ARCHITECTURE OF ADMINISTRATIVE BUILDINGS OF CHISINAU CITY WITHIN THE CONTEXT OF WORLD ARCHITECTURE

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Abstract. This article reveals the influence of the conceptual directions of development within world architecture on the active creative processes of modernist and postmodern orientations, which have taken place in Moldovan architecture. Particular attention is paid to the architecture of administrative buildings built in the period after the declaration of the sovereignty and independence of Moldova in the early 1990s. The general problem of the dissonance of the architecture of modern business and office centers with the historical buildings of the Chisinau city is revealed. This problem was reflected in the image of the capital in the form of an antagonistic contradiction between the usual “old” and unexpected “new” architecture. As a result of the analysis, it is shown that the architecture of modern administrative buildings in Chisinau demonstrates examples of revolutionary solution of compositional and artistic tasks and reflects the polystylism of the development of world architecture in such directions as: minimalism, high-tech, deconstructivism, etc.

Keywords: buildings, architectural form, business center, compositional techniques, deconstructivism, modernism, Moldovan architecture, office buildings, postmodernism.

Introduction
The appearance in the development of Chisinau city a large number of business buildings in recent decades demonstrates the variety of compositional techniques and architectural styles, reflecting trends diversity of the world architecture. In parallel with the new construction, the existing administrative buildings, built over a hundred years ago, in need of modernization, get a modern look simultaneously with functional renovation, Social and economic transformations in society, new stylistic directions in the development of world architecture, as well as achievements in the field of building science and technology in recent decades, have generated the need to revise the previous architectural strategy of the city of Chisinau. The current practice reflects the lack of a holistic approach to architectural and compositional design techniques of office buildings. To assess the current situation, it was necessary to analyze it. for to identify the main directions of the development of the architecture of administrative buildings in Chisinau in the context of the development of world architecture.
Post Second World War until 1980

On the background of the general picture of the development of world architecture, architecture in Moldova, as in other countries of the former USSR, due to well-known historical and socio-political reasons, developed with great delays.

The avant-garde architecture of the twentieth century had little impact on the architectural creativity of the Moldovan architects of Bessarabia in the period of 1920-1930s [1 - 3]. The emergence of modernist architecture in Chisinau happened much later, as well as throughout the USSR.

In the 1940s post-war years, the architecture of the city's administrative buildings is based on the classical compositional techniques of the style of socialist realism, which have become mandatory for any new construction, regardless of the typological features and differences (buildings of various ministries of the MSSR) [4].

This is in contrast with developments in other parts of the globe notably Britain, at the time the seat of the British Empire, whereby its architecture was still rooted in Classicism. In the mid-fifties, the architecture of Soviet neoclassicism was criticized "for the one-sidedness of the interpretation of the problems of architecture, which led to an uncritical passion for heritage, for the transformation of architecture into decorative art, decoration of buildings for any purpose, excessive monumentality, splendor and pathos of architectural structures" [5].

Despite the enormous scale of the construction of administrative buildings in the city and the emergence of new architectural and planning principles, the architecture of management buildings demonstrated increased interest only to the external design of buildings, the lack of reflection of the functional essence of buildings, excessive archaization, decorativeness and overload of the image. After the abandonment of the "development of heritage", the architecture of the late 1950s was in search of ways of further development [6].

Since the beginning of the 1960s, a full-scale construction of administrative buildings began in Chisinau under the influence of modernist architecture, which received worldwide recognition [7].

This period is characterized by changes in volume-plastic preferences towards laconic geometric forms, minimalism in decor and the formation of a new language of expressiveness of architectural stylistics (House of Press - today ÎS Casa presei, 1967, architects S. Shoikhet, B. Weisbein, Figure 1) [6].

The rationalistic line of architecture development was based on the understanding of solidarity need in solving functional, technical, socio-economic, ideological and artistic reasons. These parameters characterized architecture elsewhere. For example, London's buildings, which illustrate the architecture of this period, are based on a geocultural context dominated by the city's iconic limestone, namely the Portland stone (Shell Centre, 1962, architect Sir Howard Robertson; Economist Building, 1964, architects P. Smithson and A. Smithson) [8]. This was a period where, for political reasons dating to post Russian Revolution, where socialist realism was not on the agenda in the West.

Indeed, Russian Constructivism was not even covered as a topic in history of architecture; interest and research in this movement gathered ground in 1960 and by two decades later it was a theme covered of academic standing worthy to for part of the education of architects, artists, historians of architecture and historians of art.
Figure 1. Press House, 1967.

Figure 2. District executive committee, 1969.

The creation of new architectural forms was dictated primarily by standardization and typification in construction, caused by the need to save money and resources [6]. New principles of architecture of administrative buildings were approved, based on the rejection of historicism, simplicity of forms and the need to reflect in the image of a building its functional purpose and constructive solution (House of Technics - today House of Science and Technology, 1968, architect V. Zakharov). The consequence of this was the development of new urban and architectural planning techniques [9].

First of all, the rejection of the perimeter urban development led to the “free” arrangement of buildings in the space of the quarter and the possibility of perceiving its composition from different angles, which led to an increased attention to the aesthetic expressiveness of the entire volume of the building [10]. Secondly, the rational and more free solution of functional tasks was reflected in the volum-planning solution of the buildings in the form of allocation of premises of different functions into different architectural volumes (District executive committee building - today Buiucani sector Court, 1969, architect B. Shpak, Figure 2). In addition to this, the beginnings of the spatial planning system appeared, completely new for that time [5] (the State Bank of the MSSR - today the National Bank of the Republic of Moldova, 1973, architects B. Weissbein, S. Shoikhet, G. Kaluzhner, Figure 3). The solution of ideological, aesthetic and artistic problems without the use of decor corresponded to the principles of the rationalistic line of development of architecture. The reasons were different from the once in Britain, the intellectual heir of Augustus Welby Northmore Pugin’s approach to morality in architecture [11]. Artistic and compositional techniques of administrative buildings were based on the use of “clean” forms, new building structures, sun protection devices (grilles), as well as modern finishing materials at that time, such as glass, aluminum, plastic, etc. [12] (House of Communications and international telephone - today Moldtelecom, 1967, architect V. Dubok, Fig. 4). The monumentality and expressiveness of buildings reflecting the ideas of neorationalism was achieved due to the selected proportions of the buildings, the visual lightness of the wall, and the contrast of finishing materials. At the same time, the architecture of the administrative buildings of Chisinau with a modernist orientation had a number of faults in solving of architectural and artistic issues, the adoption of which was based on economic, functional and technical indicators, expressed in the monotony of compositional techniques, simplification of buildings aesthetics, stinginess of means of expressiveness and plasticity of facades. lack of color, as well as the low quality of construction and facing works [13] ("Moldgiprostroy" Design Institute - today the National Anti-Corruption Center, 1967, architects R. Kurtz, R. Bekesevich).
One of the main contradictions of this period was the stylistic and compositional confrontation between the “old” and “new” architecture, which appeared in the historical center of the city, in violation of previously adopted architectural and compositional principles.

**The advent of Postmodernism in Moldovan’s Capital**

Postmodernism, which replaced the monotony and sameness of modernism, manifested itself in the architecture of Chisinau in the 1970s [14]. At this time, the onset of crisis of ideas swung the “pendulum” of architecture development from rational determination, with excessive enthusiasm for typification and standardization in construction, to a decorative orientation in the search for new aesthetics and expressiveness [15]. Postmodernism began to consolidate its position in the late 1970s-1980s, at a time when both architectural trends existed in parallel - one was fading away, the other was in a state of development.

The search for new imagery and uniqueness of buildings has replaced the impoverished simplicity and stereotypes that have exhausted themselves [16]. This process was long and painful, as it was hampered by economic problems.

Since the architectural community was engulfed in a new wave of rethinking the imagery and expressiveness of buildings, the architecture of this period traces the characteristic features of postmodernism, indicated by Charles Jenks: historicism, traditionalism and an attempt to appeal to local architecture [17].

For this purpose, the techniques of architectural and planning decisions of administrative buildings were improved [14]. Together with the free location on the site, the buildings received a composition of blocked volumes, reflecting the complicated scheme of functional zoning (the Central Committee of KPM - today Parliament of the
Republic of Moldova, 1974 - 1976, architect A. Cherdantsev, Figure 5). The selected planning schemes became more diverse, since in addition to the classical corridor system, hall and mixed planning system began to be used (House of Trade Unions, 1977, architect V. Kudinov). New materials and structures made it possible not only to increase the number of storeys, but also to apply new compositional and planning techniques, such as spatial structures, consoles, etc. (Chisinau City Committee of the KPM - today the Ministry of Foreign Affairs and European Integration of the Republic of Moldova, 1977, architect G. Solominov, Figure 6). Thus, the basis was formed for a new shaping in architecture.

In the 1980s, in pursuit to proportionality and expressive imagery, the appearance of buildings underwent a number of changes. Thanks to the technology of construction of high-rise buildings in monolithic reinforced concrete, the geometry of architectural forms has received rounded corners and more plastic forms. A rational ratio of glazed and monolithic surfaces was found, reflecting the functional structure of the building (the Ministry of Communications of the MSSR - today Moldtelecom, 1983, architects V. Shalaginov, A. Kireev, N. Dorofeev, S. Mukhin). The sun-protection techniques and structures used in construction have become more diverse: ribs, gratings, balconies, overhanging of the upper floors, etc. (Publishing House - today the National Book Chamber of Moldova, 1980, architects V. Zakharov, L. Hoffman). The architectural design of the buildings reflected the synthesis of arts: painting, sculpture, chasing, stone carving. This was done in opposition to the modernist aesthetics, which involved banning all ornament and decoration from architecture including exiling the use of masonry as a conveyor of historico-stylistic expression [18]. Wall decoration (painting, mosaics, bas-reliefs, etc.) was actively introduced. We can also note the use of such techniques as the contrast of materials, surface textures and colors [14].

All this together, obeying to the movement of “pendulum”, reflected the decorative line of the development of Moldovan architecture. But along with the successes, there were a number of flaws, such as insufficient expressiveness, primitive compositional techniques, poor attention to the environmental approach, as well as the low quality of construction work. In the 1990s, as a result of global socio-economic and political transformations in the country, Moldova, being in the period of profound changes, went through the hardest trials that affected all aspects of society. But at the same time, thanks to cardinal changes, architectural creativity gained greater freedom and was able to develop in line with the stylistic directions of world architecture. Initially, the problems of transforming of economic and production sector of the national economy inevitably affected the construction industry, slowing down the process of further development of architecture [19]. In the absence of large capital investments, the architectural practice directed its activity towards the reconstruction and modernization of the already existing obsolete administrative buildings, the aesthetics of which (mostly modernist) did not correspond to the level of development of modern architecture (KENTFORD Business Center - former KGSPI design institute, 1978, architect A. Shkarupa, Figure 7). This process was intensified, on the one hand, by the release of a number of buildings of organizations that had ceased their activities, on the other, by the need to create an architectural and spatial environment for the development of young Moldovan business. Subsequently, this led to the transformation of the image of a number of buildings, reorganized into office and business centers (VPTI Research Institute - today JSC - IPTEH Business Center, 1974, Figure 8). The trend of reorganization of obsolete buildings continues to develop to the present [20].
Chisinau at the turn of the millennium

With new economic relations during the period of business formation, the role of the customer in the design process and its influence on architectural creativity has increased. With the growth of entrepreneurial activity and success in business, construction production intensified in the 2000s and, as a result, it became possible to implement new architectural ideas that reflected the stylistic directions of world architecture. Due to the presence of large investors in the city, a number of business centers of large private companies and office buildings that lease out space to small firms have appeared. But at the same time, this process also has negative consequences, consisting in the dependence of the level of architectural and artistic value of the work on the aesthetic taste and material well-being of the customer. [19].

Most of the new office buildings were built in a postmodern stylistic direction, although this often hides the freedom to combine forms of various styles based on high building technologies (Accent Electronic Business Center, 2007, architect G. Telpiz, Figure 9). Sometimes, the integrity of the architectural concept, its functional conditioning, the harmony of the volumetric-spatial solution, are replaced by expensive facing materials, unexpected color schemes and pretentious decor (Global Business Center - GBC, 2010).

Historicism gradually acquired pronounced forms of stylization and citation of historical motives in emphatically modern compositions (the Russian Federation Embassy, 1998, architect G. Zhinkin). Such buildings, as a rule, have an axial symmetrical composition and reproduce classical compositional techniques in modern forms (Moldindconbank CB, 1995, architect V. Modyrka). In the same time, the construction of office buildings has become widespread, the architecture of which recreates one of the historical styles, outwardly similar to the restoration or reconstruction of a long-existing object (ASCOM Group Office Center, 2012, architect S. Garkonitsa) [20].

Simultaneously, in the 2000s, many examples of modern business centers appeared in the city, which represented the latest stylistic trends in world architecture, such as: minimalism, high-tech, deconstructivism, etc. [21] Ideas of minimalism at the present time did not find a wide response in the architecture of the city, perhaps because they are associated with a period of total standardization and typification of construction, which had a negative impact on professional consciousness.

Therefore, minimalist ideas related to the period of crisis of imagery and expressiveness of architecture are found in single works determined by a specific author’s intention (Petrolbank CB - today EuroCreditBank CB).
The new age of information and modern technologies, which gave impetus to the emergence of new materials, structures and technologies, was reflected in the architecture of Chisinau with the appearance of high-tech buildings (Unionfenosa office building, 2000, architect I. Karpov, Figure 10). Despite the fact that examples of this stylistic trend appeared in foreign architecture two decades earlier [22], the construction of such structures in a city in Chisinau was often a complete surprise, causing controversy and conflicting opinions. The architectural composition of these buildings, based on the complex simplicity of the sculptural forms, manufacturability and antihistoricism, in accordance with the canons of high-tech, represents the success and prestige of the companies located in them (SKYTOWER International Business Center, 2007, architect G. Telpiz, Figure 11) [23].

Emotionally rich deconstructivism style, emphasized aggressive towards the surrounding urban environment, with excessively broken forms also entered the architecture of urban business buildings (SG Business Center, 2007, architect G. Telpiz, Fig. 12). The architecture of such objects, based on asymmetry, sharp angles and triangular shapes, reflects the quintessence of this stylistic trend, which is widespread in the modern world (Le Roi International Business Center, 2008, architect G. Telpiz). These structures, in accordance with the chosen style, play the role of a challenge to the familiar reality, awakening delight and admiration in some spectators, while in others - complete rejection and alienation [19].

The appearance of buildings of this kind in Chisinau, entering into dissonance with the existing urban development, intensifies the antagonistic contradiction between the usual "old" and unexpected "new" architecture. This problem of an international scale that exists in other cities and countries, causing a lot of disagreements and contradictions, today does not have an unambiguous solution [24]. It requires an individual professional approach based on careful research to each specific situation, in each individual case. The solution to this difficult and at the same time vital task should be based on taking into account the entire palette of design aspects: urban planning, historical and cultural, legislative, typological, volumetric, spatial, ideological and artistic, etc.

**Trends in the development of city architecture**

The directions of architecture development of modern administrative buildings identified in the study can be formulated in the form of definitions that reflect the essence of compositional techniques and the architectural concept of its constituent objects:
1. "Convergence" - reflects the process of "rapprochement and assimilation" of the architecture of new administrative buildings to historical styles, time-tested techniques, proportions and coloristics of historic buildings (Figure 13);

2. "Reminiscence" - is the use in the design of new objects of architecture, individual elements or motives of previously known works, evoking a memory or representing an "implicit quote", borrowed from the existing surrounding buildings (Figure 14);

3. "Contradiction" - demonstrates the contrariety and conflict nature of the architectural and compositional techniques of new office and business centers, opposite in relation to the stylistics of existing buildings, declaring a denial of the historical context (Figure 15);

The tendencies in the development of the architecture of administrative buildings indicated in this way reproduce the essence of the processes taking place today in architectural design, development and reconstruction of the city of Chisinau. They demonstrate the heterogeneity and diversity of approaches to the architectural and compositional solution of objects of the studied typological group. Each of the identified trends has a certain stylistic binding or preference, reflecting its character and essence [12].

So, for example, "convergence" is manifested by assimilation to historical styles, relying primarily on the techniques of classical architecture or derivatives from it. Despite the fact that this direction has been tested by time, it does not reflect a modern view of architecture and rather performs the function of copying than creating something new and extraordinary. In addition, the architecture of "convergence" requires strict adherence to the canons and proportions of the imitated stylistic direction, which in practice are not fulfilled, and often deliberately violated. This approach is deservedly criticized by a number of modern Moldovan architects for the lack of a creative component, limited original searches, errors in observing the canons, and often for plagiarism.
"Reminiscence" is postmodern stylistics, winding the memory of the context or implicitly quoting it. This direction gives more opportunities for architects to show their own views on the architectural work they create, designed on the basis of analysis of existing context. Thus, the architecture of "reminiscence" is a manifestation of respectful attitude to the environment, an analytical approach to the design process, and professional solution of the assigned tasks.

In turn, "contradiction" is inevitably associated with the modernist direction of such newest styles as high-tech, deconstructionism, pragmatism, etc. This direction is the most attractive for modern Moldovan architects, as it creates the greatest opportunity for self-expression and the search for a new form. At the same time, it is an area of maximum risk and increased responsibility of the architect when it comes to the construction of new objects in historical city center (Figure 15).

Ultimately, we can say that the issue of the organic integration of new buildings into the surrounding space of the city is solved today by the choice of compositional and stylistic techniques from three approach options: "convergence", "reminiscence" or "contradiction".

Thus, a competent and reasonable choice of the most suitable direction is a solution to one of the priority tasks of the modern architectural process, which consists in respect for the architectural context and the historical landscape [25 - 27].

At the same time, we must not forget that the implementation of this task today is based on innovative solutions and contains elements of the architecture of the future, forming a diverse spectrum of trends in its development.
Conclusions

At the beginning of the twenty-first century, against the background of global changes in society, science, culture and technology, architecture is in a position that defies clear definition.

The difference in concepts and the inconsistency of the methods of stylistic directions make it difficult to unambiguously determine the current state and ways of developing architecture. At the same time, new scientific discoveries (fractal geometry, nonlinear dynamics, neocosmology, the theory of self-organization, etc.), which changed the human worldview, combined with computer technologies, turned the view to architecture, providing architects the unprecedented opportunities, directing them to find ways to develop architectural creativity [22].

In the context of world architecture, the following conclusions can be drawn with respect to the compositional techniques of modern architecture of Moldova’s Capital City:

- The period following the declaration of sovereignty (23.06.1990 [28]) and independence of Moldova (27.08.1991 [29]) was a time of active creative searches of Moldovan architects, filled with socio-economic difficulties and contradictions;
- The process of the formation of postmodern tendencies in the modern architecture of Chisinau has a constant but uneven character. The observed delay in this process is caused by a number of objective reasons. However, they are not able to stop this process. The natural transition from classical compositional techniques to modernist and postmodernist (traced with specific examples) reflects the development trends of world architecture;
- Technical advances have become the source of appearance of new structures, finishing materials, engineering equipment in the Moldovan architecture. In the post-industrial communication era that has come, the “architecture of high technologies” provides new opportunities for the architectural shaping of business buildings in Moldova using computer technology.

The revealed artistic and compositional tendencies in the architecture of modern administrative buildings of the city of Chisinau, demonstrated that:

- The task of preserving of historical environment, urban scale and the unique particularity of the city remains relevant [30]. At the same time, the architectural image of Chisinau cannot remain unchanged, acquiring a “frozen” form;
- Currently, there are three conceptual approaches to the compositional solution of the architecture of administrative buildings with varying degrees of “novelty” of the techniques used: “convergence”, “reminiscence” and “contradiction”;
- Of the three identified trends in the development of modern administrative buildings of the city, the buildings belonging to the direction of “contradiction” represent the continuous development of the city’s architecture, the search for a new beginning to its perception, reflecting the dynamics of the development of world architecture.

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References


30. Historical Center of Chisinau - the cultural heritage of the capital. Architectural monuments in the Historic Center of Chisinau. [date of access 15.06.2020]. Available: http://www.monument.sit.md//