.
- <sup>172</sup> Ibid., p. 91.
- Prof. Dr. Stamov, St., Architecture of the old Bulgarian villages (Sofia, 2006), p. 88.
- 174 Ibid
- Raycheva, R. (2015) "Wooden structure of historic 19thC houses in Bulgarian lands", *Pro Ligno*, Vol. 11:4, p.440-449, Available: http://proligno.ro/en/articles/2015/4/Raycheva\_final.pdf, accessed April 3, 2016, p. 442.
- <sup>176</sup> Raycheva, R. (6/2012) "Architecture of Residential Buildings in Bulgaria from the Revival Period", *Architecture and Urban Planning*, p.17-24, Available:

https://www.researchgate.net/publication/272809098\_Architecture\_of\_Residential\_Buildings\_in\_Bulga ria from the Revival Period, accessed April 2, 2016, p. 23.

- <sup>177</sup> Bulgarian Academy of Science, *Short History of the Bulgarian Architecture* (Sofia: Publisher of Bulgarian Academy of Science, 1965), p. 132-135.
- <sup>178</sup> Raycheva, R. (6/2012) "Architecture of Residential Buildings in Bulgaria from the Revival Period", *Architecture and Urban Planning*, p. 17-24, Available:

https://www.researchgate.net/publication/272809098\_Architecture\_of\_Residential\_Buildings\_in\_Bulga ria from the Revival Period, accessed April 2, 2016, p. 22.

- <sup>179</sup> Zlatev, T., *Spaces in the Bulgarian Revival house*, (Sofia: State Pubilshing "Technic", 1958), p. 9-44.
- <sup>180</sup> Kate ed. Nesbitt, 1996. *Theorizing a New Agenda for Architecture: An Anthology of Architectural Theory 1965 1995*. 2nd Edition. Princeton Architectural Press, p.448.
- <sup>181</sup> Stiller, A. Bulgarien: Architektonische Fragmente (Vienna 2007), Pustet Anton, p.32.
- Prof. Dr. Stamov, St., Architecture of the old Bulgarian villages (Sofia 2006), p. 11-12.
- <sup>183</sup> Berbenliev, P., The Architectural Heritage on the Lands of Bulgaria (Sofia: Publishing "September", 1987), p.156-162.
- <sup>184</sup> Prof. Dr. Stamov, St., Architecture of the old Bulgarian villages (Sofia 2006), p.104.
- <sup>185</sup> Ibid.
- <sup>186</sup> Ibid.
- <sup>187</sup> Bulgarian Academy of Science, *Short History of the Bulgarian Architecture* (Sofia: Publisher of Bulgarian Academy of Science, 1965), p. 199-226
- <sup>188</sup> Ibid.
- <sup>189</sup> Ibid.
- <sup>190</sup> Ibid.
- <sup>191</sup> Ibid.
- <sup>192</sup> Ibid.
- <sup>193</sup> Ibid.
- <sup>194</sup> Ibid.
- <sup>195</sup> Ibid.
- 196 Ibid.

<sup>197</sup> Raycheva, R. (6/2012) "Architecture of Residential Buildings in Bulgaria from the Revival Period", *Architecture and Urban Planning*, p. 17-24, Available:

https://www.researchgate.net/publication/272809098\_Architecture\_of\_Residential\_Buildings\_in\_Bulgaria\_from\_the\_Revival\_Period, accessed April 2, 2016, p. 20.

- <sup>198</sup> Bulgarian Academy of Science, *Short History of the Bulgarian Architecture* (Sofia: Publisher of Bulgarian Academy of Science, 1965), p. 199-226.
- 199 Ibid.
- <sup>200</sup> Stoilova, L., "The 20<sup>th</sup> century architecture in Bulgaria: a possible historiographical approach" in Rethinking histories of Arts in the 20<sup>th</sup> Century (Sofia: Institute of Arts Studies, BAS, 2015), (PDF file) downloaded from Acadmia.edu,

https://www.academia.edu/24998067/The 20th century architecture in Bulgaria a possible historio graphical approach, accessed June 3, 2016

- <sup>201</sup> Alexander Koller & Jess Koller Lumley (2014) "Strategies of the Bulgarian vernacular: continuity in Bulgarian house design from National Revival times to the present day", *The Journal of Architecture*, 19:5, p.740-778, Available: http://dx.doi.org/10.1080/13602365.2014.968187, accessed March 24, 2016, p. 745.
- <sup>202</sup> Cerasi, M. (1998) "The Formation of Ottoman House Types: A Comparative Study in Interaction with Neighboring Cultures", *Muqarnas*, Vol. 15, p. 116-156, Available:

http://www.jstor.org/stable/1523280, accessed March 2, 2016, p. 116.

- <sup>203</sup> Ibid., p.130-132.
- <sup>204</sup> Ibid., p.119.
- <sup>205</sup> Ibid., p.121.
- <sup>206</sup> Dengiz, E. Burçin (2001) "Boundaries of gendered space: Traditional Turkish house", Available: http://www.thesis.bilkent.edu.tr/0001734.pdf, accessed March 2, 2016, p. 34.
- <sup>207</sup> Cerasi, M. (1998) "The Formation of Ottoman House Types: A Comparative Study in Interaction with Neighboring Cultures", *Muqarnas*, Vol. 15, p. 116-156, Available:

http://www.jstor.org/stable/1523280, accessed March 2, 2016, p. 120.

- <sup>208</sup> Wikipedia, "Konak (residence)", https://en.wikipedia.org/wiki/Konak\_%28residence%29, accessed March, 2016
- <sup>209</sup> Cerasi, M. (1998) "The Formation of Ottoman House Types: A Comparative Study in Interaction with Neighboring Cultures", *Muqarnas*, Vol. 15, p. 116-156, Available:

http://www.jstor.org/stable/1523280, accessed March 2, 2016, p. 140.

- <sup>210</sup> Dengiz, E. Burçin (2001) "Boundaries of gendered space: Traditional Turkish house", Available: http://www.thesis.bilkent.edu.tr/0001734.pdf, accessed March 2, 2016, p. 30.
- <sup>211</sup> Ibid., p. 33.
- <sup>212</sup> Ibid., p. 53.
- <sup>213</sup> Ibid., p. 37.
- <sup>214</sup> Ibid., p. 53-55.
- <sup>215</sup> Cerasi, M. (1998) "The Formation of Ottoman House Types: A Comparative Study in Interaction with Neighboring Cultures", *Muqarnas*, Vol. 15, p. 116-156, Available:

http://www.jstor.org/stable/1523280, accessed March 2, 2016, p. 119-120.

<sup>216</sup> Dengiz, E. Burçin (2001) "Boundaries of gendered space: Traditional Turkish house", Available: http://www.thesis.bilkent.edu.tr/0001734.pdf, accessed March 2, 2016, p. 34.

<sup>217</sup> Cerasi, M. (1998) "The Formation of Ottoman House Types: A Comparative Study in Interaction with Neighboring Cultures", *Muqarnas*, Vol. 15, p. 116-156, Available:

http://www.jstor.org/stable/1523280, accessed March 2, 2016, p. 119-120.

<sup>218</sup> Raycheva, R. (6/2012) "Architecture of Residential Buildings in Bulgaria from the Revival Period", *Architecture and Urban Planning*, p.17-24, Available:

https://www.researchgate.net/publication/272809098\_Architecture\_of\_Residential\_Buildings\_in\_Bulgaria\_from\_the\_Revival\_Period, accessed April 2, 2016, p. 23.

- <sup>219</sup> Ibid., p. 22.
- <sup>220</sup> Ibid.
- <sup>221</sup> Ibid.
- <sup>222</sup> Cerasi, M. (1998) "The Formation of Ottoman House Types: A Comparative Study in Interaction with Neighboring Cultures", *Mugarnas*, Vol. 15, p. 116-156, Available:

http://www.jstor.org/stable/1523280, accessed March 2, 2016, p. 119-120.

<sup>223</sup> Raycheva, R. (6/2012) "Architecture of Residential Buildings in Bulgaria from the Revival Period", *Architecture and Urban Planning*, p. 17-24, Available:

https://www.researchgate.net/publication/272809098\_Architecture\_of\_Residential\_Buildings\_in\_Bulga ria\_from\_the\_Revival\_Period, accessed April 2, 2016, p. 23.

- <sup>224</sup> Ibid., p. 24.
- <sup>225</sup> Ibid., p. 23
- <sup>226</sup> Cerasi, M. (1998) "The Formation of Ottoman House Types: A Comparative Study in Interaction with Neighboring Cultures", *Muqarnas*, Vol. 15, p. 116-156, Available:

http://www.jstor.org/stable/1523280, accessed March 2, 2016, p. 125.

- <sup>227</sup> Balkan Vernacular Architecture, "Greece", http://balkanarchitecture.org/greece/greece.php, accessed March, 2016
- <sup>228</sup> Ibid., http://balkanarchitecture.org/greece/ayiosgermanos1.php ayiosgermanos7.php, accessed March, 2016
- <sup>229</sup> Ibid., "Bosnia", http://balkanarchitecture.org/bosnia/sarajevo1.php sarajevo7.php, accessed March, 2016
- <sup>230</sup> Ibid., http://balkanarchitecture.org/bosnia/mostar1.php mostar7.php, accessed March, 2016
- <sup>231</sup> Wikipedia, "Architecture of Bosnia and Herzegovina",

 $https://en.wikipedia.org/wiki/Architecture\_of\_Bosnia\_and\_Herzegovina, accessed March, 2016$ 

<sup>232</sup> Cerasi, M. (1998) "The Formation of Ottoman House Types: A Comparative Study in Interaction with Neighboring Cultures", *Mugarnas*, Vol. 15, p. 116-156, Available:

http://www.jstor.org/stable/1523280, accessed March 2, 2016, p. 127.

<sup>233</sup> Balkan Vernacular Architecture, "Donja Koprivna, Bosnia",

http://balkanarchitecture.org/bosnia/donjakoprivna1.php, accessed March, 2016

- <sup>234</sup> Patrascu, Gh. (2008) "Vernacular heritage in Romania", *The rural vernacular habitat, a heritage in our landscape*, Vol. 1, Available: http://www.unimi.it/img/news/Futuropa\_1\_EN.pdf, accessed April 2, 2016
- <sup>235</sup> Bardzinska-Bonenberg, T. (2009) "Romanian rural architecture Diversity of homesteads", *Architecture, Civil engineering, Environment,* Vol. 4, p. 11-18, Available:

http://acee-journal.pl/cmd.php?cmd=download&id=dbitem:article:id=99&field=fullpdf, accessed April 2, 2016, p. 12-13.

<sup>236</sup> Balkan Vernacular Architecture, "Curtișoara, Romania",

http://balkanarchitecture.org/romania/curtisoara1.php - curtisoara7.php, accessed March, 2016

- <sup>237</sup> Ibid., http://balkanarchitecture.org/serbia/serbia.php, accessed March, 2016
- <sup>238</sup> Ana Radivojević, Mirjana Roter Blagojević & Aleksandar Rajčić (2014) The issue of thermal performance and protection and modernisation of traditional half-timbered (bondruk) style houses in Serbia, Journal of Architectural Conservation, 20:3, 209-225,

DOI:http://dx.doi.org/10.1080/13556207.2014.984508, accessed March 24, 2016, p. 213.

- <sup>239</sup> Ibid., p. 211-219.
- <sup>240</sup> Balkan Vernacular Architecture, "Serbia", http://balkanarchitecture.org/serbia/serbia.php, accessed March 2016
- <sup>241</sup> Nauka, "Европейската архитектура на българския град в края на XIX век" (The European architecture of the Bulgarian city at the end of the XIX century),

http://nauka.bg/a/%D0%B5%D0%B2%D1%80%D0%BE%D0%BF%D0%B5%D0%B9%D1%81%D0%BA%D0%B0%D1%82%D0%B0-%D0%B0%D1%80%D1%85%D0%B8%D1%82%D0%B5%D0%BA%D1%82%D1%83%D1%80%D0%B0-%D0%BD%D0%B0-%D0%B1%D1%8A%D0%BB%D0%B3%D0%B0%D1%80%D1%81%D0%BA%D0%B8%D1%8F-%D0%B3%D1%80%D0%B0%D0%B4-%D0%B2-%D0%BA%D1%80%D0%B0%D1%8F-%D0%BD%D0%B0-xix-%D0%B2%D0%B5%D0%BA, accessed April 24, 2016

- <sup>242</sup> Stiller, A. Bulgarien: Architektonische Fragmente (Vienna 2007), Pustet Anton, p. 44.
- <sup>243</sup> Stoilova, L., "The 20<sup>th</sup> century architecture in Bulgaria: a possible historiographical approach" in Rethinking histories of Arts in the 20<sup>th</sup> Century (Sofia: Institute of Arts Studies, BAS, 2015), (PDF file) downloaded from Acadmia.edu,

https://www.academia.edu/24998067/The 20th century architecture in Bulgaria a possible historio graphical\_approach, accessed June 3, 2016

- <sup>244</sup> Stiller, A. Bulgarien: Architektonische Fragmente (Vienna 2007), Pustet Anton, p. 44.
- <sup>245</sup> Ibid., p. 46.
- <sup>246</sup> Ibid., p. 48-50.
- <sup>247</sup> Ibid., p. 50-56.
- <sup>248</sup> Ibid., p. 59-62.
- <sup>249</sup> Georgiev, L., "Modernism in Bulgarian magazines in the period between the two World Wars (1920-1945) Architecture history thesis TU Deflt, 2007" (PDF file), downloaded from LjuboGeorgiev.eu,

http://www.ljubogeorgiev.eu/files/LjuboGeorgiev-Modernism%20in%20BG%20magazines.pdf, accessed May 24, 2016

- <sup>250</sup> Ibid.
- <sup>251</sup> Ibid.
- <sup>252</sup> Stiller, A. Bulgarien: Architektonische Fragmente (Vienna 2007), Pustet Anton, p. 62-70.
- <sup>253</sup> Ibid., p. 70-76.
- <sup>254</sup> Ibid., p. 76-78.
- <sup>255</sup> Stiller, A. Bulgarien: Architektonische Fragmente (Vienna 2007), Pustet Anton, p. 93-94.
- <sup>256</sup> Mateev, St., "The preservation of the architectural heritage in the light of the socio-political changes in Bulgaria" (PDF file), downloaded from ICOMOS international council on monuments and sites, <a href="http://www.icomos.org/monumentum/vol15-16/vol15-16">http://www.icomos.org/monumentum/vol15-16/vol15-16</a> 32.pdf, accessed May 22, 2016

- The School for architecture at Sofia Polytechnic was founded architecture in accordance with a German model. The number of accepted student grew very quickly. After their graduation, they were distributed to governmental planning offices and participating in different projects. Many of them were participating in international competitions and also working abroad in countries like Kuwait, Lebanon, Mongolia and others. Source: IAWA Newsletter, "International Archive of Women in Architecture" (PDF file), downloaded from IAWA, <a href="https://spec.lib.vt.edu/IAWA/news/news19.pdf">https://spec.lib.vt.edu/IAWA/news/news19.pdf</a>, accessed May 24, 2016
- <sup>258</sup> Stiller, A. Bulgarien: Architektonische Fragmente (Vienna 2007), Pustet Anton, p.95.
- <sup>259</sup> "national by form and socialist by content" announce on the fifth congress of the Bulgarian Communist Party, December 1948. Source: Marinov, Chavdar, "Whose is this house? The invention of the Bulgarian Revival Architecture" (Word file), downloaded from BoinaSlava.net, forum.boinaslava.net/attachment.php?attachmentid=22434&d=1390636447, accessed May 22 ,2016 lbid.
- <sup>261</sup> Ibid., p. 96-102.
- <sup>262</sup> Kaleva, Em., "The Socialist heritage A heritage in risk", Architecture 5/2015. Union of Bulgarian Architects, p. 23-25.
- <sup>263</sup> Stiller, A. Bulgarien: Architektonische Fragmente (Vienna 2007), Pustet Anton, p. 108-115.
- <sup>264</sup> Boyadzhiev, K., "The achievements of the Bulgarian architecture in the 20<sup>th</sup> century", *Architecture* 3 (Sofia: Union of Architects in Bulgaria, 2014), p. 50-52 and *Architecture* 4 (Sofia: Union of Architects in Bulgaria, 2014), p. 97-99.
- <sup>265</sup> The Bulgarian state was found in 681 AD
- <sup>266</sup> Stiller, A. Bulgarien: Architektonische Fragmente (Vienna 2007), Pustet Anton, p. 108-115.
- <sup>267</sup> Ibid.
- <sup>268</sup> Standard News, "The Palaces deserted", <a href="http://www.standartnews.com/balgariya-obshtestvo/palatite\_opustyaha-282105.html">http://www.standartnews.com/balgariya-obshtestvo/palatite\_opustyaha-282105.html</a>, accessed May 28, 2016
- <sup>269</sup> Archdaily, "Large Home Tree / Ignatov architects",
- http://www.archdaily.com/78661/large-home-tree-ignatov-architects, accessed February 11, 2016
- <sup>270</sup> "House with winter garden", Architecture 6 (Sofia: Union of Architects in Bulgaria, 2010)
- <sup>271</sup> Ibid.
- <sup>272</sup> Bratkova, R., "House with two faces", *Architecture* 1 (Sofia: Union of Architects in Bulgaria, 2016), p. 4-9.
- <sup>273</sup> European Union Prize Mies Arch, "Slight Slope Long House", http://miesarch.com/work/2428, accessed February 11, 2016
- <sup>274</sup> Stanishev, G., "Slightly sloped long house", *Architecture* 3 (Sofia: Union of Architects in Bulgaria, 2015), p. 4-7.
- <sup>275</sup> Archdaily, "Observation House / I/O Architects",
- http://www.archdaily.com/776001/observation-house-i-o-architects, accessed February 11, 2016 
  <sup>276</sup> Architect Klaus Wailzer, partner at Bulant & Wailzer (Case Study 1: Haus Sailer), e-mail to the author, April 15, 2016
- Dengiz, E. Burçin (2001) "Boundaries of gendered space: Traditional Turkish house", Available: http://www.thesis.bilkent.edu.tr/0001734.pdf, accessed March 2, 2016, p. 34.
   Ibid.

- <sup>279</sup> Ibid.
- <sup>280</sup> Ibid.
- <sup>281</sup> Ibid.
- <sup>282</sup> Ibid.
- <sup>283</sup> Ibid., p.37
- <sup>284</sup> Ibid.