

FURNITURE AND INTERIOR ENVIRONMENT OF THE NATIONAL PALACE OF CULTURE: PUBLIC TRADITION AND MESSAGE

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ABSTRACT

The paper investigates the interior and furniture of one of the biggest public buildings in Sofia, built in the period 1978–1981 – the National Palace of Culture (NPC).

The study is focused on the evaluation of interior design, items and zones, in relation to the design solutions of key public interiors, which were widespread during the socialist period; and follows their presentation in professional publications of the period.

The aim of the paper is to reveal the visual messages concentrated in the building and its interior spaces.

Thus, researching the National Palace of Culture from the point of view of architecture and interior design specific features are revealed of the development of the contemporary history of design and the arts helps to define the understanding of artistic values, as well as the evolution and preservation of the cultural heritage of the 20th century.

Key words: NPC, interior design, socialist architecture, traditions.

INTRODUCTION AND PREHISTORY

The initiative to create a large cultural center in Sofia can be traced back to the mid-1970s. (The construction of the National Palace of Culture – NPC, started in 1978). At this time the urban development opportunities of this part of the metropolitan center were not utilized at all. There were no significant buildings in the area, but a freight train station, old barracks, and hundreds of acres of land were standing. According to the NPC's declared *History of the building* (National Palace of Culture 2018), the town-planning decision for the future of these territories was taken by the Sofia City Committee of the Bulgarian Communist Party and the Municipal Council. The project was also associated with the celebration of "1300 years of Bulgaria" and the activity of "The National

Coordination Commission 1300 years Bulgaria", lead by Lyudmila Zhivkova.

In addition to state and public funds, volunteer work and supplies were invested in the construction – in order to finance the development, the citizens of the Bulgarian capital had worked one day for free and collected more than 30 mln BGN. The architectural design of the Palace was done by teams led by the architect Alexander Barov (Fig. 1) and the structural engineer- Bogdan Atanasov. They also collaborated with The Municipal Architect of Sofia – Vladimir Romensky, with the Minister of Architecture – architect Stefan Staynov, and with the professor Milcho Bryanov. The landscape design of the complex was developed by architects Atanas Agura and Valentina Atanasova. The building had been inaugurated in 1981 personally by Todor Zhivkov and named "Sofia", but several months later (and until 1989) it was

re-named – after the late Minister of Culture, Lyudmila Zhivkova (NPC 2018).



Figure 1: Architect Aleksander Barov,
Source: Archive „Zhekov“, N:193, Union of
Architects in Bulgaria

According to the official data of the building, the ensemble "was built on 18,300 square meters, its total floor area was 123,300 square meters. It is 51 meters high. Nine thousand meters is the total floor area of the administrative building. Its construction took 335 000 cubic meters of concrete, and 1.7 million tons of earth were dug out. Around 10 thousand tons of metal constructions were used, which is approximately the same quantity used for the construction of the Eiffel Tower in Paris." (NPC 2018).

"In its essence, the National Palace of Culture is a unique multi-purpose complex with a deeply democratic social purpose, a widely accessible public center for every day, with varied and dynamic cultural life." – this was how Alexander Barov (1982) presented his project. Afterwards, the complex was even often called "The Cultural Agora" of Sofia. This comparison with the antique town structure highlights again the numerous functions of the National Palace of Culture as a major metropolitan artistic center – "a center of theater and cinema, music and art, a book fair, a congress center, trade fairs", but also "a refuge for the creative initiative of the Bulgarians" (Pesheva 2001). Many artistic works

were incorporated in the building's interiors and among their authors were: Dechko Uzunov, Marin Varbanov, Svetlin Rusev, Pavel Koichev, Teofan Sokerov, Anton Donchev.

STUDY METHODS AND SCOPE

The share of the "communist princess" – Lyudmila Zhivkova – in the concept creation and the functions of the NPC complex have been explored in various Bulgarian research notes and comments. The positions and opinions of Todor Zhivkov (the head of the state), and also the criticism and the praise of both significant public figures and some ordinary inhabitants of the capital, were likewise studied more than once. A number of other professional texts were devoted to the "core of the complex – the largest congress (concert) auditorium in Sofia, with nearly 4,000 seats" which was located in the center of the building's spatial design (Today the enormous congress hall is known simply as Hall N:1 of the National Palace of Culture.) The elements of the Hall – which first creation had been especially interesting from interior point of view, were the exclusive acoustic rotating elements as well as the transformable proscenium.

Our paper is also focused on the interior environment and the furniture of the National Palace of Culture (NPC). However, the study is meant to evaluate the building's interior solutions, items and zones: on the one hand, in the context of the above mentioned *cultural* concept of the edifice, and on the other – regarding the popular design solutions of public spaces that had been created in the period of socialism.

The purpose of our paper was to reveal and follow the final visual messages, messages, produced by the interior space. The methods include documentary research of publications for the used interior elements. Due to the lack of a complete or full history

of Bulgarian architecture in the second half of 20th century, as well as the absence of documentations for all similar construction sites, we are also using case studies, creating comparative analysis of the interiors of separate, comparable public buildings.

RESULTS AND DISCUSSION

Palaces or – if called simpler – *Homes of Culture* – had appeared on the territory of Bulgaria after the Second World War. In a way, this kind of edifice was a functional replica and even a form of development of the already existing public structure of the *chitalishte* – a public organization created in 19th century, that had been hosting library and various spaces for artistic (music, dance, theater, etc.) and museum activities. Still, regional societies continued to build humbler *chitalishte* buildings in the post-war period, in parallel with the centralized (state) initiatives of creating Homes of Culture.

It is commonly believed, that the Municipal Cultural Institute of the Iskar neighborhood in Sofia, built in 1953, is the oldest Cultural Home in the capital (DSK Iskar 2017). The author was the architect Dushko Romanov, part of the key architectural organization in the socialist period – *Glavproekt* (Mihailov 1958). The edifice was set in a beautiful garden environment and built in the neoclassical style of the period, which is usually referred as *Stalinist*. As a whole, the Institute's plans and interiors were close to the

solutions of classic, existing in Bulgaria theatrical or concert halls. An other one, magnificently executed design solution with similar esthetics, was the House of Culture "Emanuil Manolov" in Gabrovo, created in the period 1959-1964 after the design of architect Karl Kandulfov (Municipality of Gabrovo 2018).

When evaluating the works of the *Glavproekt* studio (Figure 2), Georgi Stoilov (1958) praised the design of the new Cultural home buildings all over the country and especially the samples created in Ruse, Rudozem and the village of Razhevo Konare.

Finally, the appearance and interior design of the Homes of culture in the second half of the 20th century also adopted the general trends of the Bulgarian public architecture. Thus, in the 1970s and 1980s, *Stalinist* exterior and interiors were gradually abandoned in their concepts. The newly built buildings – such as the *Palace* in Sandanski and the Trade Union Home in Stara Zagora – have already been resolved in a simplified modernist style and an esthetics supporting the new technologies (hi-tech, brutalism, etc.). The chosen decorations and the urban environment of their entrance parts, along with the visual scale, revealed their social significance. Thus, Homes of culture were made similar to other central city elements – communist party houses, municipality buildings, major city hotels, Homes of technique, etc.

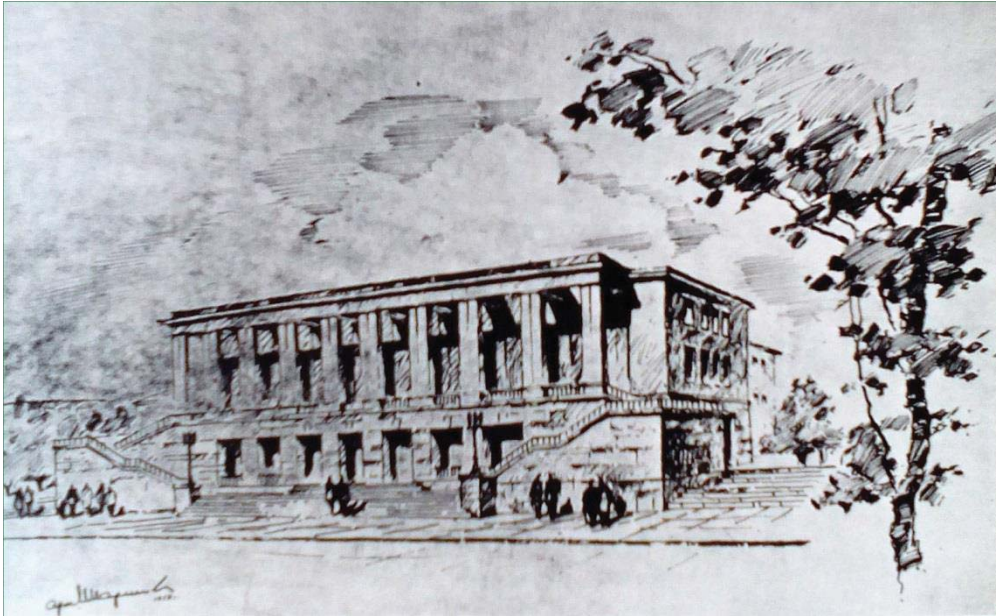


Figure 2 : Design of Cultural Home in Varna, 1958. Source: „Архитектура“, 3, 1958, с. 11, ил. 5

On the contrary, the spectacular urban development of the NPC site in Sofia strongly differed from the general trends. (Figure 3) The self-contained, central location of the building, the scale of the surrounding square esplanade and the background of distant housing co-operatives and offices –

these all added to the special impression created by the Palace of Culture. The designers were also wise and prescient – they have staked the future underground metro-stations of the complex, integrated into its underground levels as early as the late 1970-s.

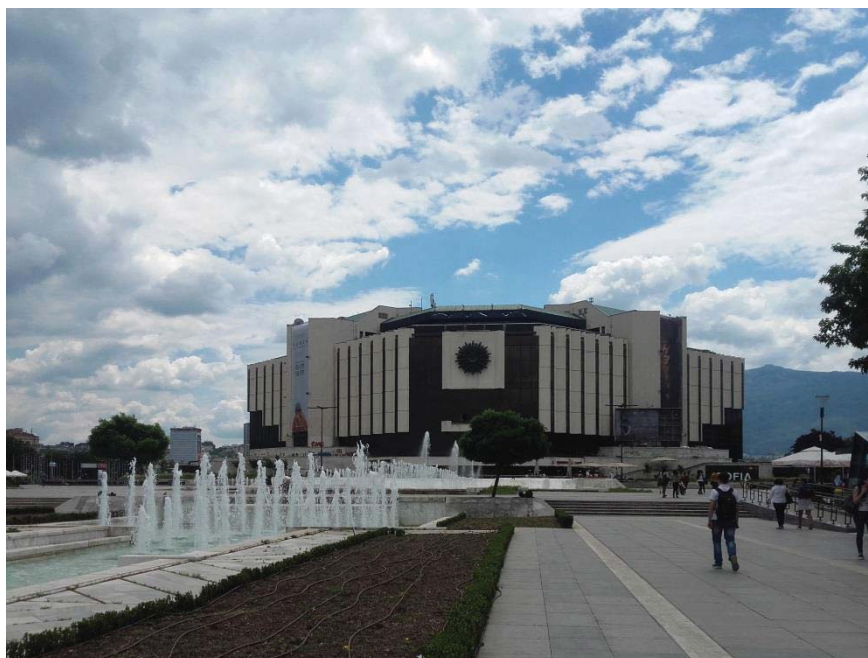


Figure 3: NPC, 2017

Due to the huge volume and the exclusive (for the time period and region) intricate

set of functions, the exterior and interior design solutions of the National Palace of Cul-

ture have fully overgrown the already established minimal drafts of the building typology (These had usually included a rectangular plan, a standard foyer with a bar, a spectacular hall and a garland of administrative part). Apart from thirteen halls (varied in character, size and appearance), restaurants

and bars, a youth club and a theater, a passage with shops and various office areas were originally included in the Palace. The architectural plan of the National complex was developed around four central concrete cores which were embedding service and communication areas (Figure 4).

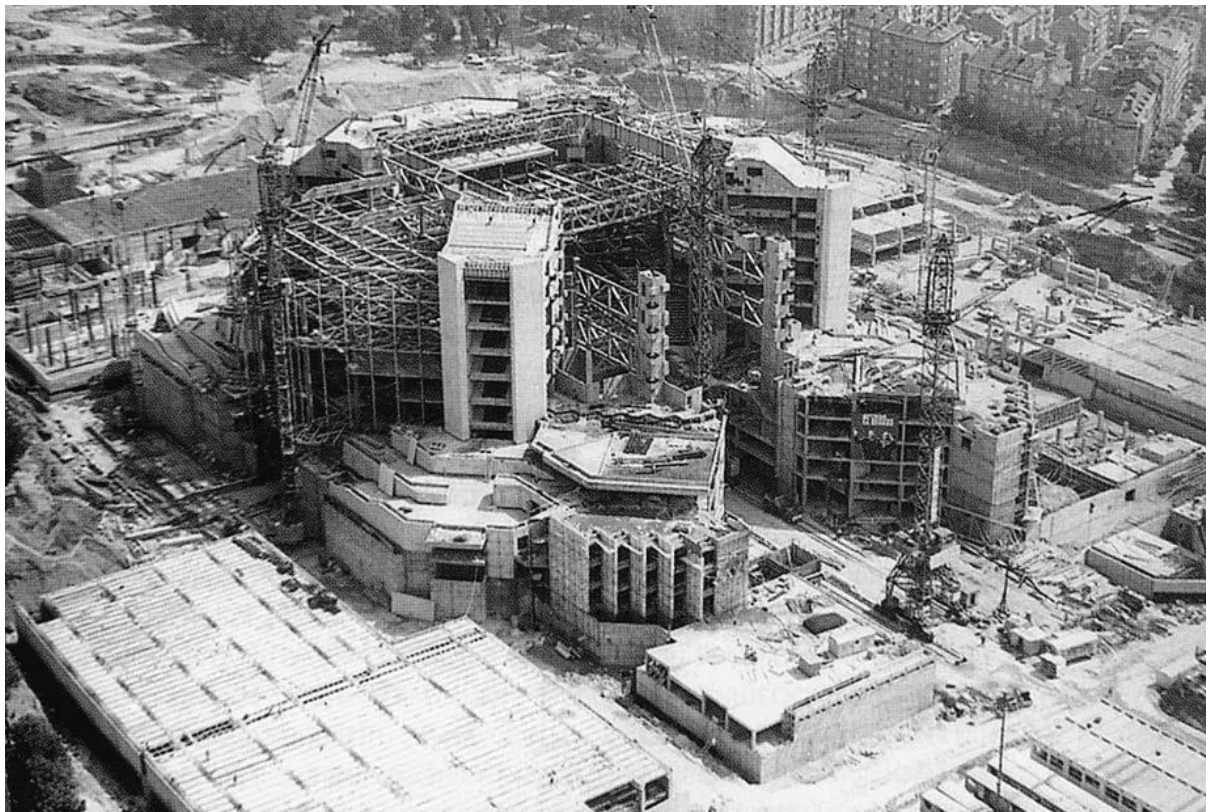


Figure 4: Photo of the building construction. Source: Valeva, M. [Балева, М. НДК има 10 000 тона конструкции – В „Строител“, 12.08.2011, <http://vestnikstroitel.bg>]

The plan of the Palace was balanced and a subject to a strict symmetry, obtained by overlaying, replicating and rotating octagons and squares. The carefully matched proportions, the sequential flow of functions, and gradual access to the internal key spaces were not typical of auditorium, spectacular hall or big store plans in the period. Rather, these elements and links resembled the centric organizations of ancient temples and the pilgrim transitions to their sacred chambers. The exclusive zoning of the NPC was also combined with the great intercolumn distances and trendy design solutions for wall claddings and other minor detail I such as

handles, and so on. For the facade facing, natural stone was used, aluminum windows and doors and suspended wall and ceiling structures were used. (These interior elements had already been widely used in public buildings at the end of 20th century in Bulgaria, but never to such scale).

The building's installations were also of prime quality –of elite class, originality, novelty and type of design. The complex ventilation and air conditioning system was thoroughly executed, and the high class of escalators, elevators and lighting fixtures are the subject of a number of urban legends. Most of these are preserved even today.

The enormous atrium halls spilled over into the varying decks and galleries to converge in the central areas. The provided circulation ways allowed for simultaneous and multiple activities by individual or group users. The interior design of the individual zones and the rich thematic decoration of public areas were also clearly distinguished by the gradation of room height and the degree of the applied illumination. The lines

and planes prevailing in the interior spaces were horizontal, with smooth round finishing, stressing the core visual mass. Thus, despite the large spaces and the overlapping of most zones and halls, a sense of comfort and human scale were also achieved. At the same time, the lack of dynamics in the interior elements was compensated by the sense of festivity and even some severe grandeur (Figure 5).



Figure 5: Pictures from NPC: 1982 (Source: „Архитектура“, 1, 1982, 9, ил.16) and 2017.

A well-known feature of the building was the active inclusion of works of art in the general interior design. The visual concept of the applied art works were logically stylized according to the traditional aesthetic requirements for the period. “One of the key factors shaping today the urban systems should be the fulfilling of the high, and also fast-developing aesthetic requirements of the Workers, the need of revealing the artistic capacities of all the people, as well as the working classes now to face the greatest artistic achievements”, insisted Lyudmila Zhivkova as a platform for her cultural activities (1977). And the project of NPC was following this concept – but to the greatest possible extent. The presented artistic items featured many different techniques and materials, like: wood-carving, metal and stone sculpture,

textiles, etc. They were all available for direct observation and in amounts – comparable to wall and ceiling surfaces. In some cases, the works were mounted on entire wall or ceiling surfaces of the interior zone (such as the metal sculpture "Flames" by Mihail Benchev on the walls (Figure 5, left), or as the Anton Donchev's central woodcarving work in the foyer), while others were specially distinguished by the overall relief and finishing details (like the wall carpet "The Book of Heritage" by Tsvetana Petrova and Evelina Pireva, or the "Architecture and Construction" mosaic by Theofan Sokerov). In some cases, works of art even partially followed the varying shape of the walls, still distinguished in terms of material with the plane of the cladding elements (Figure 6).



Figure 6: Metal reliefs “681” by Dimitar Benchev near the side entrances followed the shape of the exterior wall, 2018

Stories and subject matter depicted in the works of art generally revealed man’s dignity and life itself, but popular party symbols and signs were absent from the central spaces. The political coloring of the interior was not done in an intrusive way (despite the portraits of Lyudmila Zhivkova, like the one included in the mural of Hall 7 – where the party leader is presented among other national or communist heroes). A *masse*, executions of propaganda clichés – like the images of the *bright future*, the *union* gatherings, the *Party*, the *Commanders*, the *Workers*, the heroic *partisans*, the *Builders*, the

Red stars, etc. – were not implemented. Instead, images were applied, mostly related to events from Bulgarian history as well as to archetypal or mythological figures and motifs. Although some ethnic or traditionally folk symbols were also used (like the shapes of sun, fire, tree of life, nymph, etc.), there were no direct ethnic or religious connotations in their presence. As a sign of all the complex was chosen the trade mark – a phoenix image – created by the brilliant artist Stefan Kanchev. The bird sign was implemented in almost all door handles. (Figure 7)



Figure 7: Phoenix on the door handles.

One of the key figures responsible for the Palace image was the architect Alexander Barov – one of the biggest names in the Bulgarian architecture in the second half of 20th century. He received his diploma in 1955 in UACEG, Sofia and his works had been mostly related with the capital city (Barov 1983). It is possible to draw a parallel to the interior of the Alexander Barov's earlier project – the Boyana State Council Residence (now, National History Museum – Figure 8). Both cases (the Residence and the National Palace of Culture) were significant, representative projects, albeit with different scale and functional requirements. Both buildings had solemn decoration and monumental impressive proportions. At the same time, the edifice in Boyana openly "shows positive phenomena in the creative quest of architectural image – for something new /as visuals and associations/, but national in impression..." – Labov (1979: 73). The Barov's personal style (of similar architectural scale, zones and horizontal space) and their development could also be noticed in these cases,

although adapted to the intended functions and purposes, the different locations and urban. The use of art works in Boyana was again quite important, but it was not so varying and predominant. At the same time, the art items were again carefully but consistently used, in perfect harmony with the interior design, wall panels and other interior elements.

In the National Palace of Culture, visual accents on national were understood just as one element of the program for the celebration of the 1300th anniversary of the Bulgarian state. But the national coat of arms and symbols (along with the symbols of the communist power) were a stronger diplomatic requirement for the Boyana Residence. In both cases the national symbols were applied, but strongly softened and stylized at the National palace of Culture's interior. And, unlike the geometric octagonal symmetry of the Palace's design, the Residence edifice was designed using typical silhouettes and proportions from Bulgarian Revival architecture.



Figure 8: Interior of the National History Museum, Sofia 2018

During the construction period, the NPC was a widely publicized object, which had focused a lot of (mostly positive) attention. Already in the 1980s the building space became a benchmark – a sign of quality, even despite the criticisms immediately after the death of Lyudmila Zhivkova. It was also a complex, successfully administered, with high occupancy in all the halls and events. Subsequently, some of the techniques and design solutions used in it became a reference point for the architectural development of public buildings in the country.

The Arsenal culture House in Kazanlak could serve as an example of the subsequent absorption and evolution of NPC's design concept. At the same time, the edifice is a rare example of a corporate Cultural institute

of the Transition period (the end of 20th century), as it was funded by Arsenal AD. The new building is designed by architect K. Kozuharov and was opened in 1992 (DK "Arsenal" Kazanlak 2018) Here we can see a carefully mitigated intimate scale – zones, structural sections and electrical elements. There are also simplified details of similar to NPC's interior areas, as well as an analogous but smaller, symmetrical (and sequential) design solution. The relationship with regional architecture (from central Bulgaria) is underlined by the selection and processing of materials. At the same time, the set of artistic works has lost most of the innovative and solemn features, and was created in daily, even banal outlook (Figure 9).



Figure 9: Interior of DK "Arsenal" Kazanlak, 2017

CONCLUSIONS

We believe that today the study of the National Palace of Culture, in terms of interior design and architecture reveals some peculiarities of the contemporary history of design and the arts. The design solutions of the interior environment and the synthesis of the arts clarify some of the existing boundaries of individual architectural development of the period of socialism such as:

- the concept of humanism embedded in the creation of the "new canon" for the image of People;

- the choice of national signs and symbols somewhat outside the purely ethnic models;
- the democratic access to all art works and to the luxury elements of the interior.

Still, despite the unskillful interventions of the contemporary renovators (who are adding new, atypical materials, but leaving some clumsy design solutions of detail – Fig. 7), the authentic solemn decorations in the spirit of the 1980s have a high cultural value.



Figure 10: NPC 2017, Details of the renovated staircase; Part of the mural "Poles" by Stoyan Iliev, incorporating the cover of a fire extinguisher.

As a Bulgarian cultural heritage of the XX century, the National Palace of Culture is a building of great importance. Still, the related publications and the evaluations are often too politicized or blindly following the

current propaganda. Nonetheless the presence of the cultural center in the life of the metropolitan city is undoubtedly a significant and positive phenomenon.

As a whole, “Materials and their inherent structures and technologies have deeply influenced creativity and archetype evolution in the furniture field,” wrote Regina Raycheva (2018). In NPC, we can see how not only materials, but also cultural symbols and pieces of art fully maintained the archetypal evolution of the used interior and architectural solutions.

Today, there are a number of new elite buildings – shopping centers, sports halls and administrative centers in Sofia featuring up-to-date construction elements, upgraded spaces and renovated technologies. Despite the increased levels of comfort and the high quality materials, their appearance is far from the authenticity and splendor of the National Palace of Culture.

In addition, the National Palace of Culture is not only a project, typical for the time, neither was it just a monumental ensemble. Inside, we can see innovative technological solutions as well as original, artistic points of view, in addition to the particular, unique merging of the important ideas and concepts for the period.

REFERENCES

- BAROV, AL. 1982. Народният дворец на културата (Авторът за своя проект), Архитектура, 1.
- BAROV, AL. 1983. Цялото ми творчество е свързано с този град. – В „София“, 4, с. 31–33.
- DK "ARSENAL" KAZANLAK. 2018. За ДК Арсенал. visited on 28.06.2018. <http://dkarsenal.com/about/>.
- DSK ISKAR. 2017. Общинският културен институт „Искър“. visited on 28.06.2018. <http://www.dkiskar.com/>.
- LABOV, G. 1979. Архитектурата на София. Техника, София.
- NPC. 2018. История. visited on 28.06.2018. <http://ndk.bg/%D0%B7%D0%B0-%D0%BD%D0%B0%D1%81/%D0%B8%D1%81%D1%82%D0%BE%D1%80%D0%B8%D1%8F>.
- МИНАИЛОВ, IV. 1958. Дома на културата Гара „Искър“. – В „Архитектура“, 6, 1958, 15–16.
- MUNICIPALITY OF GABROVO. 2018. Дом на културата “Емануил Манолов”. visited on 28.06.2018. <https://gabrovo.bg/bg/article/366>.
- PESHEVA, M. 2001. Културната агора. БТА 100%, НДК, 20 години НДК.
- PIRSAREVA, E., R. RAUSHEVA. 2009. Принципи и критерии за дизайнерско оформление на обществени пространства, Сборник научни доклади. Втора научно-техническа конференция с международно участие „Иновации в горската промишленост и инженерния дизайн“, Юндола, 6–8. ноември 2009, стр. 200–206.
- СТОИЛОВ, G. 1958. 10 години Главпроект. – В „Архитектура“, 3, 1958, с. 9–15.
- RAUSHEVA, R. 2018. Archetypes in Furniture History, LAP Lambert Academic Publishing, p. 216.
- ZHIVKOVA, L. 1977. Изграждането на културата на развитото социалистическо общество – наша непосредствена историческа задача. – В „Архитектура“, 9, 1977, с. 32–33.



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