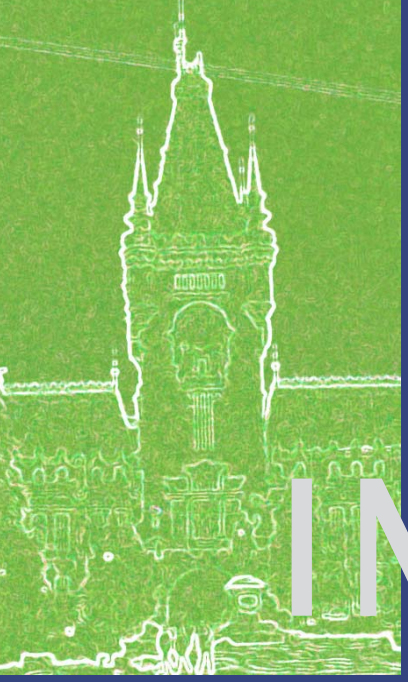

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MEMOIRE COLLECTIVE EN CONTEXTE URBAINE

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Resume

La question de la mémoire collective représente un processus de connaissance du passe et de l'histoire afin de retrouver des identités, des images symboliques et de nourrir des politiques urbaines, économiques, administratives et sociales dans l'avenir. Ce travail est une préoccupation actuelle, dont le principal but et de redécouvrir le passe afin de mieux comprendre le présent et de trouver des solutions et des pistes pour les actions futures en vue de développement urbain et des territoires.

On remarque que prendre conscience de l'histoire, impose des responsabilités autant au niveau de l'individu, qui peut posséder des mémoires qui intéressent toute la collectivité, mais aussi au niveau des groupes d'intervenants - sociologues, urbanistes, politiciens, hommes de culture, etc. - et des instituions administratives qui doivent gérer les informations pour faire évoluer la ville.

Mots clef : mémoire collective, conscience de l'histoire, développement urbain, enjeux, institutions administratives.

1. INTRODUCTION

La question de la mémoire collective représente un processus de connaissance du passe et de l'histoire afin de retrouver des identités, des images symboliques et de nourrir des politiques urbaines, économiques, administratives et sociales dans l'avenir. Ce travail est une préoccupation actuelle, dont le principal but et de redécouvrir le passe afin de mieux comprendre le présent et de trouver des solutions et des pistes pour les actions futures en vue de développement urbain et des territoires.

Ainsi, la question de l'identité représente un enjeu évident dans ce travail de mémoire. Pourtant, la question de la mémoire collective n'est pas nouvelle. Elle a toujours été à la base de l'évolution des sociétés. Dans des limites virtuelles d'un espace géographique donne, il y a toujours des caractéristiques spécifiques avec lesquelles les habitants s'identifient. On saura toujours associer a une personne qui vient d'un certain territoire, une image actuelle ou passe(pour un parisien – la tour Eiffel, pour un berlinois – un mur qui divise la ville), un plat gastronomique (pour

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un strasbourgeois – la choucroute), un événement (pour quelqu'un qui habite Rio de Janeiro – le carnaval), un objet vestimentaire (pour un irlandais – un kilt) , un attribut plus ou moins justifie (pour un italien – « bruyant ») . Toutes ces caractéristiques font partie des identités, assurent la reconnaissance et participe a l'unicité des collectivités. Pourtant, le travail actuel sur la mémoire collective veux approfondir et enrichir les identités existantes dans le contexte de la mondialisation et de la métropolisation. Ainsi, dans un monde qui tende a s'uniformiser, ou les villes s'étendent et s'éparpillent de plus en plus vite et ou la mobilité est une caractéristique importante de la société, le besoin de repères et la conscience d'appartenance deviennent nécessaires. Cette recherche, cette redécouverte de la mémoire se veut un point d'ancrage dans la diversité sociale et en même temps un symbole producteur du sens commun.

2. MEMOIRE COLLECTIVE EN CONTEXTE URBAINE

Toujours dans le sens de la mondialisation un autre phénomène devient très présent dans les villes actuelles. Il s'agit de la diversité culturelle encouragée par la démocratisation de la culture, soutenue par les politiques urbaines. Dans le domaine culturel, le travail de mémoire qui sera sans doute influence par cette diversité de cultures permettra peut-être de comprendre comment cette mixité est mise en place , quelles sont les connections qui s'établissent entre les individus et comment l'échange culturel influence sur un certains territoire sans tenir compte des limites administratives. Toujours de point de vue culturel, la mémoire collective peut être a la base de la naissance des nouvelles institutions culturelles (musées avec de thématiques diverses issues des témoignages déposées en cours du travail de recherche, des centres culturels fondes suite aux travaux de recherche sur la mixité des cultures, etc.) De même, dans le domaine de l'éducation, la mémoire collective peut fonctionner (et souvent elle le fait) comme un système d'information en ce qui concerne les compétences des organismes d'enseignements (écoles, lycées, universités) en assurant leur prestige local, national ou même mondial. En même temps, le travail de mémoire sur la culture pourra recueillir des informations capables a induire la création consciente des courants artistiques, dans les domaines de la peinture, de la littérature et de l'art en général qui seront automatiquement en étroite liaison avec le milieu dont ils sont issus. En s'inspirant de ce retour vers le passe et en le réinterprétant, les artistes peuvent par la suite influencer eux même l'avenir de la ville, pas seulement au niveau social, mais aussi au niveau physique de l'espace urbain. De la même manière, dans le domaine de la science, la mémoire collective pourrait constituer la base pour des théories nouvelles en contribuant ainsi au développement de la culture universelle.

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De point de vue économique, l'histoire peut permettre a la ville de comprendre les dynamiques économiques actuelles qui ont ou non des causes internes et aussi de visualiser et analyser ces causes en vue des décisions futures. La question qui se pose est de comment utiliser et interpréter ces ressources du passe pour réussir a revitaliser certaines zones économiques et les maintenir toujours a l'hauteur des demandes en fonction des évolutions du contexte qui lui, est en perpétuel changement. Le but c'est d'essayer de trouver dans l'histoire une source infinissable de solutions aux problèmes d'actualité.

En même temps, le développement économique des villes, inspire des traditions locales, peut gagner une symbolique créatrice d'identités et qui va assurer en même temps la vitalité économique future de la zone en question . Un exemple dans ce sens est la création de l'industrie suisse SWATCH, basée sur une longue tradition dans l'horlogerie qui est devenue une icône forte a l'échelle mondiale et qui donne la garantie de la stabilité économique de l'industrie même.

Un autre mode très actuel d'exploitation de la mémoire collective est le tourisme. Favorise par les nouveaux moyens de déplacement , par le phénomène de la mobilité et soutenu par une société qui se préoccupe de plus en plus des loisirs, le tourisme devient une bonne stratégie économique pour certaines régions, villes, territoires. Ainsi, par la redécouverte des traditions anciennes, en les réinventant par des manifestations culturelles ou de loisirs (carnavals, fêtes, etc.) ou même par des logos (Strasbourg – le dessin d'une cigogne), les villes se créent des images attirantes, qui séduisent les touristes et qui participent ainsi au développement économique.

Ces enjeux (culturels, économiques, sociales) sont fortement conditionnes par le contexte politique. Ainsi, il y a eu dans l'histoire des régimes politiques inappropriés pour la conscience de la mémoire collective et donc pour son utilisation ultérieure. Un exemple dans ce sens, serrait le régime communiste instauré par Ceausescu en Roumanie, représente par une dictature qui n'a pas tenu compte de l'histoire d'un peuple, et qui a défiguré le visage des villes roumaines qui ont perdu un patrimoine architectural et urbanistique inestimable suite a ce régime. Par contre, le mieux adapte dans ce sens , semble le cadre politique démocratique qui crée les premises d'une mémoire collective capable de faire avancer consciemment les entités urbaines.

En tenant compte de tous ces aspects (d'identité – social, culturel, économique), le travail de développement de la ville et de projet urbain doit aussi rajouter leur propre champ de constatations en ce qui concerne le passe. L'analyse de la ville, telle qu'elle est devenue actuellement doit passer aussi par la prisme de la mémoire. Par exemple, le tissu urbain actuel de n'importe quelle grande ville de l'Europe Occidentale, porte les traces des changements historiques conditionnés soit par le cadre économique, soit par celui culturel ou politique. Ainsi, les grands

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ensemble, les cites ouvrières, les sites industriels ou militaires, l'intégration des villages dans le tissu urbain périphérique, les zones pavillonnaires ou le tissu de type open planning, représentent des traces de l'histoires et des témoignages de la transformation du territoire urbain. Toutes ces expériences précédentes montrent aux acteurs de la ville soit des exemples négatifs a jamais répéter soit des organisations urbaines qui fonctionnent et qui peuvent constituer des points de départ pour les futurs opérations. De la même manière il y a des expériences capables de prouver l'importance du passe dans la ville. On parle ici des villes novelles, complètement planifiées et réfléchies, qui font ressentir justement cette manque de valeur historique, de tradition, sans aucune trace du passe a laquelle elles pourraient s'attacher.

Par contre,un problème très intéressant qui intervient, est la quantité de mémoire dont les villes ont besoin pour assurer leur avenir. Garder tout est impossible, renoncer a quelque chose devient problématique car on peut se tromper. Le plus difficile, mais pas impossible, est de trouver la juste balance entre la conscience du passe et l'originalité d'un projet nouveau, tout en tenant compte de la population, de ses besoins. Un exemple dans ce sens pourrait être la Potsdamer Platz a Berlin, réaménage par Renzo Piano, qui était un lieu plein d'histoire douloureuse pour les allemands, comme un trou noir qu'ils voulaient oublier. Tout en sachant que l'histoire ne peut pas être effacer facilement, Renzo Piano, réussi a faire un projet qui ne tient pas compte de la signification historique de cet espace et arrive a définir un nouveau lieu de rencontre, comme un territoire neutre entre le Berlin d'Est et celui de Occidental.

3. CONCLUSION

En effet, on remarque que prendre conscience de l'histoire impose des responsabilités autant au niveau de l'individu (qui peut posséder des mémoires qui intéressent toute la collectivité) mais aussi au niveau des groupes d'intervenants (sociologues, urbanistes, politiciens, hommes de culture, etc.) et des institutions administratives qui doivent gérer les informations pour faire évoluer la ville.

Bibliographie:

1. Bruston Andre, *Des cultures et des villes: memoires au futur*, Editions de l 'Aube, Paris, 2005 (in French).

2. Foret Catherine, *Centre de ressourses et d'echanges pour le developpement urbain* (CRDSU) Lyon, 2005 (in French).

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THE SENTIMENTAL AESTETICS OF G.M.CANTACUZINO

Doina Mira Dascălu

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Summary

There are personalities which have such magnetism that every word surrounds you with perfume, color and light. The architect G. M. Cantacuzino was blessed with such a charismatic power. Reading his books, looking his drawings or paintings, means to enter in a special realm, beyond time and space. His language has rhythm and creates sounds that you can hear indeed. His paintings and drawings bring our soul into a dreaming and peaceful state. Entering in this atmosphere, you will be able to see trough his eyes all the treasures of the worlds that he describes or draw, you will hear trough his ears all the enchanting sounds of the nature and human beings.

G. M. gives to the Romanian architecture such explanations that you can understand all the complicated processes passed in the historical evolution. He feels those times, in a very dramatic way, because that period was full of dilemmas for the Romanian architecture and he feel all the problems like a sensible but objective annalist. We can say that he had an innate personality to analyze, to go and find all the roots of every artistic or stylistic hypostasis from the human history.

His entire creation gave him the right to talk, not as a dry and theoretical critic, but as a creator of exception.

Keywords: G. M. Cantacuzino, Romanian architecture, tradition, modern architecture, sentimental aesthetics, stylistic hypostasis.

1. INTRODUCTION

There are personalities which have such magnetism that every word surrounds you with perfume, color and light. The architect G. M. Cantacuzino was blessed with such a charismatic power. Reading his books, looking his drawings or paintings, means to enter in a special realm, beyond time and space. His language has rhythm and creates sounds that you can hear indeed. His paintings and drawings bring our soul into a dreaming and peaceful state. Entering in this atmosphere, you will be able to see trough his eyes all the treasures of the worlds

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His entire creation gave him the right to talk, not as a dry and theoretical critic, but as a creator of exception.

2. ABOUT THE ROMANIAN SOUL AND ARCHITECTURE

Being in other big countries, or in other magnificent build or natural landscape, he turns back with his mind and soul, again and again, to the Romanian soul and architecture: "At the first sight it seems to be confused and not very clear. The Romanian landscape…is like a target… different arrows from different directions come over it. If we compose the different spiritual forces which worked over the collective Romanian soul, only two big resultant remain: one aim to north-west and one to south-east."

One of the explanations that G. M. Cantacuzino gives to the influences, over the Romanian soul, comes from the geographical position of our country: its important position, into a big commercial roads intersection, where the big roads from Europe to Asian steppes cross with the big roads from North Sea to Black Sea. He perceives that "the gothic constructivity meet the Byzantine one on the land of Moldova" and in Walachia where the Byzantine style came directly over the Danube River "they build in the purely Byzantine style".

Through the depth of his soul he was sensible and attentive how the Romanian people crystallize a strong personality and high culture. He underlines clearly the subtle particularities that give specificity and charm to the Romanian architecture: "It is interesting to observe our soul autonomy or, better, the moral resulted from these researches. We should perceive also that this autonomy don't give us isolation, neither stylistic obedience…The essence stay in the realm of mysteries and any psychological alchemy cannot decompose or penetrate."

These last words remind us Lucian Blaga poem "I don't crash the wonder corolla of the world" - the poet don't want to destroy the mystery of Creation trough a dry and rational research, he want only to enjoy through intuition and contemplation. In the same way, G. M. decipher the mysteries of Romanian

architecture without destroying its subtle aura that the time weaves and he succeed to transmits the sincere joy of his contemplations.

As an authentic and passionate researcher, guided by a special common sense and discrimination, he observes that: "We adapted to the historical storms. Like the small trees which grow to the sea side, taking strange form in order to resist to the devastating winds, in the same way our art took the subtle way, appropriating such hermetic and meditative character, only sketching in the natural harmony the line of spiritual tendencies, of reserved emotions and of some smoothed emotions."

3. THE SENTIMENTAL AESTETICS OF G.M.CANTACUZINO

Related to the most disputed subject of "traditionalism versus modernism" in the Romanian architecture, he succeed to choose the middle wise way: "First of all, it is about knowing which is our attitude facing the new currents…The modernism and the Romanian style seems to be like two antagonist forces, which cannot give any common resultant. But, if we analyze further this problem, if instead using the acceptable and larger words *tendency* or *current*, I believe that the image of our future clarifies itself…Each (style) represent a tendency susceptible of a long improvement or adjustment. Each one represents experiences that wait to be ratified by their utilization, means by the time."

Living in that époque which was an important stylistic crossroad for the Romanian architecture, G. M. don't reject modernism, but explain about this phenomenon in a very clear manner: "In any case, we don't talk about the architectural application of some aesthetics. It is not a fashion, but it is about social imperatives. So, the problem is not *Romanian architecture versus modern architecture*, neither *national art versus international art*. First of all, the problem is to know which our attitude could be in front of these new premises, and how these problems will be solved by the Romanian soul, how will assimilate the new experiences."

In a very wise way G. M. Cantacuzino pay attention to the dangers of applying the international style in art, using injudicious ways: "The pretext of internationalism for setting the art on the pure abstract and intellectual plan, cutting any root with the local sentimentalism, this is a very futile and dangerous game…You are not Romanian beginning today, but you are the product of this very past, doesn't matter what your future desires could be."

G. M. feel those times, in a very dramatic way, because that period was full of dilemmas for the Romanian architecture and he feel all the problems like a sensible but objective annalist. We can say that he had an innate personality to

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analyze, to go and find all the roots of every artistic or stylistic hypostasis from the human history. And he explains himself very clear: "I don't sustain only the retrospectives attitudes, but I think that the images, containing the works of the past, are favorable places giving for the thoughts a security feeling for dreaming the future."

Trying to surpass his époque architectural dilemma, he had a vision of future obstacles on the road of the imitations of the past: "To provide for an autochthon stile with the satisfaction of using and adapting the past elements, more or less successful for covering the present needs, this can lead to a deadlock, because this can lead to early to the exhaustion of some evolutes forms from the past and to the condemnation of any future evolution."

4. CONCLUSIONS

He understood through his own experiences the difficulty to resist, as an architect, in front of the modern stylistic avalanche, to the technical progress, to the new construction materials, or in front of the urban vanguard. His architectural creation gave him the maturity to talk, not as a dry and theoretical critic, but as a creator.

G. M. Cantacuzino looks with objectivity to the effects of the Romanian modern architecture of his time over the Romanian people. He understood the confusion feeling created in the minds of urban inhabitants, because of the new architecture which grew suddenly beside the old buildings: "Romanians remain puzzled in front of this strange, but quite attractive mirage and the specific nostalgia of his soul, of a patriarchal life."

This patriarchal trait of the Romanian soul has deep roots in our history and imprinted in a visible way the Romanian past architecture. The specific, traditional architectural and decorative elements come again and again in the present architecture, and because of that G. M. say: "Our aesthetics comes from an honorable sentimental attitude…We sincerely seek a one's own, properly décor."

Finally, G. M. Cantacuzino understood that there is any dilemma between the traditional and the modern Romanian architecture, but only appearances. He had a vision of the future cities: "Loosing many historical monuments from our cities, it was a request for the new monuments to remind the past to which we are so deep related…But beyond banality, our cities will take something from the dignity of ancient citadels, and we will certainly be more in harmony with the past, than remaining into a retrospective attitude".

The innate qualities of Romanian people, as a strong desire for culture and civilization, are the arguments for a future salvation of Romanian architecture:

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"Opening our spirit and curiosity to these common problems for all the peoples of the world, we will enter in the big constructive cycle of the modern life, giving to our inherent qualities the possibility to be developed on a large scale…We cannot unconsidered now, as we did not in the past, the big idealistic currents which excite the world."

The clear soul autonomy of the Romanian people is underline in the books of G. M. Cantacuzino and that quality created such important chef d'oeuvre in our architecture. His resolution was: "Our problem is not to reduce the general currents to a local aesthetics, but to turn to the best account our old local tradition, bringing it to a general importance, at the big human level of imperishable works".

The Romanian soul dilemma remains a psychological one, or a sentimental one: "Only when we will have a completely awareness of our possibilities, we will create a superior art, where the fantasia will find a wonderful world of creative possibilities, free of any conditionings".

References:

1. Cantacuzino G. M., *Izvoare si popasuri*, Ed. Timpul, Iasi, 1999 (in Romanian)
2. Cantacuzino G. M., *Scrisorile catre Simon*, Ed. Dacia, Cluj-Napoca, 1993 (in Romanian)
3. Shri Mataji Nirmala Devi, *Meta Modern Era*, Computex Graphics, Bombay, India, 1995

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"MIHAIL STURDZA" PALACE BETWEEN PAST AND PRESENT

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Summary

The synthesis work of the Russian architect M. Singurov,[1] built up within the norms of the neo-classic style as a royal palace for Mihail Sturdza, between the years 1841-1842, was bought by Moldavia and Suceava Metropolitan Seat in 1891 to become the residence of Veniamin Costache Seminary , the restorations having been led by the architect Gh.Mandrea. The maintenance and restoration works took place between 1893 and 1910 under the guidance of the architect I. Vignali, as well as minor works performed after the earthquake of 1940 and the bombardment of 1941.[2]

A series of provisory consolidation works were made up after the earthquake of 1977 and studies signing the deteriorations evolution and their cause, restoration and consolidation works were performed as well.

Under the circumstances of reacquiring the status of location for theological training and education with new functional requirements, a new strategy and approach for consolidation, restoration and functional rehabilitation works is imperiously imposed.

Keywords: palace, neo-classic, Moldavia and Bucovina Metropolitan Seat, deterioration, consolidation, restoration, rehabilitation.

1. INTRODUCTION

The former palace of Mihail Sturdza is an edifice, characterizing a certain period of developing the historic centre of Iaşi, representative for the Moldavian royal families, used as royal residence for Mihail Sturdza within 1842-1849 as well. This building has also remained in the history of the city as the main centre of orthodox theological training and education, Veniamin Costache Seminary having been functioning since 1894 up to 1948.

After about 40 years, while the building has been used by other units of superior training, the palace has suffered severe damages due to wars and earthquakes, and after several partial repairing works, null and void most of the time, the edifice has come back to Moldavia and Bucovina Metropolitan Cathedral

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as residence of D. Staniloaie Theology Faculty of "Al. I. Cuza "University from Iaşi.

2. "MIHAIL STURDZA" PALACE - BETWEEN PAST AND PRESENT

Mihail Sturdza Palace, situated between St.Gheorghe Lozonschi Church and Moldavia and Bucovina Metropolitan Cathedral, a remarkable presence in the architecture of the last two centuries from Iaşi, makes the object of consolidation, restoration and functional re-establishing studies and projects, according to its new status as residence of Theology Faculty got at the end of the XIX th century.[1]

The monumental building in neo-classic style was finished between 1841-1842 under the guidance of the Russian architect M. Singurov and was designated as royal palace of Mihail Sturdza and as private residence in the city as well.

Bought by the Moldavia and Suceava Metropolitan Seat and Veniamin Costache Seminary from Socola in 1891, extensive restoration works led by the architect Gh.Mandrea were performed from 1891 up to 1983. Between the two world wars, It has temporary sheltered a campaign hospital and military unit as well. After the Second World War, the seminary having been cancelled, the Palace has become the residence of certain locations designated to Superior Institutes from Iaşi.[2]

One of the most important civil buildings, built up between 1800 and 1850, due to its spread ness and architectural composition worth the title of palace.

Taking over a certain type of palace, developed especially in baroque and neo-classic architecture, the architect Singurov has proposed the extension of the old central segment with two lateral wings. The two wings, with long sides surrounding a large court of honor, arranged as park, the access from St. Gheorghe Lozonschi Church having been made through, configure an H shape The central body of the building provided with an outer part in the median area that is enabling the access in the edifice and the stair of honor getting to the first floor is corresponding to, has a secondary access to the yard delimitated by short wings toward the Metropolitan assembly.

The aspect of the palace is impressing as a whole; its composition in classic style is generous, in perfect harmony with the function of the royal palace. The main entrance is marked by a higher volume, decorated wile pilasters, columns with composite column heads with a developed entablement, richly decorated friezes and cornices. For the last cornice, the crowning entrance is marked by a stir of balusters and two classic acroterium.

The main entrance is assured by three double oak massive doors with sculptured ornaments and decorated fences. The great hall and the stair of honor

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are built in an architectural plastic art specific to the nobles' houses from that period. The walls are marked by pilasters with Corinthian column heads built up from masonry and the ceiling is taking over the enclosure of the stair house found in Roznovanu's Palace. On the left and the right side and on the lateral wings as well, in a symmetrical composition a suit of windows at the ground floor and the first floor are marking the spread ness of the main rooms, embodying the perimeter of the court of honor. The ground floor is represented by a strongly proliferated boss age separated by the floor marked by the suit of framed windows through a classical decorated frieze. A strong cornice is emphasizing the crowning and above each window from the first floor, framed in classic profiles, there is Sturdza's family blazon. The endings of the two lateral wings are the most strongly expressed volumes. Their decoration is the same with that of the central area. A suit of blind windows corresponding to an attic with a considerable height is situated over the first floor. Although its proportions and the essential elements of the facades facing to the yard have been preserved, the posterior facade hasn't the same rich ornamentation.

The interior is much poor in architectural designs, even austere, the proper attitude for the usual use is that of training and educational location.

The main body of the building is a corridor leading to the posterior façade, toward the southern area, designated as monumental stair with accessing platforms that are forked at the attic level and all the rooms are faced toward the court of honor. The two lateral wings have a corridor leading to the park-yard and the rooms are facing toward the lateral facades.

The chapel located within the central body of the palace has been integrated in the new assembly with the occasion of the restoration performed in 1891 that might be seen at an attentive analysis of the correspondence between the equal size of the windows and the chapel lightening requirements, has imposed the closing of a number of windows.

The building has the resistance structure made up of brick masonry, diversified ceiling (masonry vaults with metallic profiles, armed concrete, wood), and masonry foundations without hydro-isolation made up of natural rock, pedestals of large blocks of rock, wooden framework and coverings made up of iron plates. The fill in, partition walls of brick masonry were built in different stages and don't have a perfect connection with the rest of the structure.

A network of masonry caves, presently inaccessible, is placed under and outside the building. The caves don't have an airing system, and the natural ventilation system that usually exists to all old buildings, has been destroyed in time, these ones having been considered the main cause of moistening of the ground floor together with the rising of the yard level, the generalization of the

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asphalt coating, the uncontrollable losses of water and sewage system and the consequence of the rising of the underground waters level as well.

The central passing by corridor which is the oldest one is developed on the ground floor, semi basement, the first floor and the high attic while the wings have ground floor, first floor and a high attic only.

There might be deep caves, presently inaccessible, under the building. Such an entrance starts from the south-east part of the annex of the south side that doesn't belong to the original assembly of the building and that is spreading in parallel with Crişan Street. The lateral caves from the inner yard of the building have been partially destroyed at the consolidation works performed in 1985 and 1990.

The earthquakes from the XX century and the wars as well, have affected the resistance structure of the building, so that the most easily noticed deteriorations from nowadays are those of the abundant dampness from place to place with damaging effects on finishing area and also on the brick masonry durability and deep fissures from certain areas of the masonry.[3] A series of partial consolidation works and those of removing the dampness and of the interruption of the disruption processes of the foundation ground by waters infiltration under the building were performed after the earthquake from 1977.[3]

As a result of the documentation studies that have been performed, of those of researching the archive and of the land inspection, due to the technical expertise and to the analysis of the physical state of the building and to the thematically program, viewing the functioning re-establishing in accordance with the statute of Theology Faculty, a concept of implementing restoration, delivery, preservation and reintegration works shaped in a direct correlation with the functional arrangement wished by the patron will lead to the revitalizing of the hereby historic and architectural monument. 4-6 rooms for groups of students including about 100 students, seminary rooms for groups made up of 15-30 students, laboratories for the restoration objects belonging to the cultural patrimony (icons, books, textile material, metal works) and for the didactic stuff, counseling rooms and administrative places, library with storing locations and reading rooms will be created in order to achieve a performed development of the didactic process.

Answering to the needs referring to receptions, meetings, ample public manifestations, in order to strengthen the relationship with the Metropolitan Cathedral, the central part of the building has performed amplification in this respect with a student angora at the ground floor, an academic forum at the first floor and a polyvalent space, location for certain ecumenical manifestations at the attic.

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On the location of the presently festivity hall, there is also the possibility of arranging an amphitheatre with a capacity of 150 seats in the south-east small wing. By the clearage works that will be performed in the southern wing, the filling at the level of the ground that is situated under the level of the ground floor will be removed, giving the possibility of creating useful locations designated to restoration and micro- production activities. The useful locations will be spread away, developing a room for seminars, individual study, for students and doctor degree candidates and accommodation as well within the existent attic. As the attic is very high, the investigations are not going to affect the volumetry of the assembly or the original plastic art at all.

The demolition of the two annexes with an advanced degree of deterioration, presently used as storing shelters that have been added lately in the south-east side of the building, is imperiously required. In the further stage of construction, a new building with the required volumetry and a proper architectural plastic art that which should include the building of the Theology Faculty in the metropolitan seat.

3. CONCLUSIONS

The consolidation, restoration and functional rehabilitation works going to be performed will contribute to the compliance of the historical and architectural monument of Iaşi with the present circumstances, nevertheless participating to the spiritual wealth of the people living on these places.

References:

1. Nicolae Stoicescu, *Repertoriul bibliographic al localitatilor si monumentelor medievale din Moldova,* Editura Directia Patrimoniului Cultural National, Bucuresti, 1974, (in Romanian)
2. Primaria Iasi, *Dosar 60,7/9 Seminarul Veniamin Costachi* (in Romanian)
3. Facultatea de Constructii si Arhitectura, 1994, *Studii si cercetari privind interventii la cladiri cu valoare arhitecturala si istorica deosebita,Studiu de caz "Palatul Sturdza" Iasi* (in Romanian)

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SUSTAINABLE DEVELOPMENT AND LANDSCAPE ECOLOGY

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Summary

The adaptability of human beings, with all their limits and their possibilities, shows in time that there are many limits of the resistance capacity of human species. Therefore, the technological development should be compatible with the human health, giving survival possibilities, enhancing the quality of life. As more communities experienced the effects of urban sprawl, traffic congestion, polluted rivers, streams and lakes, loss of forests and open space, local citizens became concerned about their quality of life and loss of community. These concerns led to an outburst of projects throughout the nation to stop uncontrolled growth and start planning for a more viable and liveable future. Efforts of sustainable development soon became a local issue more than a global or regional issue.

As a vanguard, in the 1960's, Ian McHarg defined what is called sustainable development in his book, Design with Nature. That time, he was far before his time when he wrote: "Where you find a people who believe that man and nature are indivisible, and that survival and health are contingent upon an understanding of nature and her processes, these societies will be very different from ours, as will be their towns, cities and landscapes."

Two landscape ecological approaches succeed to find judicious ways, through such research and studies wich have been conducted to find the best design, integrating man and nature. In order to create sustainable communities, these studies was conducted to find some alternative design to the traditional and conventional urban and teritorial design.

Keywords: sustainable development, landscape ecology, traditional design, conservation design, network of open spaces, quality of life.

1. INTRODUCTION

The adaptability of human beings, with all their limits and their possibilities, shows in time that there are many limits of the resistance capacity of human species. Therefore, the technological development should be compatible with the human health, giving survival possibilities, enhancing the quality of life.

As more communities experienced the effects of urban sprawl, traffic congestion, polluted rivers, streams and lakes, loss of forests and open space, local citizens became concerned about their quality of life and loss of community. These concerns led to an outburst of projects throughout the nation to stop uncontrolled growth and start planning for a more viable and liveable future. Efforts of sustainable development soon became a local issue more than a global or regional issue.

The concept of sustainable development emerged on a global scale when the United Nations proposed for cities and counties to strive towards sustainability in 1992. The United Nations created a definition for sustainable development at the UN's Commission on Environment and Development Conference in Rio de Janeiro, Brazil. They defined it broadly as "development that meets the needs of those present without compromising the ability of future generations to meet their own needs." The goal of sustainable development is to attain social equity, economic prosperity and environmental enhancement.

As a vanguard, in the 1960's, Ian McHarg defined what is called sustainable development in his book, *Design with Nature.* That time, he was far before his time when he wrote: "Where you find a people who believe that man and nature are indivisible, and that survival and health are contingent upon an understanding of nature and her processes, these societies will be very different from ours, as will be their towns, cities and landscapes." [1] His book underline the need to balance a community's physiographic resources and social values to determine the areas within a community where both benefit and one does not harm the other. This approach is what communities today are challenged with in attaining sustainability.

2. SUSTAINABLE DEVELOPMENT AND LANDSCAPE ECOLOGY

Two landscape ecological approaches succeed to find judicious ways, through such research and studies wich have been conducted to find the best design, integrating man and nature. The first approach expresses the communities need to inventory their natural resources and social values to protect their environmentally special areas from the degrading kind of development, population growth, and irresponsible planning. The second approach aim is the neighborhood planning and the need to create a sense of community within these neighborhoods. These approaches want to give the possibility of integrating landscape ecology and land-use planning among willing communities, who demand new policies and demand alternative approaches to community planning.

In order to create sustainable communities, these studies was conducted to find some alternative design to the traditional and conventional urban and teritorial design.

One of these alternatives is the concept of "Conservation Design", which remind us the green settlements proposals from the beginning work of Frank Lloyd Wright.

That means a type of design in which developers set aside part of their land for open space and build at their maximum density on smaller lot sizes in a "less land-consumptive manner [2]. This design manner will provide a network of open space throughout a community - open space which can be in the form of agricultural lands, native forests, managed forests, greenways, linear hydrologic systems, and other undeveloped land with harmonious qualities.
The most important research is how to obtain this network of green space. Two studies of Arendt Randall - from Natural Lands Trust, *"Conservation Design for Subdivisions: A practical guide to creating open space networks"* and *"Growing Greener: Putting conservation into local codes"*, propose some tools: creating a vision project, protecting open space networks in the existent plans, developing zonal options, and creating design standards.

The Natural Lands Trust proposes that developers/designers first identify land of primary and secondary conservation needs and map these areas on their land-use maps. [3] These conservation areas will include endangered/threatened species, native or rare habitat, unique land features, wetlands, aquifer recharge areas, floodplain areas and other environmentally sensitive/in danger areas, that need protection. Then, the other step should be the identification of areas that are suitable for development. This concept encourages developers to preserve also the conservation areas that have potential for connectivity with other conservation areas within the community, in order to create a network of open space throughout the region. Only after these special areas are identified, the developer can design the streets and trails around the conservation areas and the development areas. And the last thing that should be done is to draw the lot lines. This kind of project seems to be the reversal of conventional/traditional design.

Another alternative approach is the "Traditional Neighborhood Design", which focuses on some other important community needs: economic prosperity and social equity. Traditional Neighborhood Design wants to reintroduce the true definition of a neighborhood: an identifiable place where neighbors live in harmony, near each other. [4] This approach tries to restore a community dignity and establish a good sense of appropriating the place. This design tries, in a harmonious, resource-efficient and effective way, to link the home to the place where inhabitants work, shop, learns, play, and relax.

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3. CONCLUSIONS

This kind of design should be integrated with the "Conservation Design Concept" in order to attain the best environmental issue of sustainable development, in order to create sustainable communities. The fast paced changes occurring today created an increasing need to provide areas for the public to relax and slow down and enjoy their surrounding environment. A combination of these two approaches results in a community that can function somewhat independently from the larger region on a small scale. How well the community functions is contingent upon whether the residents utilize these resources to their maximum potential.

The most important aim is to bring people and nature together, to live in a harmonious way, enhancing the quality of life while benefiting nature. A true ecological neighborhood creates neighbors who socialize, work, and learn together, as a harmonious community. That means creating a true neighborhood where the residents' can identify with and take pride in, that means creating a new awareness, an ecological consciousness [4].

References:

1. McHarg, Ian. *Design with Nature,* John Wiley and Sons, Inc., New York, 1992.

2. Arendt, Randall. *Growing Greener: Putting conservation into local code,* Draft booklet, Island Press, California, 1997.

3. Arendt, Randall. *Conservation Design for Subdivisions: A practical guide to creating open space networks,* Island Press, California, 1996.

4. Shri Mataji Nirmala Devi, *Meta Modern Era*, Computex Graphics, Bombay, India, 1995

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MATERIAL PERCEPTION AND PSYCHOLOGY IN ARCHITECTURAL CONVERSION

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Summary

The fast developing of mankind cast upon human beings the illusion of progress and comfort, but in reality can have a destructive effect. Objects around us have a very strong influence on our psychology.

The objects around us create the material world in which we live. They can have a very strong influence on our psychic and our interior conditions, enclosing in the same time the projection of the environment that created them.

Considering the psychology of a man – made form, we can draw some conclusions abut different characteristics of social, ideological, cultural and political factors who influenced the final form of conception.

The restoring of historical monuments represent a process that soften the pragmatic look towards future, but the rehabilitation of old factories is regarded with skepticism by the investors who want to get a quick profit.

Here are some reasons to reconsider the revaluation of converting of old spaces.

Key words: historical monuments, industry, industrial heritage, conversion, form, psychology, identity.

1. INTRODUCTION

The objects around us create the material world in which we live. They can have a very strong influence on our psychic and our interior conditions, enclosing in the same time the projection of the environment that created them.

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2. MATERIAL PERCEPTION AND PSYCHOLOGY IN ARCHITECTURAL CONVERSION

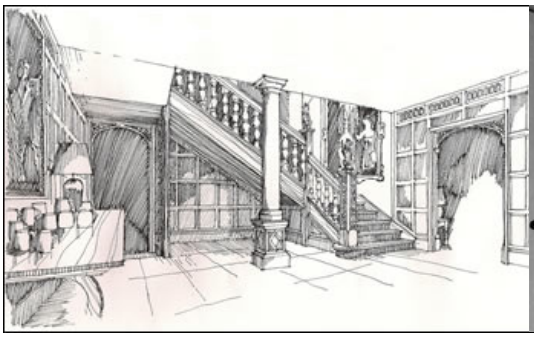
Having an innate instinct to create, man has made objects, integrating – in a conscious or not conscious way – the utility and the aesthetics.

First sign of discontinuity in this relation took place due to the first industrial revolution, because of the mass production. But, even if objects lost their originality, objects continued to have their aesthetics, which derived from their utility as an adapting to a perfectly coherent system – which was NATURE and her internal laws.

Nowadays the utility is no longer the result of physical factors only, but it is the result of PROFIT. Objects are designed to be useful but not to last forever, because new objects have to come soon and to replace them.

The progress of the new society is based on consumption and this we can very easily "read in the object world around us.

The interiors of the postindustrial houses are designed to be flexible, to adapt very easy to change. The furniture is composed by modules, they can be rearranged and changed in a multiple range of solutions.



The value of one object increases with the multifunctionality that characterizes it. But this freedom who bring the illusion of functionality and comfort give people a feeling of instability, and lack of identity of some certain space.

We all love to spend time in house of our grandparents, because there we feel the place where we belong. Here we feel safe, and our body and mind can find rest.

Considering another scale, even the industrial buildings had the same transformation. In the end of XIX and beginning of the XX century, big industrial buildings were adopting another structural system – from the multi-level steel

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structures – which were using the gravity as a force of transporting products between different levels – to the one-level system which used the new-invented horizontal conveyer. This type of structure offered the perfect multifunctional space, which could be adapted to the new-evolved technologies.

According to this rapidly evolution of a world in continuous movement we can feel the same uncertain equilibrium in human being. Man is overwhelmed by material world, and he desire to have more objects, as they change forms, fashions and level of comfort. So, the value of the things last more short time, as they are "up-graded" continuously. Everything is becoming to be more and more temporary. Even the structure of new factories is reversible and their pragmatic architecture has lost the quality of its attributes bringing them to the limit of functionality. The elements of architectural composition – such as space, volumes, light, the facades, become simple sentences that satisfy the minimum of needs for the factory to give profit.

Contemporary factory

As an antithesis of this trend of continuous change, there is the trend of conserving old objects, and so, to preserve the past of human civilization. Old buildings and old factories are reconsidered in urban and architectural developing, by aesthetic, cultural, economic and ecological reasons. This type of developing ensures in the conscious and subconscious of people the physical basis of their existence, because old forms are symbols of our passing through history, and of our identity. Such an object from past is more valuable than a new one, because it encloses a story – maybe about history of mankind, or about the developing of techniques.

Conserving for example an old mill can tell a story about how people lived in that time, how were their social life in community, how they were managing the forces of nature – may that be a wind or water mill.

Rehabilitating an old factory who, after being at the periphery, was absorbed by the city, resolves the issue of the economical and strategically developing of the town, which has a limited and more and more expensive space, it resolve the issue of the ecological problem, by annihilating the pollution factors, and it resolves also the issue about the preservation of the landmarks of the town.

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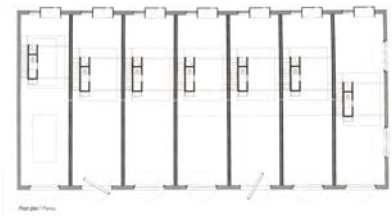
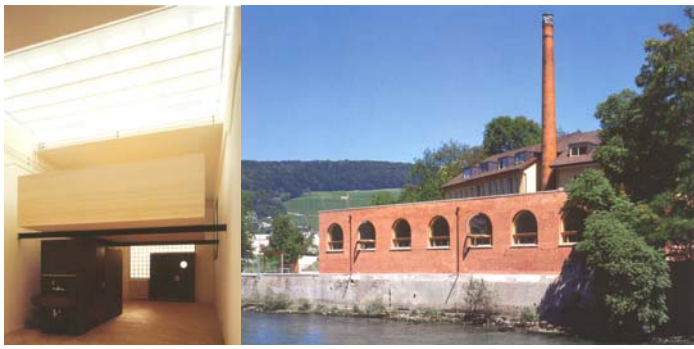
But most important, this preserving of old forms it is insurance, a safety device of our existence, as Françoise Choay would define it. Rehabilitation of the old object lightens the weight of time, and makes calmer the developing of new things. The persistence of memory give the object an anthropological dimension and it humanize even the old factory, which maybe was in the past a place of suffering and struggle for existence.





Conversion of water shop into one-room flats – Entebaden, Switzerland

3. CONCLUSIONS:

The revaluating of past structures is an issue of maximum importance, because otherwise, in the name of progress we can wipe out our history, real values and identity. Because very few people do not realize this, there should be made a mass informing workshops and seminars, to help them understand the real value of their heritage in all its aspects.

References:

1. Heritage Allegory – Françoise Choay – Simetria, Bucharest, 1998 (in Romanian)
2. The system of objects – Jean Baudrillard – Paideia, Bucharest, 2005
3. Shri Mataji Nirmala Devi, *Meta Modern Era*, Computex Graphics, Bombay, India, 1995
4. The Question Concerning Technology – Heidegger Martin, ed. David Farrell Krell, New York: Harper Collins, 1993
5. The architecture of contemporary industry – economical issues – L. Adler, M. Enescu, E. Baiculescu – Technical Print House, Bucharest, 1972 (in Romanian)

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ARCHITECTURE AT THE END OF THE 20th CENTURY

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Summary

The last decades of the last century were characterized by economic prosperity, at least until the 60s, when economic prosperity was briefly interrupted by energy crises. Architecture ceased to be restricted to a handful of building types. The increased variety and complexity of functions within and around buildings called for new structural and architectural solutions. The early modern style was grounded on rationalism and it intended to break with the historical precedents, many architects became convinced of their ability to solve most social problems by architectural means. Gradually, from modernism and from its derivatives, such as brutalism, functionalism and structuralism, a new and different type of architecture evolved.

In the 20th century progress, continued to advance at a frantic pace, especially in industry; increased urbanization followed and with it the concentration of labor in cities, a trend which has continued right up to the present time. During the period 1960-2000 housing became a mass affair to the point when tens of millions of families could move into well-equipped homes. However, an improvement in world housing conditions and city life remains a task for the twenty-first century. Modernism, undoubtedly, achieved great technical progress in building but by the end of the modernist period (around the 1960s) disenchantment with it had set in strongly. This in turn led to post-modernism which gradually spread throughout the world.

The complex problem of ecology and methods to apply these concepts to the process of designing buildings is of an extreme importance for our profession and the education of future architects. As the use of building materials continued to evolve together with demands for comfort and better hygiene, the form of building changed: they became more open. The development of building forms in hot climate zones was quite different. The tendency in those areas was to locate living areas underground to utilize the coolness of the earth and to create ventilation through buoyancy, thus improving thermal comfort. New schools of architecture, regional developments, or vernacular architecture will spread new approaches, ideas, technologies or materials in order to enrich the already highly divers faces of contemporary architecture.

Keywords: new architecture, technology, modernism, environment, ecology, globalization

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M. Driscu

1. INTRODUCTION

The last decades of the last century were characterized by economic prosperity at least until the 60s. The arms race between the superpowers extended into space, stimulating high-technology industries such as electronics, communications, as well as the more traditional ones: the metal, glass and chemical industries.

Innovations and inventions in armament and space research quickly found their way into everyday civilian use, and this applied to the building industry too. Economic prosperity was briefly interrupted by increased oil prices. The energy crisis of the 70s spurred Western economies into devising new solutions for the reduction of energy use, for example by adopting higher standards of thermal insulation and by developing new technologies and discover many materials.

Architecture ceased to be restricted to a handful of building types. The increased variety and complexity of functions within and around buildings called for new structural and architectural solutions. Moreover, the construction of high-speed railways and the new facilities of air transport were of greater complexity than was traditionally the case. This, together with the general increase in the size of buildings and structures, led to the use of greatly increased spans. Therefore, any treatise on architecture must cover a much broader range than was the case in earlier periods.

2. ARCHITECTURAL "MACHINERY"

The notion that buildings equipped with a multitude of modern services could serve as machines was first raised in the 1920s. It was Le Corbusier who famously said that a house is a machine for living in. This was a statement that did not find universal favor. Frank Lloyd Wright vented his sarcastic disagreement:" Yeah, just like a human heart is a suction pump". It was only later in the "high-tech" post-modern period that the idea was materialized in a very sophisticated way.

The early modern style was grounded on rationalism and it intended to break with the historical precedents. Fired by a new aesthetic vision, many architects became convinced of their ability to solve most social problems by architectural means. However, disappointment with modernism soon arose in the recognition of the failure to construct cities with an adequate quality of life (Jacobs). Many felt that a fresh start was required, which could contribute to urban renewal. Just to mention one of the similar statements about this development: "The revolutionary ideal of solving societal problems through design that was so vehemently proclaimed by modernism's proponents in the heroic age of the 1930s was exposed as hollow". Gradually, from modernism and from its derivatives,

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such as brutalism, functionalism and structuralism, a new and different type of architecture evolved with some practitioners and theoreticians accepting and others rejecting the post-modern label (Koolhaas, Jodidio).

The 1960s introduced new-thinking, which gradually developed into post-modern trend. The last 40 years of the century saw how post-modernism it self became spent and began to make way for new architecture, sometimes called super-modernism. New functions of buildings and the concentration of different functions in single versatile and flexible buildings required new building designs. New architecture does far more than simply retain and renew the achievements of the past's architecture; it also applies new principles.

These embrace new architectural and structural schemes, the satisfaction of new functional requirements and the use of modern construction and design technologies. Some of these are the new materials (reinforced concrete, metals, glass, plastics), tensioned structures (tents have been built since ancient times but their modern variants offer entirely new possibilities) long-span roofs over large spaces, retractable roofs, deployable structures, atria and many others. In certain types of buildings (hotels, offices) high atria have been introduced. Whilst some architects were prepared to see the post-modern style as a logical development of modernism, many considered that the new style was a reaction to the latter's impersonality. According to Jencks: "The main motivation for Post-modern architecture is obviously the social failure of modern architecture (Jencks, 1966) and Post-modern is a *portmanteau* concept covering several approaches to architecture which have evolved from modernism. As the hybrid term suggests, its architects are still influenced by modernism… and yet they added other languages to it. A Post-modern building is doubly coded – part Modern and part something else: vernacular revivalist, local, commercial, metaphorical, or contextual". (Jencks, 1988)

Indeed the post-modernism style favored the use of decoration, symbolism, humor and even mysticism. Unlike those favoring pastiche out of nostalgia for the past, the proponents of post-modernism were prepared to avail themselves of the use of up-to-date technology, as well as traditional materials. In this they recognized that technology affected architecture both in form and function

The new "machinery" represents a joyful possibility for architects to use their imagination, creating a diversity of spaces. For example, in the skyscraper "The Commerzbank Building", Frankfurt, designed by Sir Norman Foster and Partners, the planned three-storey winter gardens spiraling around the building, became four-storey, while the double-leaf facade became single-leaf. Another fundamental change was to integrate the elevator areas in the service cores, which had previously been annexed in the 'fish rail'. However, the basic idea remains unchanged.

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In pursuit of improved infrastructures for urban areas, designs with atria, malls and light wells, are enjoying a revival. The architecture of the late 70's and early 80's rediscovered the special features of rooms under glass and their versatility as meeting places, lobbies, climate buildings, modifiers of the microclimate, noise protectors, etc. depending upon the specific requirements, different solutions present themselves for servicing these projects.

3. ECOLOGICAL APPROACHES

As the use of building materials continued to evolve together with demands for comfort and better hygiene, the form of building changed: they became more open.

Contrast to these examples of buildings in temperate zones, the development of building forms in hot climate zones was quite different. The tendency in those areas was to locate living areas underground to utilize the coolness of the earth and to create ventilation through buoyancy, thus improving thermal comfort. Until a few hundred years ago, the relationship between human beings and their environment was characterized by their willingness to adapt to the environment and to live in harmony with it.

The comfort requirements were very different in the past and cannot be compared to today's demands, since people were unable to tame nature to the degree to which it is possible now. The global population was much smaller and groups had ample space, finding in nature all they need for survival. The small windows units allowed little daylight to penetrate into rooms. The main function of windows was to provide visual contact with the outside world. Small windows also resulted in minimal heat gains from the outside to the inside, and therefore in minimal cooling loads. In winter, these small windows created only insignificant heat losers and the heating requirements for rooms in the buildings were generally no higher than they are in modern, well-insulated buildings.

In the 20th century progress, continued to advance at a frantic pace, especially in industry; increased urbanization followed and with it the concentration of labour in cities, a trend which has continued right up to the present time and has triggered the tendencies of the post-industrial age with which are all too familiar. 'Less is more' is the motto for all future buildings with regard to ecological demands. Past and modern designs as well as state-of-the materials and technologies should be adopted to minimize energy demand and thus actively protect the environment. The complex problem of ecology and methods to apply these concepts to the process of designing buildings is of an extreme importance for our profession and the education of future architects.

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The technology of ecological building has a sense of integrated planning: global prognoses and ecological cycles help to formulate guidelines for buildings in the future, standards that must be observed if we are to guard against environmental crises. We need high technology in order to integrate the supply of water, heat, cooling, electricity, natural ventilation and lighting into the buildings structures to be design from the start of the processes and to contribute, to the protection of natural resources by utilizing solar energy and rainwater, geothermal and other thermal systems, to name but a few.

More and more clients and investors recognize the need for architectural innovation that will render buildings less vulnerable to crises. Ecological building means applying technical aids sparingly and making the most of all passive means provided by the building's fabric. Here, developments in structural engineering and construction in urban areas, building form and orientation, play important roles. To help better understand certain climatic, aero physical and technical processes and function, the basic principles of these fields are made easily accessible, laying a foundation of information with which to begin drafting new designs.

The measures employed in ecological building are complex and derive from several specialized disciplines - from urban planning, architecture, construction and facade design to active technical building services and their applications. Planted surfaces, indoor and outdoor, fresh air, soil, water and rainwater, all contribute to an integrated design, as does the management of building services and utilities that use the abundant resources of the environment.

Few architects, construction engineers and building services engineers are truly able to deal with these issues; their training has usually not prepared them for this kind of approaches. Very important are the local climate influences by focusing on design, orientation and locations and glazing aspects, as well as integrating planted surfaces, terraces, and shading elements into the design of his buildings.

Developments in efficient heating and air-conditioning services opened up the possibilities of maintaining climatic comfort in large spaces, which were covered, or enclosed by a thin, often glazed envelope of minimal thermal inertia. Consequently, historical solutions, such as the tent or atrium, could be revived in a new context and with the use of new materials and technology. The atrium with glazed roof became a favourite feature of many office, hotel and shopping developments. Relatively recent concepts are sustainability, protection of the environment and energy conservation, all, of which have influenced architectural thinking. Sustainability, in its most general meaning, refers to strategies in the present that do not harm or endanger future life. Various factors contribute to the design of sustainable buildings, which are also referred to as "green buildings". These factors, among others, include attention to energy-conservation and HVAC

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(heating, ventilation, air-conditioning) control, thermal storage and land conservation.

During the period 1960-2000 housing became a mass affair to the point when tens of millions of families could move into well-equipped homes. However, an improvement in world housing conditions and city life remains a task for the twenty-first century.

4. CONCLUSIONS

The "new architecture" makes use of new geometric and amorphous shapes, new concepts and proportions, measure, colour, lighting and technological aspects. Some new non- technological factors, coming from the latest of science and social development, also affect new architecture. The original ideals of modernism were characterized by Jencks:" Modern architecture is the overpowering faith in industrial progression and its translation into the pure, while International Style (or at least the Machine Aesthetics) [has] the goal of transforming society both in its sensibility and social make-up" (Jencks, 1996).

Modernism, undoubtedly, achieved great technical progress in building but by the end of the modernist period (around the 1960s) disenchantment with it had set in strongly. This in turn led to post-modernism which gradually spread throughout the world. The speed with which functions, requirements and technology are changing as called for flexibility and adaptability in buildings design.

Returning to the socio-political events, the most momentous of these in the late 1980s was the collapse of the communist system in Eastern Europe, and with this, the end of the centrally planned economy and ideological constraints. However, from the point of view of architecture, the most far-reaching consequences of the event lay in economics. The event assisted the acceleration of the globalize economy, the penetration of multinational companies into new industries and, the rapid growth of commerce, technology, or corporate identity. Globalization affects also architecture and construction, but globalization as an overall trend in society is still very much a matter of debate.

Great progress has been achieved in long-span building roofs: tensioned table roofs, etc. From the imposing number of new cultural buildings, perhaps the Bilbao Guggenheim Museum (architect: Frank O. Gehry, completed in 1998) may best be characterized as containing the most up-to-date design features: a cladding made from thin titanium sheet, designed by computer program borrowed from aircrafts CAD. Future building design and development must take into consideration the dependencies illustrated in the ecological circle [3, pg.118] has to

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identify the crucial topics, such as exterior space, structural fabric and technology and their respective subtopics.

New schools of architecture, regional developments, or vernacular architecture will spread new approaches, ideas, technologies or materials in order to enrich the already highly divers faces of contemporary architecture.

References:

1. Frampton Kenneth, *Modern Architecture. A Critical History*, Ed. Thames and Hudson, London, 1991.

2. Sebestyen Gyula, *New Architecture and Technology*, Architectural Press, 2003.

3. Daniels Klaus, *The Technology of Ecological Building Basic principles and Measures. Examples and Ideas*, Birkhauser Verlag, Basel-Boston-Berlin, 1997 .

4. Frei Otto, *Architecture et byonique constructions naturelles*, Ed. Delta Spes, Bruxelles, 1985.

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