Special Issue
QUESTIONS 3 – International Workshop in Architecture and Urban Planning
Continuity and Discontinuity in Urban Space

FOREWORD

The present volume includes papers presented at the Third International Workshop in Architecture and Urban Planning, organized by the Faculty of Architecture and Urban Planning of the Technical University of Cluj-Napoca. Preceding the diploma-project sessions of the Faculty and the related exhibition, the workshop was organized in Cluj-Napoca (Romania) on the 8th and 9th of July 2014 and was entitled "QUESTIONS - Continuity and Discontinuity in Urban Space".

Responding to the Call for Papers, scholars and PhD students/candidates, professionals in architecture and architectural higher education contributed to a refreshed understanding of a dialectical pair - continuity and discontinuity - that has often been at the core of theoretical and practical discourses on the built environment.

The contributions were grouped according to three main topics:

Urbs – Civitas
policy & urban structure, urban fabric & communities, urban design;

Architecture in the City
cultural landscapes, living with heritage, contexts, construction & technology;

Private – Public
boundaries & passages, expressing ways-of-life, faces of the city, transitions & public art.

During the workshop, students, teaching staff, researchers and other professional community members had the opportunity to attend contributions by invited professors, mostly from universities involved in Erasmus programs with our Faculty: Fabien Palisse, Arch. du Patrimoine, Maître Assistant Associé, Ecole Nationale Supérieure d'Architecture de Clermont-Ferrand; Patrick Thépot, Enseign. Arch., Ecole Nationale Supérieure d'Architecture de Grenoble; Raf De Saeger, Prof. PhD Eng.-Arch., Faculty of Architecture, Katholieke Universiteit Leuven campus Sint Lucas, Brussels/Ghent; Rudolf Klein, Prof. Habil. PhD Arch., Ybl Miklós Faculty of Architecture and Civil Engineering, Szent István University, Budapest; Smaranda Bica, Prof. PhD Arch. and Liliana Rosiu, Assoc.Prof. PhD Arch., Faculty of Architecture and Urban Planning, Polytechnic University of Timisoara; Daciana Daraban, Assoc.Prof. PhD Arch., Ion Mincu University of Architecture and Urban Planning Bucharest; Ovidiu Pecican, Prof. PhD, Faculty of European Studies Babe -Bolyai University Cluj-Napoca. Other contributors to the workshop came from TU Graz, SIU Budapest, BME Budapest, UP/ Timisoara, UT/ Cluj-Napoca, individual architecture offices.

We are very grateful to Prof. PhD Eng. Aurel Vlaicu, Rector of the Technical University of Cluj-Napoca and to Prof. PhD. Eng. Vasile Dadarlat, Head of the International Office of T.U. Cluj-

Napoca, who encouraged and supported this workshop and to our Dean, Assoc. Prof.PhD Arch. Romulus Zamfir.

The editors appreciate all authors' effort in their valuable contributions as well as the colleagues' help in reviewing the papers published in this book.

We must mention the importance of material support constantly assured by our colleagues, erban igănaș, President of the Romanian Architect's Order and Assoc. Prof. Dana Opincariu. Thanks for the administrative and organizational skills to Lect. PhD Arch. Cristina Purcar, Lect. PhD Arch. Paul Mutica, T.Assist. PhDs Arch. Andreea Motu, T.Assist. PhDs Arch. Alice Oprica and for the important help in organizing the social events to Techn. Cristina Miclea.

Organiser and Editor,

Assoc. Prof. PhD Arch. Mihaela Ioana Agachi
Head of Department of Urban Planning
Faculty of Architecture and Urban Planning TUCN

Cluj-Napoca, December 2014

SECTION 1

Urbs – Civitas

Policy & Urban structure, Urban fabric & Communities, Urban design;

Substantiation Survey - Analysis of Urban Structure

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Abstract

The paper describe a conducted research realized in the Group for Research and Design in Urban Planning of the Department of Urban Planning from the Faculty of Architecture and Urban Planning of the Technical University of Cluj-Napoca, Romania. The purpose of the substantiation survey achieved by our team as support for the project for the general town planning (GTP) for Cluj-Napoca, main city in the north-west side of Romania, was to study the historical - urban becoming of the town, its evolution in time. We followed through economic, social, political and cultural aspect, which decisively influenced the evolution of the city in time, the analysis of its physical components - necessary for understanding the urban becoming. A city is a specific field, recorded in history, having a memory and so failing to completely obey to the needs or the will of a social class, keeping morphological traces that illustrate its resistance. At the same time the memory of a place play a major role in the perennial significance of urban space, keeping "what an era finds relevant in another." (J. Burchardt). Analysis of urban structure as socio-spatial system allows the approach of continuity and discontinuity issues of urban organism evolution. The paper illustrates two types of analysis we made, in a structural and typological approach.

Rezumat

Lucrarea de față descrie studiul realizat de către Grupului de Cercetare și Proiectare în Urbanism, din cadrul Facultății de Arhitectură și Urbanism al Universității Tehnice din Cluj-Napoca. Scopul acestei cercetări l-a reprezentat studiul de fundamentare istorico-urbanistic pentru Planul Urbanistic General (P.U.G.) al municipiului Cluj-Napoca, cel mai important oraș din nord-vestul României. În cercetarea devenirii istorico-urbanistice a orașului s-au urmărit aspecte economice, sociale, politice și culturale, care au influențat decisiv evoluția cadrului construit de-a lungul timpului. Orașul este un teren concret, înscris în istorie, având o memorie și de aceea nesubordonându-se complet necesităților sau voinței unei clase, păstrând repere morfologice care ilustrează această rezistență. În același timp, memoria locului, noțiune determinată istoric și social, joacă un rol important în perenitatea semnificației unor spații urbane, ea ilustrează : "ceea ce o epocă găsește demn de atenție intr-o alta " (J. Burchardt). Analiza structurii urbane ca parte integrantă a unui sistem socio-spațial, permite relevarea unor continuități sau discontinuități ale evoluției organismului urban. Lucrarea de față ilustrează două tipuri de analiză folosite în cadrul studiului: analiza structurală și analiza tipologică.

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Keywords: Substantiation survey, morphological approach, structural analysis, typological analysis, urban structure.

1. Introduction

Our research is part of the substantiation surveys necessary to achieve the project for the general town planning (GTP) for Cluj-Napoca, main city in the north – west part of Romania. The framework content of these surveys generally focuses on the following aspects: delimitation of intended purpose, critical analysis of the existing situation by emphasizing aspects of the case and gap analyzes areas, highlighting dysfunctions and proposing elimination / reduction of gaps (specifying the expected effects and the measures required to be taken), establishment of priorities for intervention. Entitled „Historical and Urban Study of city Cluj-Napoca", our analytical study is one of main basis for deepening urban issues necessary for achieving a sustainable strategy for the future development of the city, by understanding its "making", it's becoming.

2. Research method

We organized the research on two major levels, revealing the analysis mode we consider appropriate for the urban approach of a city time evolution. The urban history of a town is always a decisive argument of customizing a part of the urban area at global or local level, and is well illustrated in the historical maps by the evolution of city's urban structure. City plans (Fig. 1) reveal specific characteristics of urban forms, urban pattern, and network of streets [1], of the main representative areas: squares and buildings. We followed through economic, social, political and cultural aspects, which decisively influenced the evolution of the city in time, the historical evolution of the urban structure. City plans studied in parallel with urban regulations, are illustrative for the way a municipal administration organized the urban development over time. The structural approach is continued by the typological analysis of urban patterns. We analyzed in historical maps of the city the major morphological aspects splitting specific issues related to continuity and discontinuity of the urban organism, of a specific evolution, determined by history and society (number of population, specific activities, habitudes, administration).

The research was based on extensive documentary: main plans of the city Cluj-Napoca, from reconstituted ancient times and historical maps to the present - we found in municipal archives, historical studies and topographical plans, and articles and books on the historical and urban evolution of the town [2].

2.1. Structural analysis

The structural analysis is made on two levels: the distributive and the compliance levels. The distributive approach aims to observe the role of the economic and social objectives, of the location relations, of flows and movements in relation to topology [3]. The city evolved in a gradual ascent on terraces increasingly higher of the Someş River (Fig. 2).
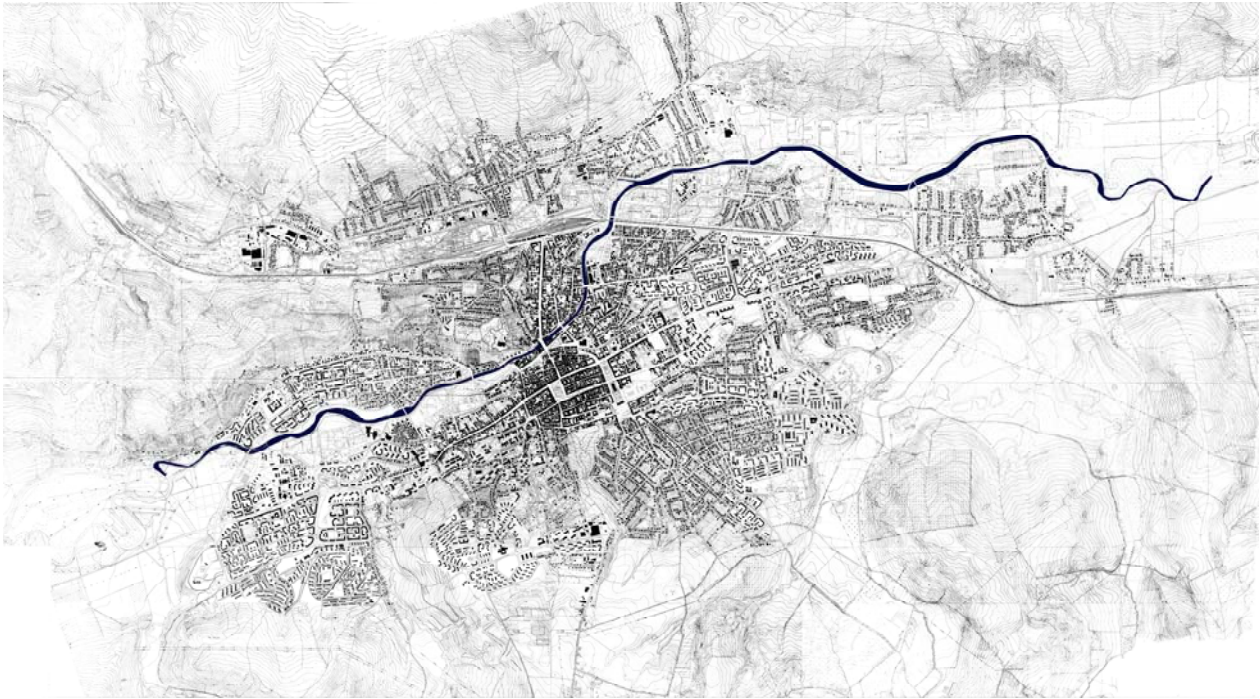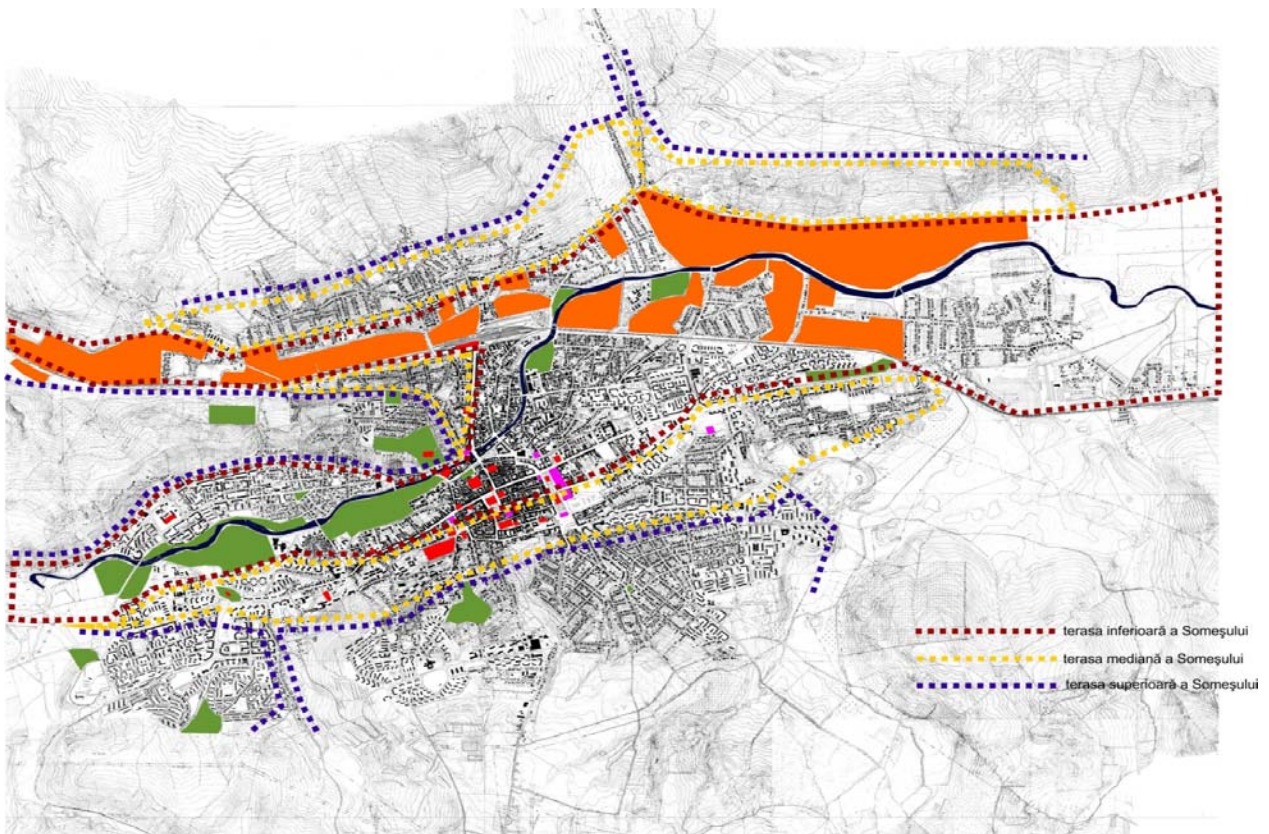
Figure 1. Cluj-Napoca - present city plan.

Figure 2. Cluj-Napoca- relationship between topography and the main zones of the city: green - parks; orange industries; delimited with red, yellow and blue dots - the lower, median and upper terraces of the river Someş surrounded by hills with high slopes switch to river valley, suggesting an image of amphitheater - today less noticeable because of the density of buildings and visible only from the upper places of the city.

The compliance approach observes the formal, geometric aspects of the urban area. Revealing the specific aspects of urban structure, we can establish the characteristics of its constituent elements through a morphological approach.
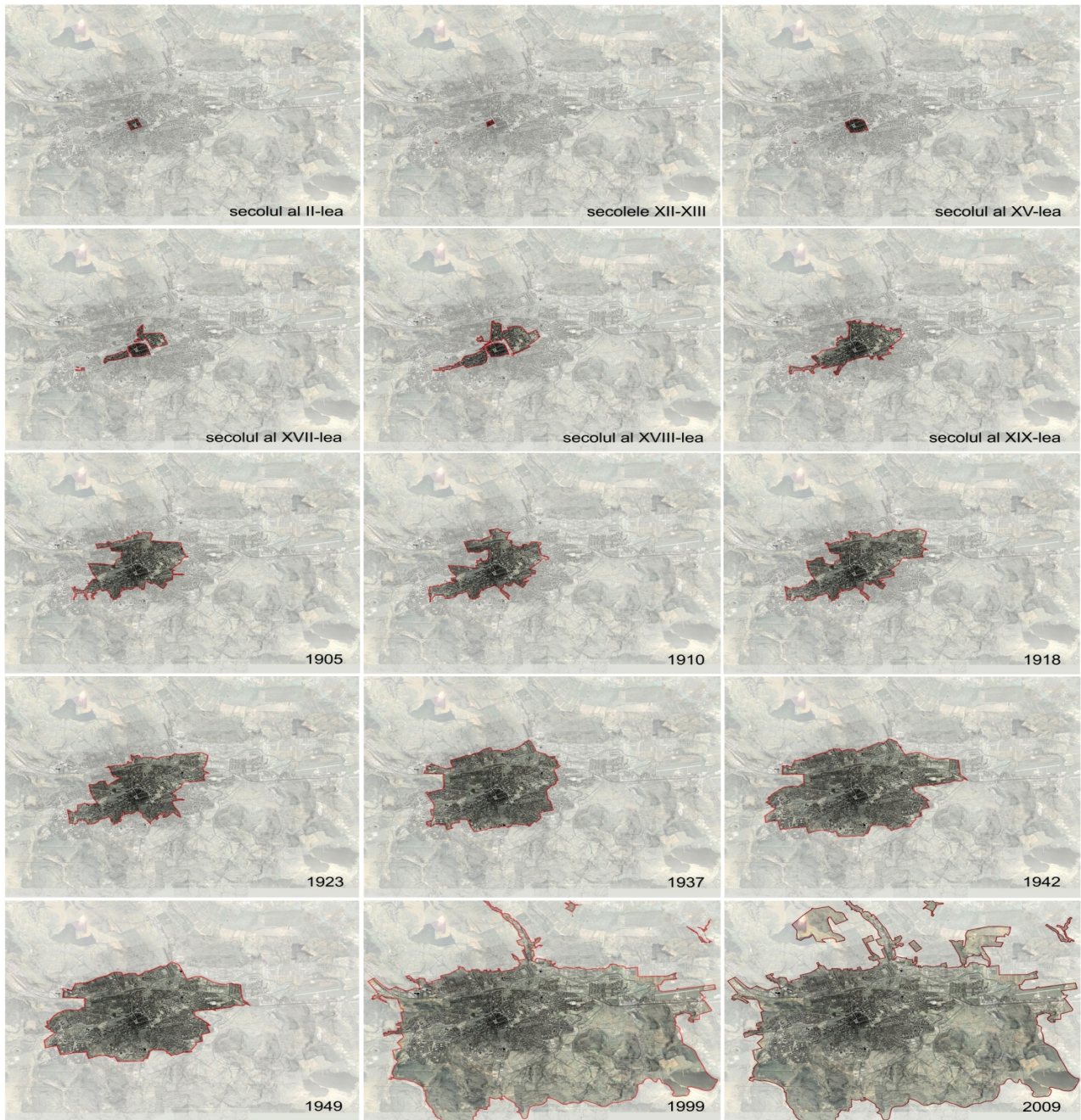

Figure 3. Cluj-Napoca: city's area evolution

Very suggestive, the evolution of the city's area, the urban form of Cluj-Napoca (Fig. 3), show a rather concentric development around the initial nucleus of the city, the antic one. The study of historical plans of the city over time reveals in the same time a great perennial urban organization. Keeping the same "attitude" towards site, each "upgrade" included previous nucleus and continued as result stage, a continuous evolution and coherence is evident, determined constantly by location rather than constantly changing society and trends of each age.

The study of the city evolution in time specify also characteristics of the use of land from the inner city - urban patterns, to the proximate vicinity of urban territory, from forests to pastures and vineyards, aspects that influenced the future developments.
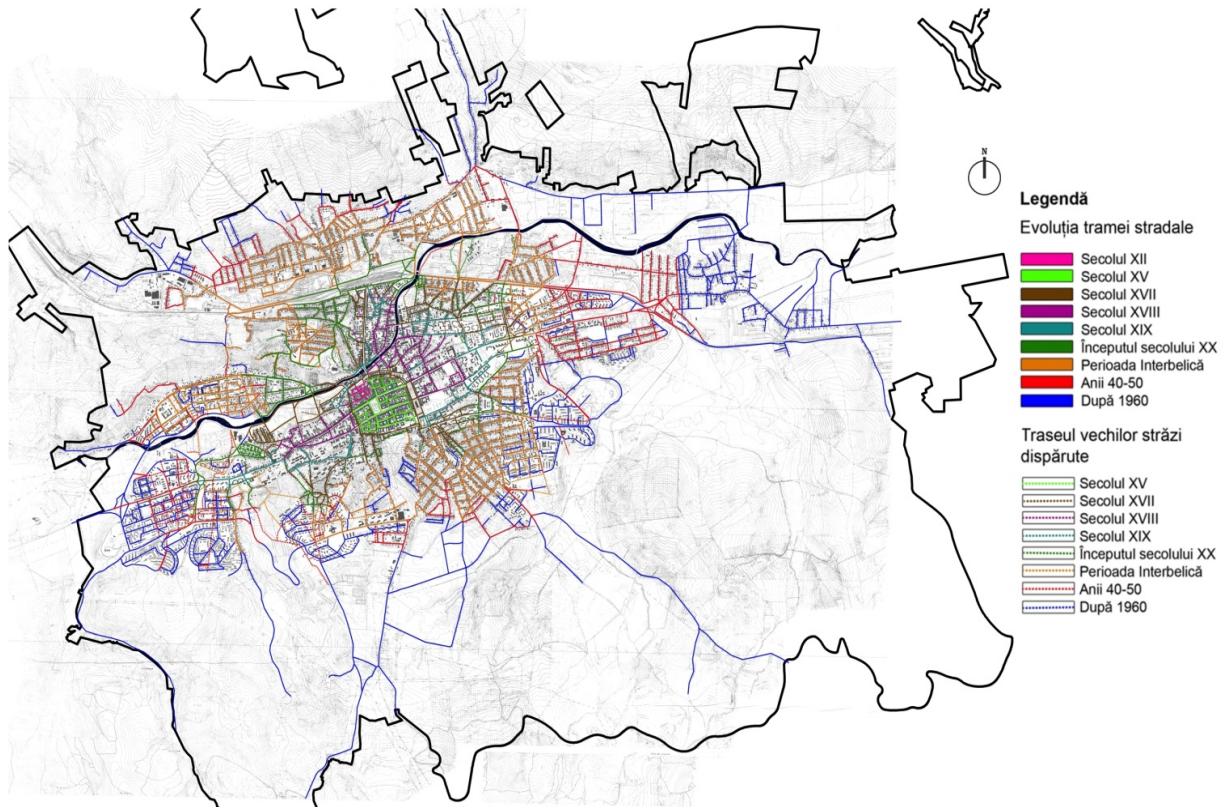

Figure 4. Cluj-Napoca: street's evolution in time.

Following the evolution of the streets network (Fig. 4) we notice a continuity and permanence of the main crossing streets (direction west-east), axes connecting the territory and equally, the abandonment of some "links", usually small street, because of changing in the importance of certain places in the city [4]. In the same times we can observe a permanence of the blocks, whose division into plots illustrate, as in the case of streets, adaptation to changing in importance and significance of places. The interdependence of the main components of the city is logical and understandable and it has a significant meaning through its form.

2.2. Typological analysis

We used the typological analysis which is based on the observation of the elements with a common character, defining and specifying types of society, of some concepts, of ways of building. The characteristics determined by the precise relationship among buildings and lots, yards, gardens, streets, squares were defined by the specific elements of the urban landscape established by K. Lynch [5]: path - major routes, generally the oldest routes of the city, which present a defining feature for a long distance, nodes - strategic points in the urban landscape, representing either crossroads of pathways, points of rupture or single pathway of the city network; districts - parts of urban areas, globally identifiable, which can be either homogeneous areas from the morphological point of view - variation of a neighboring type or types - or heterogeneous areas(these districts may be net limits or identifiable borders, or they may end in diffuse fringes), edges - limiting elements (can be traffic routes or typological changes of the built areas, as well as tears in relief) and landmarks - built elements: exceptional buildings, monuments or parts of a monument, with a

special form facilitating their identification (urban places, intersections, squares and bridges can also be landmarks).

Using typological analysis and the language proposed by K. Lynch for the reading/understanding of urban landscape, has inherently a degree of subjectivity because it depends on the perception of the authors who made this endeavor. Therefore discrepancies may arise in assessing the significance of an area. They can be reduced by conducting surveys among city residents. Another important aspect in our research was the identification of valuable perspectives, representatives and specifics for the urban landscape of the city. In the regulations of the previous GTP we do not find customizations on the typology and characteristics of existing buildings, the main attention being the use of land, without interest to the identification of any built area excepting the protected one. And we noticed on the other hand - the protected area was defined arbitrarily. In the intention to deepen the study of the urban landscape in a larger scale, legible, we have divided the city area into several parts (Fig. 5), corresponding to the administrative districts and by numbering, to the historical evolution of city's area.
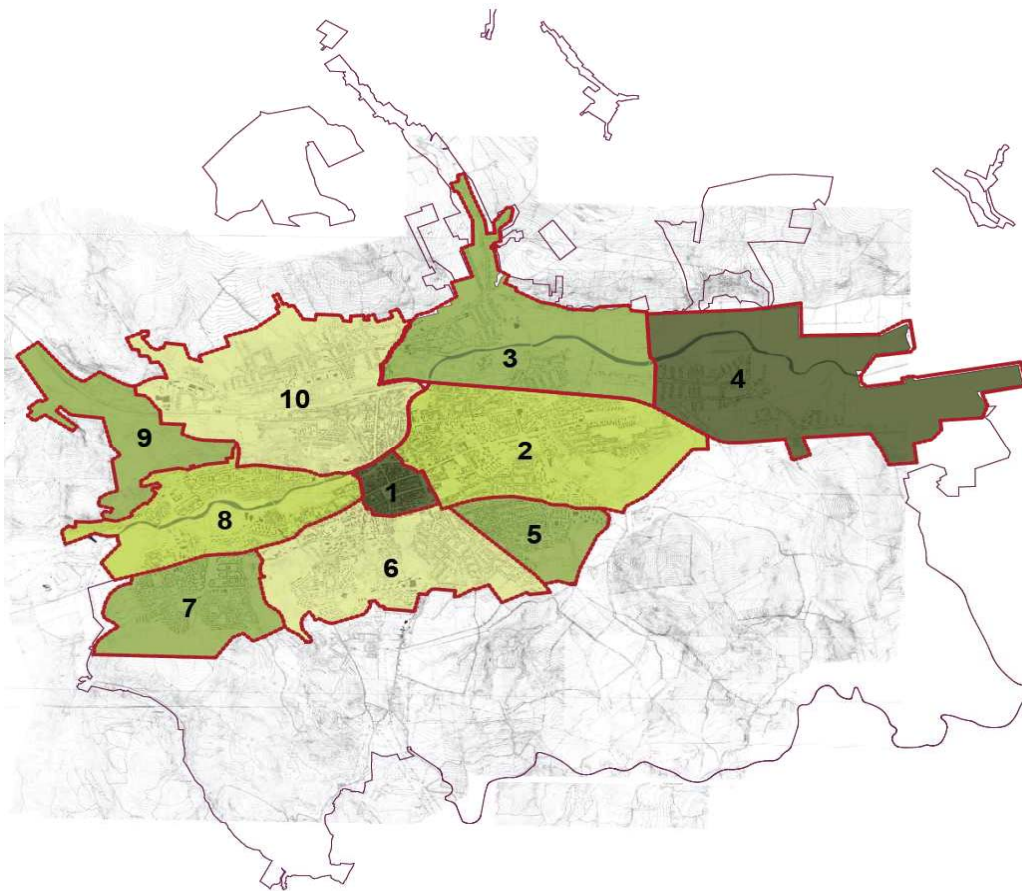

Figure 5. Cluj–Napoca – present city plan - subdivision in the characteristic studied areas.

The division of the city in several areas of study had as main goal to identify and to reveal specific characteristics of each district and to highlight the conflicts between the present field situation and the present urban regulations, as identification of specific areas (districts) and their characteristics. In following images below (Fig. 6, 7, 8) is the application of this analysis in an important area of the city, the historical center of Cluj-Napoca. In many historical studies, the city center of Cluj-Napoca, the medieval nucleus was considered a very homogeneous structure from the point of view of land divisions.

Figure 6. Typological analysis for historical center (area 1): identification of the districts.

Figure 7. Typological analysis for historical center (area 1): landmarks and nodes –elements of main identity of the town at global level

Our study underline that specific for this area is a quite big heterogeneity, explained by social and ethnic differentiation and by historic development - otherwise put out by historical maps and the old names of the streets. This should be emphasized by the new urban regulations in order to allow proper development of each type of district and proper identity.

The typological analysis for the historical center in many aspects differs from the present urban regulations. As shown in Figure 8, overlapping the existing regulation upon our analysis, we highlight the conflicts between the field situation and existing regulations.
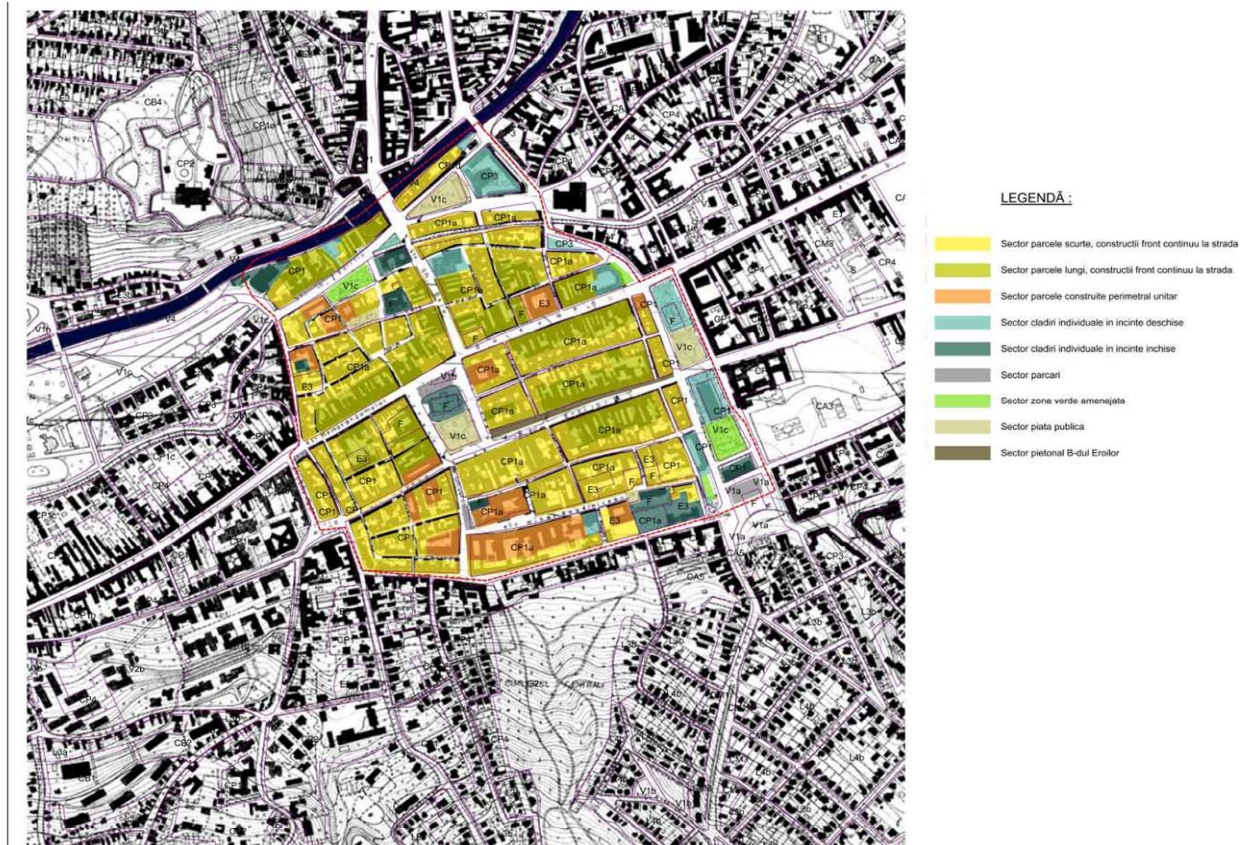

Figure 8. Historical center - overlap of the existing regulation upon our analysis: highlighting the conflicts between the field situation and existing regulations.

We present in the same succession, typological analysis (Fig. 9, 10) and critical comparison (Fig. 11) with the present urban regulations, for two residential districts, realized in different times: the "Andrei Mureşanu" neighborhood - between the world wars and "Zorilor" - in the '80s. These examples illustrate the way we analyzed the entire city.

In this "search for identification" we discovered many places – considered uninteresting, neglected places, which a careful and friendly look reveals like unique in the context of landscape, like architecture and meanings, with real possibilities for personalization of anonymous zones and for the increase of significant images in the urban landscape.

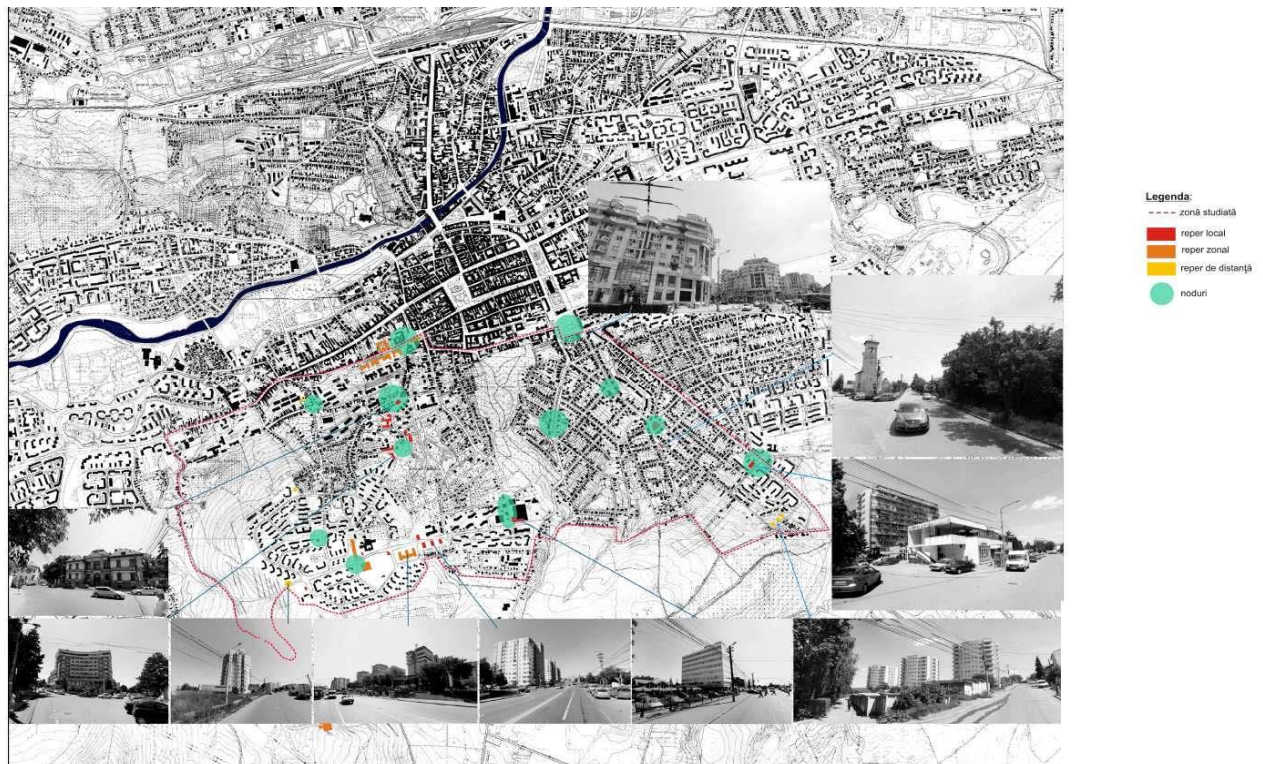Figure 9. Typological analysis for Zorilor and Andrei Mureşanu neighborhoods : identification of districts.

Figure 10. Typological analysis for Zorilor and Andrei Mureşanu Neighborhoods: landmarks and nodes.
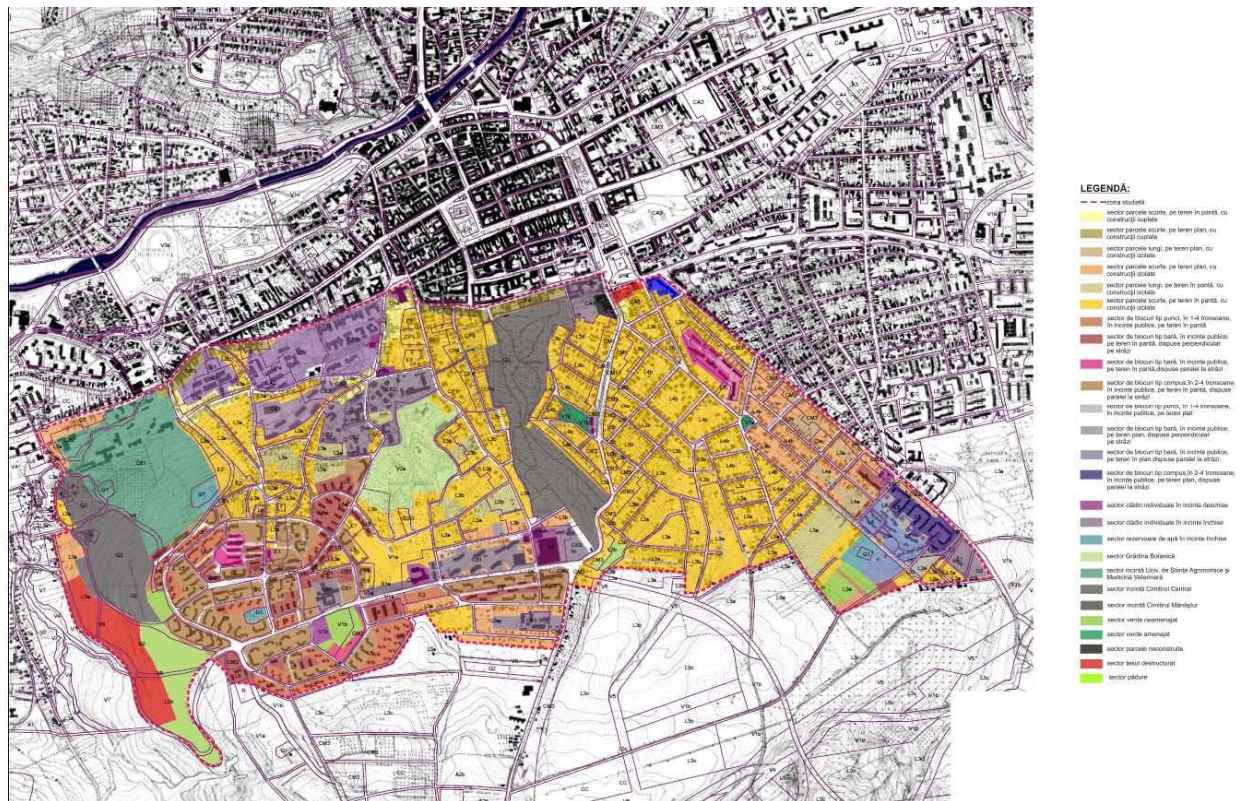
Figure 11. Overlap of the existing regulation upon our analysis: highlighting the conflicts between the field situation and existing regulations.

3. Conclusion

Urban structure of a city is growing in time by a sequence of reactions and developments related to a previous state. The elements of the urban structure are the network of streets, blocks- built spaces surrounded by various streets and representative spaces - squares and buildings. Streets and blocks are complementary, their joining determine the city' space. At first sight the city is reveled by the network of streets, around which aggregate more or less built areas. This built areas are blocks often characterized by a mix of typologies of buildings, resulting from specific habits, usages and specific relationships between different groups of people. Public buildings and monuments - distinguished by appearance, symbols and functions, introduce new local relationships with street and buildings in their vicinity, influencing the city at both global and local level. Identifying characteristic typologies of urban tissue and the structures and systems that generate them, we can determine their viability and also possibilities of individualization and customization thereof in order to define strategies to follow, to establish priorities and specific attitudes.

Our study, by the proposed analysis, allows the detection of specific attitudes in interactions between site and identities in use of social life at a time, for the purpose of the establishment of hierarchies in the evolution of the city as urban pattern [6] and its equable urban development.

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Timișoara – the Ottoman Town under the Central European Skin

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Abstract

Contemporary Timișoara, the multicultural and multiethnic city, the melting pot of diverse influences, the Central European city "par excellence", with its baroque and secession architecture, hides under its skin an understudied ottoman past. Lately, in the light of recent archeological diggings in the center, the city is unveiling the Turkish baths, the mosques and the wooden paved streets. Due to years of blaming the ottoman regime, this world was hidden from the public eye. Little is known about Ottoman Timișoara, and even less about its architecture. This article will explore the hidden ottoman architecture of Timișoara from the few stories that have survived until today, such as those of Evlya Celebi. Timișoara's Ottoman architecture is placed on the larger context of the Ottoman Empire's architecture. The Ottoman city was build during a time when the chief architect of the empire was Mimar Sinan, an emblematic figure, whose career expanded over the reign of three sultans, assuming paternity for almost 400 buildings and engineering constructions. The urban discontinuity of Ottoman Timișoara needs to be explored and revisited as a better way to understand how the contemporary city emerged.

Rezumat

Timișoara contemporană, oraș multicultural și multietnic, creuzet de influențe și stăpâniri vremelnice, orașul central european prin excelență cu arhitectura sa barocă și secesion, ascunde sub epiderma sa un trecut otoman insuficient cercetat. În ultimii ani, datorită unor lucrări edilitare în centrul istoric, orașul dezvăluie ruinele vechii băi turceăsti, vechilor moschei și străzile pavate cu lemn. Anii de propagandă anti-otomană din perioada comunistă au făcut ca toată această lume să ne rămână ascunsă. Cunoaștem puține lucruri despre Timișoara otomană, și chiar mai puține despre arhitectura sa. Articolul de față explorează arhitectura otomană de altădată din puținele mărturii care au supraviețuit până în zilele noastre, cum ar fi cele ale lui Evlya Celebi. Cu toate acestea, arhitectura timișoreană otomană trebuie poziționată în contextul mai larg al arhitecturii unui imperiu, care la vremea cuceririi Timișoarei era tutelată de figura emblematică a lui Mimar Sinan, arhitect a cărui carieră se întinde sub domnia a trei sultani, și care își asumă paternitatea pentru aproape 400 de clădiri și construcții civile. Pentru a înțelege Timișoara contemporană, această etapă de discontinuitate trebuie explorată și cercetată.

Keywords: Timișoara, ottoman architecture, archeological diggings, city, vilayet, Banat

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„He who conquers Buda rules a city, / He who conquers Timişoara rules a country"
Saying of the Danube Ottoman Beys, recorded by Henrik Ottendorf, Timişoara, 1663 [1].

1. Revisiting Romanian-Ottoman Architectural History

Contemporary Timişoara is a typical Central European city that proudly calls itself "Little Vienna". As debatable as this self-proclaimed smaller scale duplicate status is, it does underline the fact that, from an architectural point of view, Timişoara is an 18th century Austrian baroque city . Nevertheless, Timişoara is not a city funded *ex-nihilo* by the Austrians. The history of the city dates back to medieval times [2], and possibly ancient Roman times [2]. Timişoara has been for more than 800 documented years, one of the most important human settlement in the Banat area, controlling the Banat plain. For all this time it has been a border region, and the playground of rivalries and political interests between Eastern and Western Europe, the Eastern and the Western church, Christians and the Muslims.

For many Romanians, the history of Timişoara starts with the conquest of 1716, when Eugen de Savoy, "gloriously" defeated the Ottomans and "saved" the city of Timişoara from the hands of the Muslims. Only decades later, a new city rose from the ashes of the old Ottoman one, and not one building remained to remind us of the past. At least, this is the image we get if we read Ehrler's or Griselini's [3,4] description of Banat. The architecture and the customs of the Ottomans were obsolete and primitive and the Austrians build everything from scratch.

Although, this was the propaganda tone that most communist pupils grew with, recent light was turned into the matter. In 2006, due to an urban renewal project in the historic center, the ottoman city was brought to light by archeological excavations. Eight years later, another urban project regarding the central squares and streets of the historic center, enabled access to an even larger area of archeological research. Since the central squares remained inbuilt over the centuries, the archeologists were able to find parts of a Turkish Bath, probably two mosques, several tombs, part of the wooden paved street system and part of the fortification walls. The results of the excavations are yet to be published, little information can be found from several newspaper articles and public presentations.

In order to understand the ottoman architecture, some basic historical facts need to be explored. After the Mohacs battle on August 29, 1526, where the ottomans defeated the Hungarians and king Ferdinand lost his life, the conquest of Buda and the following political fight between Ioan Zapolya and Ferdinand of Hapsburg, led to the gradual subjection of the Banat region. The conquest of the city of Timişoara, on July 26, 1552, by the army of Kara Ahmed Pasha, was part of a larger conquest scheme, including several strategic citadels protecting the Mureș trade line. The Mureș river was already an important wood and salt trade route.

Ottoman sources are unanimous in showing that Suleyman Kanuni paid great attention to the conquest of Timişoara between 1551-1552. 16th century Ottoman chronicles stress the strategic importance of Timişoara, the capital of the Banat plain. Mustafa Ali and Abdul Karaçelebizade mention Timişoara as the capital of Transylvania " Timişoara is a world envied fortress ... with strong towers and walls, impossible to defeat...It is the most important and most powerful fortress in the country of Transylvania" [5]. Timişoara along with other fortifications in the Banat plain were crucial to Ottoman border security. South of Timişoara, the Ottomans conquered a great number of other fortresses: Ciacova, Vrsac Haram, Pancevo, Semli and Mehadia. Kara Ahmed's army conquered probably more than 21 fortresses, possibly 24. After the conquest, the fortification system of Timişoara, Lipova and another 3 cities on Mures line was improved, but many of the other conquered cities were demolished for security reasons.

2. Timișoara- The Ottoman City

Figure 1. Perette Map. Map Of The Ottoman Timișoara, drawn in 1716 when the Austrian army led by Eugen de Savoy conquered Timișoara [6,7]

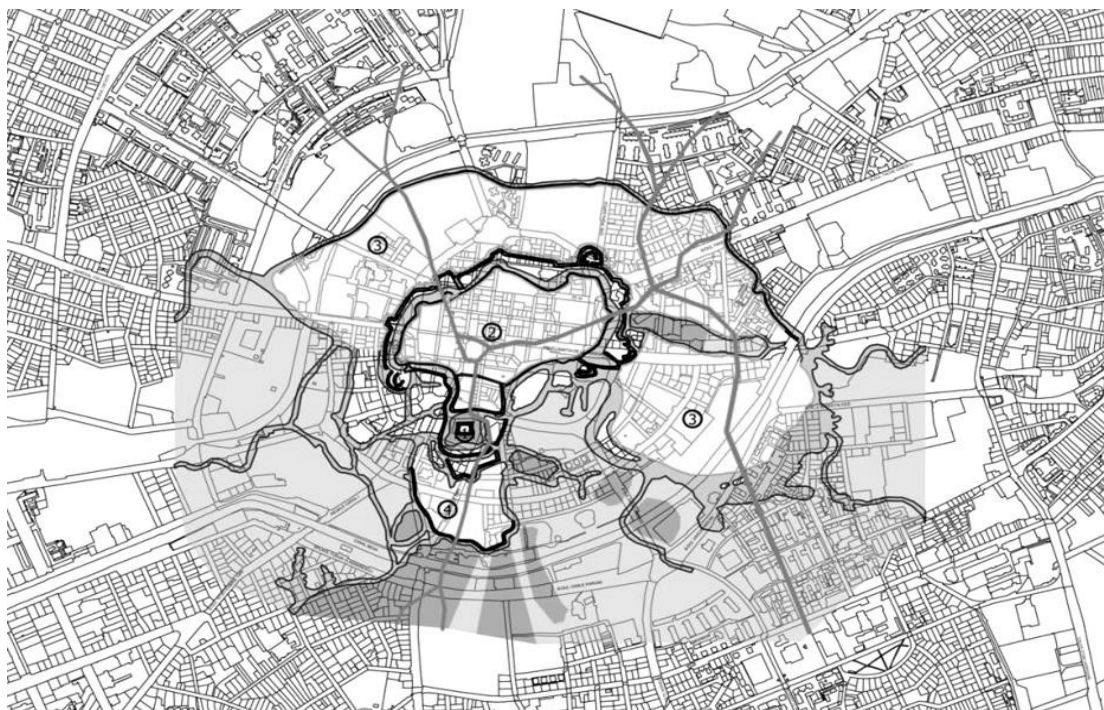Figure 2. 1) The fortified Castle- the political and military center of the city, 2) The Ottoman City, 3) The „Palanca Mare,, neighborhood, 4) The „Palanca Mica,, Neighborhood. Perette's map superimposed on a contemporary map designed by the Timișoara City Hall team under the supervision of arch. Mihai Opriș, for Timișoara's PUG preliminary historical study *http://www.primariatm.ro/index.php?meniuId=2&viewCat=319*[6,7]

Timișoara's transformation from a central European fortress to an Ottoman city, and from an Ottoman city to an Austrian Central European one, again, is emblematical. The process of urban continuity/discontinuity is easy to follow. While the ottomans preserved the existing city by adapting it to their political and religious needs, the Austrians erased everything they found, and build a new city from scratch. It was not just the ottoman city that was demolished, but also the surrounding "rascian" neighborhoods inhabited by Christians. While one culture adapted itself to an existing context, the other denied it. It makes one wonder, which culture might have been more invasive...

The little cartographical medieval evidence we have left is unable to offer a clear picture of the city of Timișoara before 1552. By comparison with other cities in the Balkans, we can presume that the ottomans adapted their administrative, religious and military institutions to the existing context. The most dramatic transformation was the demographical one, as the city was colonized with Muslim families, which led to the emergence of new urban functions. Nevertheless, not all churches were transformed in mosques, and Christian communities continued to exist in the outskirts of the fortified city. The Muslims brought their own cultural background and adapted it to the swampy plains of Timișoara. Evlya Celebi has a rather amusing story of locals being frightened by camels, donkeys and mules [8]. Recent archeological evidence seem to point out to the fact that, indeed, 400 years ago, camels walked in the streets of Timișoara.

The ottoman culture is an urban culture *par excelence*, the city is dominated by the tall silhouette of the minarets, by the public *vakîf* (muslim charity institution) buildings, by the presence of bazaar shops, public baths, coffee and public smoking houses (especially from the 17th century) [5].

To better understand how the city might have looked we can compare Perette's map, a map drawn by a French captain in Eugen Savoy's army in 1717, considered to be the most precise map of the ottoman city, with Evlia Celebi's and Henrik Ottendorf's descriptions, both travelers in the 17th century Timișoara. The three maps drawn shortly after Savoy's conquest were the main source of information for the archeological excavations in 2006 and 2013-2014 in Timișoara's historic center. One might wonder if urban social life started in Timișoara with the ottomans. Before the conquest Timișoara was no more than a fortified castle with surrounding earth walls (*palanka*) fortified neighborhoods.

Evlia Celebi's description give us a better understanding of the general shape of the city: "This fortress is so situated in the swamps of the Timis river, as it looks like a turtle laying in the water; the four towers look like the four legs, the fortified castle looks like the head, and the fortified city represents its entire body." [8]

The ottoman city concentrated its political and administrative institutions in the *kale* (the fortified walls of the city), while the bazaar was in the vicinity of a *çarşî* (a type of urban square). According to Ottendorf, Timișoara's bazaar was somewhere in the center of the city at the intersection of two main roads, and it had, in Evlya Celebi's description, approximately 400 shops and no *bedestan* (textile bazaar), since the Ragusa merchants probably had monopoly over textile trade, and they lived in the Latin neighborhood situated in the vicinity of the bazaar [5].

Timișoara was considered inexpugnable because of the city's location at the meeting point of Timis and Bega, in the middle of a large swamp. The geography might have protected the city more than its outdated fortifications. According to Ottendorf, Timișoara consisted of a fortified castle, a fortified city (*kale*) and two major suburbs: *Palanca Mica* (*The Island*) in the south and *Palanca Mare* (*Ratzenstadt, Orașul Rascian* in Romanian) north of *kale*. The suburbs evolved from a rural settlement developed in the close vicinity of the medieval castle, to rather

extended neighborhoods. Their growth was closely linked to the scarce dry land. *Palanca mica* also called *the island*, had a more rational street development and larger gardens, while *Palanca mare*, in the shape of a fan surrounding the fortified city, had an organically developed street system, smaller gardens and higher building density.

The neighborhoods were organized around Friday mosques, dervish communities (*zaviye*) and prayer houses (*mesdjid*). According to the *kadi*'s register, Timișoara had 14 *mahalle (*neighborhoods) with Muslim population, two with mixed population, and two with Romanian and Serbian population [5]. The 17 wooden paved streets we find on Perette's map, are lined with small wood houses with a single room on the ground level. At least two such houses were unveiled during the excavation in the Sf. Gheorghe square. The single room on the ground level was generally used for shops and workshops.

3. Timișoara's Ottoman Architecture in the age of Mimar Sinan

Figure 3. Sf. Gheorghe square archeological site, remains of the 19th century demolished Jesuits church, with a disputed mosque wall, and a typical ottoman house
https://www.facebook.com/588797367826822/photos/a.721612807878610.1073741931.588797367 826822/721612834545274/?type=1&theater

Figure 4. Libertatii square archeological site, remains of one of the Turkish bath in the city, *http://www.opiniatimisoarei.ro/wp-content/uploads/2014/05/santierul-arheologic-libertatii-de-sus.jpg*

The most elaborate buildings in the ottoman city of Timișoara were undoubtedly the 8 mosques, the 4 public baths and the Pasha's house. We find them on the Perette map and both Ottendorf and Celebi mention them.

The first mosques appeared in Timișoara's cityscape shortly after the conquest. Similarly to other conquered Balkan cities, some prominent churches might have been transformed into Friday mosques. By the time Ottendorf and Celebi travel to Timișoara, we already have 8 mosques: two in the fortified city, one in the *Island* and five in the suburbs [9]. Their description is very short: "regarding the mosques in Timișoara, there are eight of them, large, with tall towers, built according to tradition, covered with ceramic tiles and the towers are covered with lead" [9]. Cristina Feneșan has reason to believe that, at certain times, there might have been more than 8 mosques [5].

The first mosque in the city bore the name of the sultan Suleyman (*djami șerif*). We have little to nothing information regarding its architectural features. Ottendorf positions this mosque near the bazaar, probably in today's Sf. Gheorghe square. This was not the only Sultan's mosque, Ottendorf talks about another one, Muradiye [9], build during Murad III or Murad IV's reign, somewhere in the suburbs. But not only sultans built in Timișoara, several other military commanders or less known political figures build smaller mosques.

The size and features of the mosques are relevant to the patron's social status. The mosques in the fortified city are large, made out of durable materials, while the ones in the suburb are modest "build with wood, with smaller wooden towers" [9].

Timișoara's first mosques were build in a time, considered by many to be the "renaissance" or the classical period in the history of Ottoman architecture. Being a mosque patron was one of the highest honors in ottoman society. During Suleyman's reign, when Timișoara was conquered, the royal chief architect of the Empire was none other than Mimar Sinan. Mimar Sinan, the "Turkish Michelangelo", was one of the most prolific ottoman architects. He lived more than 100 years, and claimed authorship over the famous Suleymanye Mosque in Istanbul, and more than 400 buildings and engineering works. Due to his prodigy, Sinan was transformed by folklore into a hero with superhuman powers including the ability to fly from one construction site to the other, a feat demonstrated by footprints at some sites believed to be those of Sinan's [10].

Mimar Sinan was royal chief architect between 1539 and 1588. Necipoglu [10] describes him as: "the most celebrated architect of the Islamic lands,... bolstered by the affinity between his centrally planned domed mosques and Italian Renaissance churches: an affinity rooted in the shared Romano-Byzantine architectural heritage of the eastern Mediterranean basin that was concurrently being revived in Istanbul and Italy."

We know that during a certain time, Timișoara had a chief architect, appointed with, probably, Mimar's knowledge. When Celebi travels to Timișoara he speaks about the powerful builders guild and their *mimar başi* (chief architect) [5]. Kara Ahmed Pasha, the conqueror and the first *de facto beglerbeg* (administrator) of Timișoara [10], and Grand Vizir of the Empire for two years before he was executed in 1555, has commissioned Sinan a rather spectacular mosque in Istanbul: Kara Ahmet Pacha Mosque, but he never lived to see completed.

Many of Sinan's mosques, for which he claims authorship in his autobiographies, were designed by him, but executed by other royal architects, and although his works maintained his "controlling vision", only the ones in Istanbul were fully supervised by him [10]. From Necipoglu's point of view, Sinan is codifying mosques types according to social and territorial rank, by creating a "richly variated typology responsive to culturally defined expectations of propriety" [10].

Sinan's sultan mosques included status signs like "sitting on commanding hilltops, innovative ground plans, monumental scale, grand domes, quadruple minarets with multiple galleries, and marble-paved forecourts surrounded by domical arcades", in an attempt to enter in an "iconographical meaningful visual dialogue with Hagia Sophia, the ultimate symbol of imperial magnificence embodying the grandeur of the state and religion." [10]

The smaller mosques commissioned by members of the royal family maintained only some visual signs like double minarets. Non-royal mosques with single minarets were classified according to rank, "starting with the highest patronage level of the grand viziers and viziers, and moving down the social ladder" [10]. While prestige mosques were concentrated in Istanbul, provincial mosques could easily adapt to regional taste. With lead covered hemispherical domes and cylindrical minarets, the mosques were a symbol of the "Ottoman idiom, mixed with local dialects" [10]. They were veritable territorial markers which unified the different regions of the Ottoman Empire.

Timișoara's mosques are yet to be studied, we know little about their patrons, their architecture and the Muslim communities that participated at the Friday prayer in these mosques. We need to find out furthermore if Sinan, the emblematic royal architect ever saw a Timișoara map, and if he did, if he was involved in the city's reconstruction . This article serves as a preamble of questions that need to be answered in an attempt to erase all the historic propaganda imposed on us, and rewrite the urban history of Timișoara.

4. Conclusions

Although little is left, we have to admit that the Ottoman culture is still present in Banat despite years of Austrian, Hungarian and Romanian communist propaganda. New research show that a great deal of new settlements were funded during the 164 years of Ottoman ruling in Banat.

We know little to nothing about the Ottoman architecture of Timișoara or the cultural institutions. We are yet to find out how this imperial culture dialogued with the local vernacular culture. There is always an assumption that Romanian vernacular architecture remained unchanged from Dacian times. Although John Paget [11], a traveler in the 19th century Timișoara considers Wallachian (Romanian) vernacular architecture similar to the one carved on the walls of Trajan's Column in Rome, surely all the different rulings left their imprints on the local culture as well.

The Ottomans practiced religious tolerance, but brought their own urban culture to Timișoara. The mixing of the two resulted in a new city, with a vivid public life. The new excavations in the city centre are starting to show us the scale of this vivid city. We will never understand contemporary Timișoara if we keep hidden the ottoman city under its skin.

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Differential Evolution of the Settlements in the Metropolitan Area of Cluj-Napoca

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Abstract

The differential urbanization model developed in the 90s by H.S. Geyer and T.M. Kontuly uses three phases of urban evolution (urbanization, polarization reversal and counter-urbanization) in order to explain the historical development of national urban systems in different countries. The model isn't however suitable for studying the changes that occur within smaller scale urban networks over a short period of time. Furthermore, in areas with high percentage of non-urban population, the model cannot be applied in its initial form. These limitations make the model hardly usable as an analysis tool for policy making at subnational level. In order to overcome the applicability issues of the differential urbanization model, the paper tries to expand it by using a simple analogy process. To do so, we will define a generic settlement network dominated by a single center. The differential urbanization phases of the original model will be replaced by similar, but more generic, phases of differential evolution. Thereafter, the modified model will be put to a test to verify its applicability on the settlement network of the metropolitan area of Cluj-Napoca. By analogy to the original differential urbanization model, Cluj-Napoca should play in the expanded model a role similar to that of the primate city, while the roles of intermediate and small cities would be taken by the non-urban settlements of the metropolitan area based upon their evolution within the system.

Rezumat

Modelul urbanizării diferenţiate, dezvoltat de H.S. Geyer şi T.M. Kontuly în anii '90, foloseşte trei faze ale evoluţiei urbane (urbanizare, inversare a polarităţii şi contra-urbanizare) pentru a explica dezvoltarea istorică a sistemelor urbane naţionale în diferite ţări. Totuşi, modelul nu este adecvat pentru studiul schimbărilor care se produc în cadrul unor reţele urbane la scară mai mică şi pe o durată mai scurtă de timp. Mai mult, în zone cu pondere crescută a populaţiei non-urbane, modelul nu poate fi folosit în forma sa iniţială. Toate aceste limitări fac modelul dificil de utilizat ca un instrument pentru elaborarea de politici la nivel subnaţional. Pentru a depăşi problemele legate de aplicabilitatea modelului urbanizării diferenţiate, lucrarea încearcă să îl extindă printr-un procedeu simplu de analogie. În acest scop, vom defini o reţea generică de aşezări dominată de un singur centru. Fazele urbanizării diferenţiate ale modelului iniţial vor fi înlocuite prin faze similare, dar mai generale, ale evoluţiei diferenţiate. Ulterior, modelul modificat va fi testat pentru verificarea aplicabilităţii sale la nivelul reţelei de aşezări a zonei metropolitane Cluj-Napoca. Prin analogie cu modelul iniţial, Cluj-Napoca ar trebui să joace în modelul extins un rol similar cu cel al oraşului primat, în timp ce rolurile oraşelor medii şi mici vor fi jucate de aşezările non-urbane ale zonei metropolitane, pe baza evoluţiei acestora în cadrul sistemului.

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Keywords: model, urban systems, differential urbanization, metropolitan area, Cluj-Napoca

1. Introduction

Population variations trigger changes of the need for housing, transport infrastructure, social facilities and other types of infrastructure. These variations occur due both to natural causes (difference between births and deaths) and migration. ESPON 2013 research reveals that in the studied area (EU27 plus Iceland, Liechtenstein, Norway and Switzerland) migration is by far the main force driving population changes [1]. Also, the within the same programme it is shown that, at NUTS2 level, the two components of migration (internal and international migration) differ from region to region [1]. Thus, there can be significant differences of migration balance even between regions of the same country. Furthermore, at a lower level, there can be significant differences of migration balance between the NUTS3 subregions of the same NUTS2 region and further on at lower levels. For example, positive migratory balance in a region can be determined in some cases by significant positive migration in only one of its subregions or cities. Because of this, a more relevant image could be obtained starting from studying migration relations at the level of system of settlements such as metropolitan areas, or more generic, networks dominated by a sole urban core. Further on, at a lager scale, it would be possible to extrapolate the method by studying the relations between networks of networks.

The Differential Urbanization Model, developed by H.S. Geyer and T.M. Kontuly, tries to explain the formation of national urban systems through phases of differential urbanization [2]. According to this model, migration relations between cities of a country change in amplitude and direction according to phases of urbanization, polarization reversal and counter-urbanization [2]. The main issue when trying to use this model is that of losing important details due to the scale that it uses: national urban systems are themselves composed rather of smaller subsystems than of actual nodes. Also, nowadays, at least in Europe, regional and subregional levels tend to be more relevant for studies than national ones. Taking these facts into consideration, the paper proposes an expansion of the Differential Urbanization Model in order to make it usable as a generic, scale independent, instrument of analysis.

2. Using the differential urbanization model for the analysis of settlement networks at a subnational level

The Differential Urbanization model tries to explain the formation of national urban systems through three phases: urbanization, polarization reversal and counter-urbanization. Due to changes in migration relationships that occur during these phases, the urban system shifts through seven possible stages: early primate city stage, intermediate primate city stage, advanced primate city stage, early intermediate city stage, advanced intermediate city stage, early small city stage and advanced small city stage. During the phase of urbanization, the system gains in centrality, most of the migration being oriented towards one of its settlements and transforming it into the primate city of the urban network. Thus the system shifts through the early primate city stage, the intermediate primate city stage and the advanced primate city stage. Afterwards, during the phase of polarization reversal, some of the migration within the urban network is redirected towards other settlements that start to grow into intermediate cities. Thus, the system shifts further through the early intermediate city stage and the advanced intermediate city stage. Finally, during the phase of counter urbanization, migration is directed towards the small cities. Thus, the system shifts further through the early and the advanced small city stages. [2]

Because during the system's evolution some disruptions might occur, its stages don't necessarily follow each other in a chronological order. Also, because migration relations are always changing, the system's evolution doesn't end in any of the stages. Thus, even though not at the same amplitude, after counter-urbanization the entire process might start over with a re-urbanization phase. Further on, through changes in migration relations, phases similar to that of polarization reversal and that of counter-urbanization might follow.
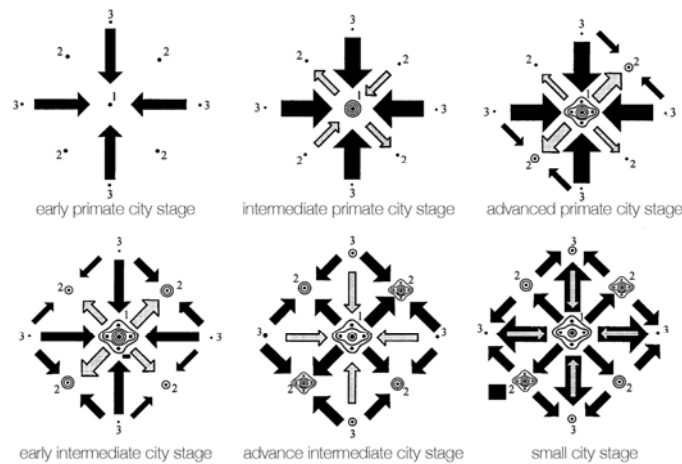

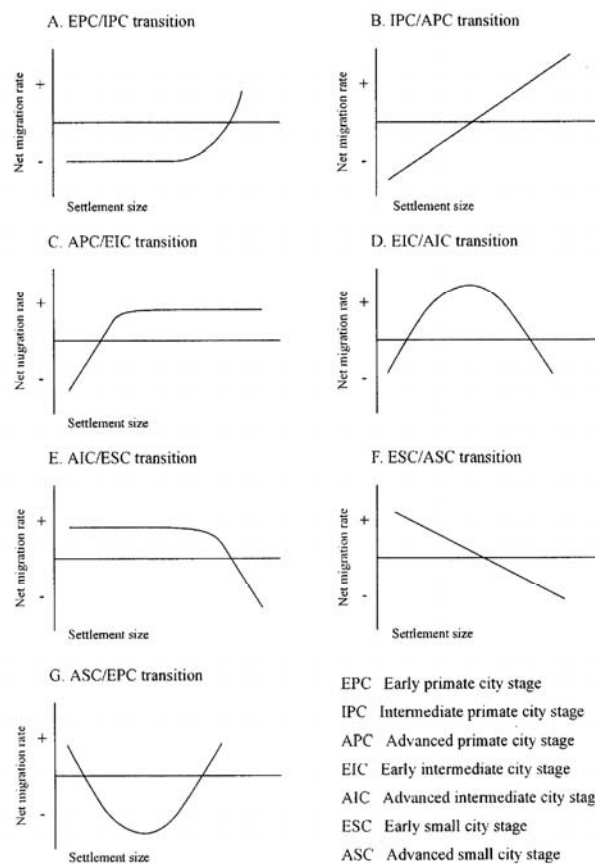Figure 1. Phases of differential urbanization

Figure 2. Changing relationships between net migration rate and settlement size

When trying to use the Differential Urbanization Model in its original form in order to correctly

diagnose the problems within a settlement network it becomes visible that there are some practical issues. First of all, there is the matter of scale. The original model addresses a national urban system, but it is a known fact that, in the EU, even though international disparities are narrowing, interregional ones are widening. [3] Thus, from a planner's point of view, it should be more interesting to address a smaller scale in order to have a clearer picture of the actual situation. Secondly, in direct relation to the scale issue, there is a problem related to the monocentricity of the network. Nowadays, especially at national scale, but many times also at regional scale, monocentric systems in the pure sense of the definition are quasi-inexistent [4]. Thus it should be necessary to adjust the scale used by the model at a level where a center could be easily identified -such as that of a metropolitan area, or a monocentric urban agglomeration. Thereafter, there is a problem of semantics. Geyer and Kontuly's model refers to terms such as urbanization, counter-urbanization, primate city or cities in general. This might be accurate for a national wide urban system in formation, but when in need to change the scale of the network or the moment of the analysis the problem becomes visible: a smaller system might include non-urban settlements that gravitate around a center that is already urban -thus it would be more appropriate to refer to a main center (rather than a primate city) that gains or loses in centricity in relation to secondary centers of the network or its periphery. Last, but not least, there is a problem regarding the need to also take into consideration the relation of the studied network with its exterior. Thus, even though external migration from the system might by far exceed internal migration between the nodes of the network, it is not taken into consideration into the original model. Taking these facts into consideration, it becomes clear that some alterations must be made to the model in order to transform it into a usable tool for settlement system diagnosis. The following table (Table 1) tries to illustrate in synthesized way the proposed alterations regarding matters of scale and semantics:

Table 1: Proposed alterations to the Differential Urbanization Model

Model element/characteristic	The Differential Urbanization Model	Altered model
scale	National urban network	Sub-regional urban network
settlements	Primate city	Main center
	Intermediate cities	Secondary centers
	Small cities	Other (non-central) settlements
phases	Urbanization	Gain in centricity
	Reverse Polarization	Lose in centricity
	Counter-urbanization	Decentralization
stages	Early primate city stage	Early main center stage
	Intermediate primate city stage	Intermediate main center stage
	Advanced primate city stage	Advanced main center stage
	Early intermediate city stage	Early secondary centers stage
	Advanced intermediate city stage	Advanced secondary centers stage
	Early small city stage	Early non-central settlements stage
	Advanced small city stage	Advanced non-central settlements stage

Further on, the problem of finding a monocentric network could be solved by choosing a proper

scale for studying the system. Thus, should there be more settlements of equivalent centricity, that have a primary role within the network, it is possible to build subsystems around these centers and to study the relations within and between these subsystems.

Last, the problem concerning the study of changes induced by migration from and towards the exterior of the system should be solved simply by adding external migration data (including its direction) for every node of the network. Should this data be unavailable, the model could still function by using data regarding population changes of the settlements.

3. The Metropolitan Area of Cluj-Napoca

The metropolitan area of Cluj-Napoca (Fig. 3) consists of the city of Cluj-Napoca and 17 surrounding communes. To these settlements we add the Feleacu commune, that, even though has withdrawn from the metropolitan association in 2009, is important for the study because of its geographical position and its functional ties with the metropolitan area.

Figure 3. The metropolitan area of Cluj-Napoca

Because of the lack of specific data, it is not possible to distinguish between internal migration

between settlements of the metropolitan area and the migration from or towards the exterior of this network. Given this issue, we will use as main indicator for this study the overall net migration (internal and external to the system).

As the sole urban settlement, it is evident that Cluj-Napoca plays the role of main center in its metropolitan area. For the rest of the settlements instead, it isn't that clear which should qualify as secondary centers and which are non-central according to the definitions proposed in Table 1. To solve this problem, we will use the yearly average population of the non-urban settlements as a threshold in order to make the distinction between "large" and "small" communes (communes with population greater than average will be considered secondary centers, or large, while the rest of the communes will be considered non-central, or small). Of course, because of population changes, the threshold is not constant -fact that can lead to hierarchic changes within the system. Thus, communes such as Feleacu, Cojocna or Jucu changed their rank during the studied period from secondary centers to non-central settlements. The rank changes of these communes impacted on the distribution of population in large, respectively, small communes. When a secondary center's population fells below the yearly calculated threshold, the total population in secondary centers might decrease (even though each of these centers might have positive evolutions) while the total population of non central places might increase (the population from the newly added commune might compensate any natural or migratory loses of population of the old non-central communes).

By studying the changes in migration that happened during the period from 1991 to 2012 (Fig.4), an alternating succession of the phases of decentralization, gain in centricity and lose in centricity can be observed. Thus, as the main destination for migration changes from non-central settlements to secondary centers, then to the main center, and then oscillates between the main center and the secondary centers, the system goes through a large number of stage transitions over a relatively short period of time.
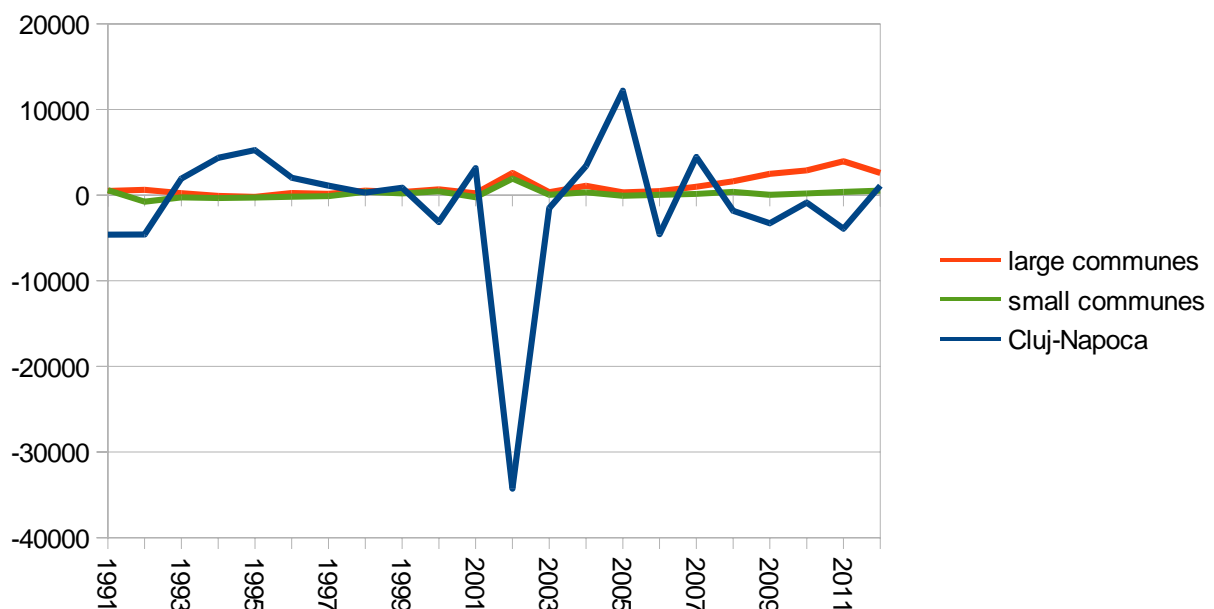

Figure 4. Net migration in the settlements of the metropolitan area of Cluj-Napoca

On the map of road distances between Cluj-Napoca and the centers of the communes of its metropolitan area (Fig. 5), there can be observed that almost all of the secondary centers (Apahida, Baciu, Floreşti, Gilău, as well as the former secondary centers Cojocna, Feleacu and Jucu) are

located close to the main center. Bonţida is in fact the only secondary center situated at a greater than 22 km road distance from Cluj-Napoca (approx. 30 km). This fact suggests that any shift of migration towards these settlements could be due to indirect attraction towards Cluj-Napoca. In order to prove this supposition, a more detailed picture of the actual migration would be needed, so that a distinction could be made between the migration from the exterior of the metropolitan area towards Apahida, Baciu, Floreşti and Gilău, and the intra-metropolitan migration from Cluj-Napoca towards these communes.
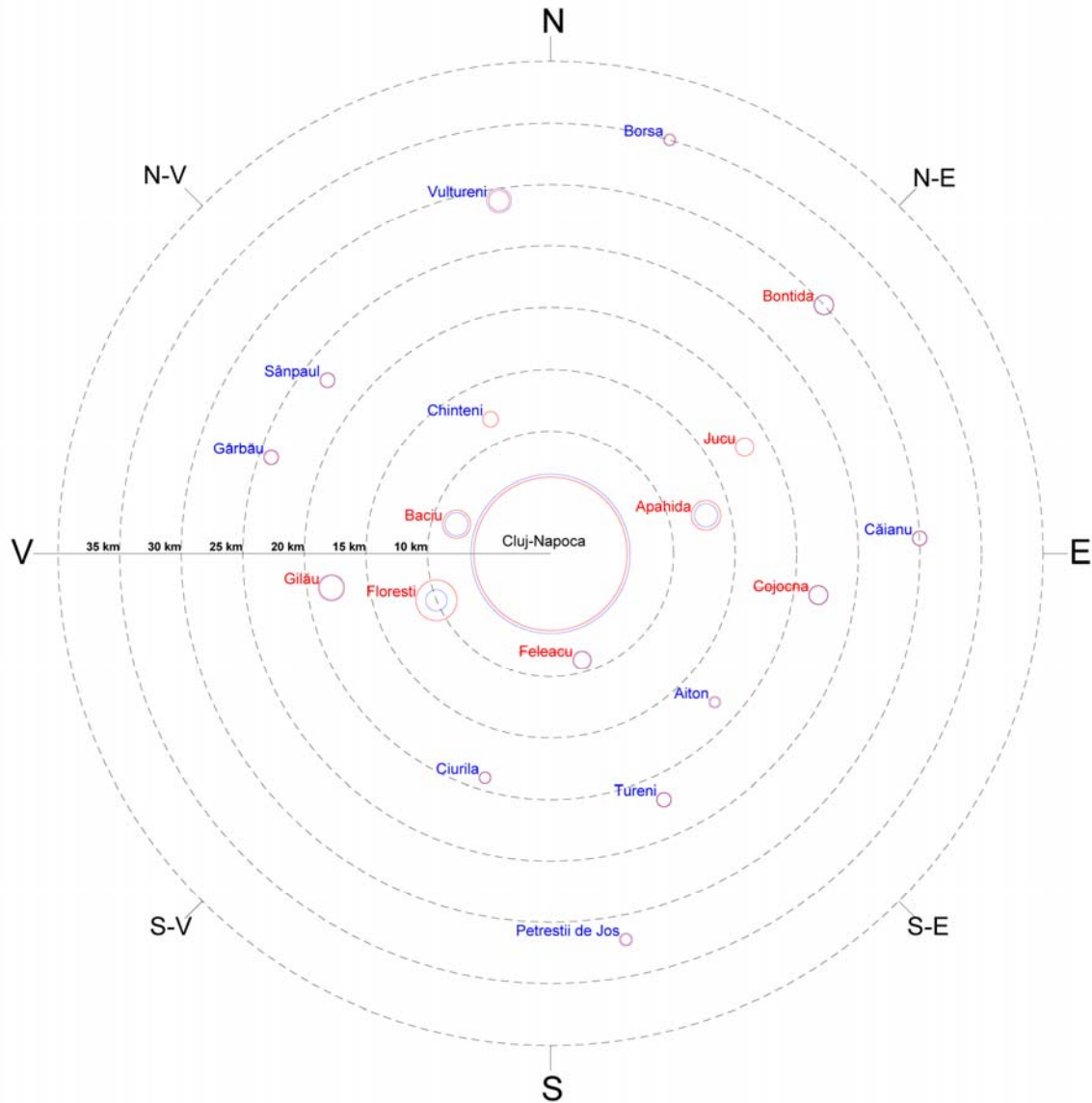

Figure 5. Road distances between Cluj-Napoca and the communes of its metropolitan area

Regarding the change of the population's distribution in the metropolitan area by settlement ranks (Fig.6), there can be observed that, by far, most of the inhabitants are concentrated it the primary center and that the periods during which migration was oriented mainly towards the secondary centers had little influence in changing the proportions of this distribution. By further speculating, this fact should suggest that in-migration towards the large communes doesn't have its primary source in out-migration from Cluj-Napoca. But, even so, it would be difficult to state that the large communes are in fact a destination for external migrants attracted by Cluj-Napoca without further proof.

The share of metropolitan population living in the small communes has increased during the studied

period mostly due to the addition to this category of large communes whose population has fallen below the yearly calculated threshold. Thus, the populations of Cojocna, Feleacu and Jucu stopped adding up to the total population of large communes and started adding up to the total population of small communes in, respectively, 2010, 1997 and 2009.
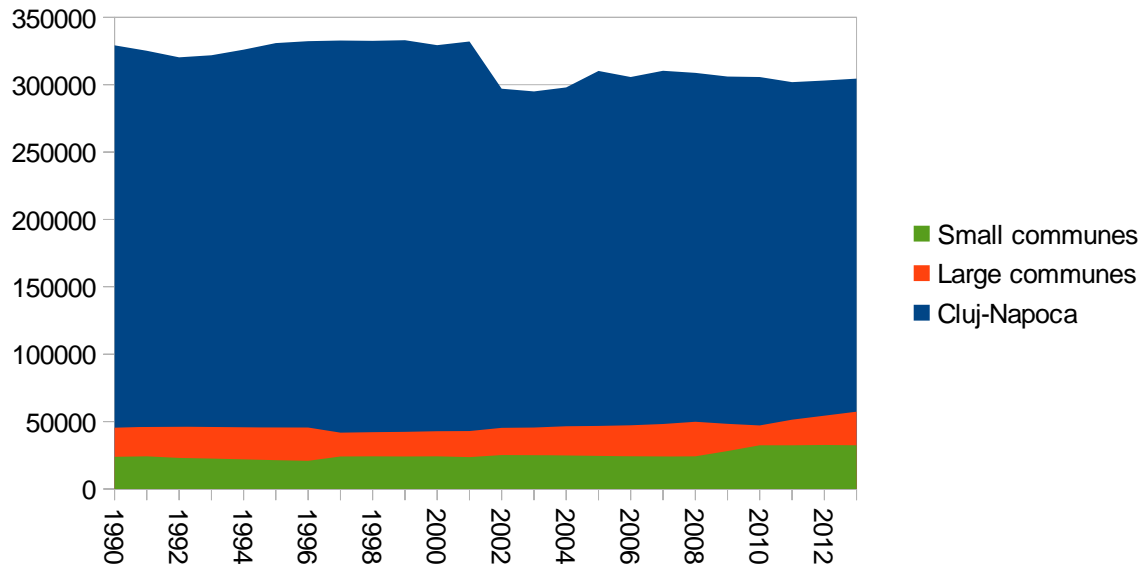

Figure 6. The population's distribution in the metropolitan area of Cluj-Napoca by settlement ranks

5. Conclusions

At a theoretical level, the paper shows that it should be possible to obtain a new analysis instrument by making some alterations to the Differential Urbanization Model. However, what the paper proposes is a mere sketch of a framework for a new model. By further case studies, such as that presented here for the metropolitan area of Cluj-Napoca, this instrument could be further refined and transformed into a real working model. Thus, input from real life situations could bring further changes not only in the method of implementing the model's framework, but in the framework itself.

The case study for the metropolitan area of Cluj-Napoca shows that a system of a relatively small scale can shift through a large number of urban evolution stages during a short period of time. Thus, because of frequent changes in migration direction, concerning mostly the primary and secondary centers of the system, it can be stated that the metropolitan area still oscillates between phases of gain and lose in centricity. This fact could be interpreted through fading limits between Cluj-Napoca and periurban secondary centers such as Apahida, Baciu and Floreşti, that might be gathering migration attracted by the main center. In terms of strategic planning, a validation of such an hypotheses should translate into a necessity of further blurring the limits by improving connections between these centers and bringing more urban functions to the periurban communes. Also, because small communes don't seem to attract enough migration in order to justify significant direct investment, a functional implant from the main center towards secondary centers might be of help by bringing needed services closer.

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7. List of figures

Recovering the City Center in the Era of Consumerism

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Abstract

This paper focuses on the issue of changes that take place in the city, with the emergence and experimentation of malls and especially how the mall culture affects the city centers and their image. The intent is to provide a generalized description of these phenomena without criticizing the mall culture or the urban renewal strategies. One of the questions is: what happens with what it is the traditional city center, with the places that traditionally were spaces for discussion and urban events, now that cities are defined by shopping and malls are creating artificial replicas of the perfect urban centers? City centers are turning emptier, with more space for cars instead of people, and what remains in the end are ghost-like spaces, lifeless. The result of this study offers preliminary evidence emphasizing the importance of including mall culture in urban studies, how the mall influences the city center and how it can be "saved". We must realize that total, long term impacts a mall has upon the city, are far greater than the direct, foreseeable ones. In this entire struggle, towns must negotiate, in good faith, to ensure the community's quality of life is maintained. I must say that the analyses presented in this study are not definitive, there are part of a complex study, and are only trying to establish the premises of the general research, the final purpose of the study being to establish a set of interventions and measures that can be applied on different cities, in order to "recover" the city center.

Rezumat

Prezenta lucrare are în vedere problematica schimbărilor ce au loc la nivelul oraşului, în contextul apariţiei şi experimentării mall-urilor şi, mai ales, în ce mod cultura mall-ului afectează imaginea centrelor oraşelor. Intentia este de a oferi o descriere generala a fenomenului, fara insa a critica cultura mall-ului sau strategiile de regenerare urbana. Una din principalele intrebari este : ce se intampla cu ceea ce era acceptat ca fiind cen.trul orasului, spatii pentru interactiune sociala si evenimente urbane, acum cand, orasele sunt definite tot mai mult de shopping si mall-urile creaza replici ale urbanului perfect? Centrele oraselor devin tot mai goale, mai secate de viata, cu spatii mai primitoare pentru masini si nu pentru locuitori, ramanand in final spatii lipsite de viata. Rezultatele cercetarii sunt unele preliminare si doresc sa sublinieze importanta cercetarii culturii mall-ului in studiile urbane. Trebuie sa realizam ca impactul pe termen lung pe care mall-ul il are asupra orasului este mult mai important decat cel imediat, prezent. In toata aceasta lupta, orasele trebuie sa lupte pentru a asigura in final calitatea vietii cetatenilor. Trebuie sa subliniez ca rezultatele cercetarii nu sunt definitive, fac parte din un studiu mult mai amplu, si doar incearca sa stabileasca premisele generale ale temei, scopul final al studiului fiind acela de a contura o serie de masuri ce pot fi aplicate in diferite orase, pentru a se ajunge in final la "recuperarea centrului

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orasului".

Keywords: consumerism, globalization, city, city center, mall, mall culture

1. Introduction

Malls are increasingly becoming reference points in the city and they are "virtually contributing to the deterioration of old urban centers, firstly by depriving them through, black hole-like, attraction from people and activities."[1] What happens then with what it is the traditional city center, with the places that traditionally were spaces for discussion and urban events? City centers are turning emptier, with more space for cars instead of people, and what remains in the end are ghost-like spaces, lifeless. What is the city's reaction to the urban renewal strategies known and how can they be used to regain the viability and vitality of the city center. Some studies are saying that the impact of mall on downtowns is probably considered to be the most significant impact of regional mall and that mall hurts downtown; but, on the other hand, can we see the mall not just as a way of destructions of the city, of killing the center, but as a way of recovery? Is there a price to pay by inserting in the city center a program that once killed or once contributed to the decline of the city?

Modern consumerism determines the artificiality of the world we live in. From many points of view, we all consume the artificial and moreover aspire to artificial. We are surrounded by artificiality in such a manner that maybe, we can-not seize the natural anymore, but we are not encouraged to do this either. Cities are now defined by shopping, it invades all the activities that are related to urban life itself and contributes to creating the artificial world characteristic to global consumerism that we live in. "The relationship between shopping and the city has, over the last half century, inverted from shopping as a component of the city to shopping as the prerequisite to urbanity. Rather than shopping (as an activity) taking place in the city (as a place), the city (as an idea) is taking place within shopping (as a place). Through an evolving series of processes, shopping has become to constitute urbanity. " [2:194]

2. Consumerism versus Globalization versus Mall Culture versus City

Just like it is suggested in the title, the subject is to be debated taking into consideration the last decade, a period of time that is referred in the paper as the "era of consumerism". To be able to judge the subject properly, it is necessary to understand what implies there era. The ideology of consumerism (hereafter consumerism) that began to emerge after the industrial revolution in the West and all over the world by the second half of the 20th century represents the start of the era of capitalist globalization. Consumerism is an addiction to more and more possessions and to constantly novel experiences and it becomes oppressive as it inevitably exacerbates the twin crises of capitalist globalization. The city becomes increasingly consumerist/oppressive as a consequence. [3] (Figure1)

Figure 1. The impact of globalization

Talking about the center of the city, it must be said that is has traditionally been the economic hub for larger market areas or regions, providing a major source of employment, the location of a mix of businesses types, and access to a broad range of goods and services and have also served a range of social and cultural functions. Often the centre for tourism and heritage, and house services and cultural amenities such as hospitals, courthouses, churches, museums, theatres and universities., these areas are home to a diverse resident population, typically living within relatively high density housing. Downtowns are central places where people work, live and spend their leisure time. "A city is often judged by the economic, social and cultural vitality of its downtown. The downtown shopping area has historically played an important role in defining the image of a city." [3]

The shopping mall is the quintessence of the consumerist/oppressive space and it plays an important role in the life of the contemporary city, contributing to its image and life. The mall is now transformed in the third type of public space, the other two being the house and the school /working place. Mall design is "over determined by the goals of retail profit." Escalators, maximum walking distances to spending-points, entrances, temperature, lighting, music, mirrors, cleanliness, all are subordinated to the profit imperative. Regarding the floor plan, it is critical that a too-direct and obvious route between the entrance and exits must be avoided. Ultimately, the goal is to trap the consumer in the world of consumption.[4]

The impact of this growth on the retail vitality of/over the downtown is evident, and we can observe that, the city center as a complex environment has experienced decline across Romanian cities in recent years.

To understand the changes within the city caused by the mall and its culture, I find it is important to talk about the culture of the mall, and especially about the mall as a public space, a precise replica of the traditional city and its center.

2.1 The culture of mall

From the historical point of view, the mall appeared in America, and it was invented by the architect Victor Gruen, at the middle of '50. " Gruen intended for malls to accommodate all the functions normally associated with the city, insisting that "shopping centers become, increasingly, multi-purpose town-centers." The mall, in his conception, stood in for the city center, and he legitimized this view by placing the mall in direct lineage with past forms where shopping was coequal with the city." [2:384] Malls adapt, they change, they conquer new territories, they evolve, they triumph, they fall. It "hybridizes" to be able to prosper even in late modernism, it returns to the town center, in different ways and aspects. Resurrecting the mall really is the "assimilation of the concept of" Entertainment Architecture." Founding author of this kind of mall is the architect Jon

Jerde. Gruen's mall was still an expression of technical efficiency, functionality and pragmatism expansion modernist urban, Jerde predominance relies on redundant spectacular".[1]

It is a fact that globalization is one of the motifs the culture of mall exists. Products of different brands, cultures and communities live under the same roof. Traditional market places that were usually located in the city center were one-dimensional. Today, festivals and events that take place inside a shopping mall, are acquiring a special importance, new meanings, the old ones being lost and forgotten. Malls are secular, ahistorical and postmodern in nature. While the streets of any city carry markers of history, the mall currently lives exclusively and he answers only to the present needs of the citizen. "The apparent diversity of shopping marks actually a fundamental homogeneity"[5:9]. The warship of the mall develops, bundled with the warship of the car, requiring good urban infrastructure, especially places with an impressive number of parking spaces. "They are the product of a common culture where people share and live" the culture of the mall ", and this, in fact, demonstrates the power of the built space in determining our way of life" [1] "The Mall World which does not respect the no limit, not even the imperative of limited-consumption "became the world" [5:15] it is a fact that the mall has become a global phenomena.

2.2 The mall as a public space

The relationship between the mall culture and the city is a strong one. The mall and its concept influences the city center, and it influences the way it was seen over the history, being a discontinuity factor. Being a perfect replica of a city, can we see the mall as a public space? Is it for real public, an element linked with the rest of the urban -the metaphor of the ideal city?

The mall is increasingly focusing more and more urban space, space that is translating from the city to the mall. Maybe the idea of a perfect space, an attractive one, where the urban chaos is missing, and that offers us everything we could have imagined, is making us as customers not want to go somewhere else. "The enclosed mall compressed and intensified space.[...] Architects manipulated space and light to achieve the density and bustle of a city downtown-to create essentially a fantasy urbanism devoid of the city's negative aspects: weather, traffic, and poor people"[5:22] Even though the mall creates a public space, a replica of the city there will always be a crucial space between this one and the real public space within the city. But instead, his lack of formal expression variety, his limited potential- the activity is the one that allows him/it to build, to outline the effects of a city can't be compared with the dynamics of the city, the busy life rhythm, and the space perception in different moments of the day.

The "public" spaces of the new mega structures and supermalls have supplanted traditional streets and disciplined their spontaneity. Inside malls, office centers, and cultural complexes, public activities are sorted into strictly functional compartments under the gaze of private police forces. This architectural privatization on the physical public sphere, moreover, is complemented by a parallel structuring of electronic space, as heavily guarded, pay-access databases and subscription cable services expropriate the invisible *agora.*[6] (Figure 2)

Figure 2. The "public" space of the new megastructures

"Quasi-public spaces, internal or external [...] mall-are part of the public domain. This includes what we call" privatized public spaces." As long as their owner retains the right to restrict access and behavior they are only nominally public spaces. Sorkin M. pejoratively refers to them with the "pseudo-public spaces".[7:111] They only give the impression of freedom, but in fact, everything is actually about total control. "Shopping malls may destroy sense of place through their 'replication of anonymous, universal patterns' and by isolating consumers from the outside world."[7:102] They only compress and intensify traditional aspects of public space, they give the impression of the ideal public space. Malls are spaces where private enterprises co-exist with public through. I think this is one important ideas that we must take into consideration in the matter that this paper is trying to develop.

Even if the mall tries to replicate the city and its center, there will always be a right way in which a mall can influence and transform a city center. This idea will be taken into consideration in the forth chapter of this paper, after the topic of a city center's relevance.

3. The relevance of city centers

In this case of study, particular attention must be given to the relevance of city center within the city, to be able to understand the changes that are taking place. In order to do that, I will try to briefly define the main characteristics of a city center.

The frontier of cities has changed over time. However, we should consider that in the past decades we have witnessed a process of expansion and dispersion of cities and a reinforcement of its polycentrism that is unparalleled in urban history. "Therefore, and because new centers have been appearing inside or in the surroundings of the largest cities, the old city centre became only the traditional centre. These areas have experienced some problems like the loss of accessibility and elements of attraction and a lack of local animation. In a process initiated or, at least, enhanced with the dissemination of shopping centers in peripheral areas we are witnessing a moving out of functions from the traditional city centre, causing problems in employment and residential function".[8]

In all this abundance of events and trends characteristic to the last twenty years, the old central areas have failed, in part, to keep pace with the changes, weakening its position in the urban hierarchy. This process has been causing the loss of vitality and viability of city centers. In order to see its relevance it is necessary to understand the notion of the city center, and how this chanced over the years. Even if a definition was given in the introduction of the paper, it is necessary to add

something. Initially this concept only referred to the historic traditional centre. Now it has been extended to the new centers that used to be peripheral.[8] Nevertheless, there has been a protection of the old city centre. To some extent, the importance of these areas is due to the following characteristics: uniqueness, multifunctionality, accessibility, and centrality.

One of the most important characteristics of traditional town and city centers is their uniqueness. Centers are composed of different layers from different periods in history, but not just because of this, it is not possible to replicate this authenticity in other areas. This area can't be modern as fast as the other areas are. Nevertheless, it is this "passivity" that allows them to be recognized as the ones where the historic elements are more visible. "Considering the centre as representative of the whole city, one may admit that cities may be assessed by the economic, social and cultural vitality of their city centre"[8] This uniqueness, distinctiveness is enhanced by the fact that these areas are the ones searched for by tourists, are the most visited ones, areas of high density.

Multifunctionality is a very important characteristic for maintaining the vitality of the city centre. The functions that these areas may include are multiples: residential, commercial and services, leisure, administrative work, etc. The existence of such a large number of functions means that in the same space at different hours of the day we can find residents, workers and consumers. This area can be one of the most lively of the city: "the historic city is sold at the same time as a shopping city, the residential city, the sporting city or many other cities to the same or quite different customers."[8]

Talking about accessibility, we can easily observe that these areas are generally the best served by public transport. But, with the increase of the motorization rate and the location of shopping centers in peripheral areas, the most accessible area is no longer the city centre. There are several reasons for this problem: internally this is because central areas have not been able to deal with traffic and parking needs; and externally because urban expansion was accompanied by the development of new roads that have improved the accessibility to the new retail locations. However, the new shopping centers are not accessible by public transport or this kind of transport is underdeveloped for those areas.

The centrality of these areas, though not necessarily geographical or geometrical, puts them on top of the urban hierarchy. "The accessibility and multifunctionality endowed these areas with a centrality singular in the city and allowed people to supply different needs such as shopping and leisure, for instance. It is admitted that the loss of centrality is partly related to a continuous loss of accessibility".[8]

The centrality of a city center, not necessarily a geometrical one, depends directly on how healthy the center is. (Figure 3)

Figure 3. The city center: uniqueness, multifunctionality, accessibility, and centrality

Seeing how malls are like and what they involve, and why city centers are so important, we easily identify the main changes that the mall determines within the city, in the end being able to talk about some methods that can help establishing a balance between this two, and how can we help the city survive. There must be taken into consideration that each center has its own individuality and that no matrix of urban renewal scheme can be followed.

4. Recovering the city center

"Downtowns have traditionally been regarded as safe, healthy and vibrant places"[4]. However, pressure from the suburbanization of population and commercial structure has resulted in many of Romania's city centers showing signs of decline. The contemporary Romanian city is suffering a radical redefinition process, which leads to a new stage of the process of slow disarticulation of the traditional city. City centers are losing their viability and vitality and becoming only a shadow of what they used to be. Because of the lack of quality public spaces, citizens choose to spend more and more of their time in the mall, which provides them the illusion of a perfect public space. Having more space for cars instead of people, cities are abandoned by the citizens. Commercial spaces within the center are not seen as viable as the ones within the mall, this being a strong reason for local business to close their gates or to move out.

Solutions for these problems exist, all having the same final purpose: to regain and to reestablish the continuity of the importance of the center in the urban hierarchy, and its viability and vitality. There are traditional, if we may call it like this, urban renewal strategies, but there are also some of them that are using the mall as a tool for urban recovery.

Traditional urban renewal policies, mainly based on combating social exclusion and physically building are changing because cities are much more then buildings, and persons, are more about experiences, cultural identities, change of information. There are known several methods of regeneration, but we can't see them as universal answers to the problems that a city has. Each one of them is the answer of a specific situation and context, and the result depends on the location, purpose and contributors.

In recent decades, the role of culture has become a major and often driving factor for the process of urban regeneration, as we can find several examples where culture helped in the general plan of a city's regeneration. "The focus on culture as a factor in regional transformation has been particularly

extensive in response not only to competitiveness among cities but also to sustainability requirements in the cultural sector. Culture in its broadest sense assumes a decisive role in constructing a system of interventions, where employment, tourism, and social and sustainable development becomes the product of the integration of places, people, economies and traditions".[9]

It is a fact that cities have significantly invested in their cultural infrastructure and creative economies in the past two decades. "Culture has been used as a means of urban regeneration, economic development and social inclusion".[10]

From another point of view urban regeneration is today almost automatically seen as synonym with pedestrianization. Pedestrianization is now justified as a returning to the traditional public space, and not as an inspiration from the American mall model. The mall and its concepts can be implemented in the city, using in this way the existing and to take advantage of the features of the center. Anyway, we must observe that the strategies accepted today for the reviving of the central areas -gentrification, pedestrianization, theme parks- they all work in the commercial way, more specific, of the mall. [1] "Open air markets, once viewed as old, were regenerated -with the insertion of a mall- and a new generation of consumers walks on the uncovered allies. Virtually, any large building or historical area can compete to be regenerated in a mall."[5:9]

Successful and vibrant downtown retail areas are an essential element of healthy downtowns. The challenge for urban development is to create a holistic and strategic planning approach that integrates all the key constituencies.[4] Healthy city centers are a fundamental element of the urban life." Supporting the retail sector and the main city centre the overall aim was to promote the revitalization of these spaces. The focus on retail highlighted the role that the sector has. By incorporating this sector into the revitalization process of those areas it highlights its importance to city vitality and viability. These interventions assume that relations between the city and retail are dynamic in both directions".[8] Viewed in a traditional way, retail needs urban areas with their concentration of people, and on the other hand, cities as livable places that depend on retail, one of its main functions to justify its existence. "Introducing shopping as a way to regenerate the urban space enmeshes the city in the paradoxes of the logic of shopping, and the difficulties of its containment, both as form and as an activity. The return of shopping to the city has further opened the Pandora's box of rationalized consumption, where shopping engulfs an increasing number of urban realms. "[2:194] The urban that was once a forum of liveliness is nowadays being replaced with a dull avalanche of imperceptible transactions. Yet the revival of urban centers is a death knell in itself.[2:153]

5. Conclusions

Cities are constantly changing, their image needing to adapt permanently to the exterior changes. The traditional European city, with its squares and parks, places that were the perfect spot for the public activities is losing itself, is slowly disappearing, becoming emptier and emptier. The city finds itself in a radical process of redefinition, showing signs of decline, losing its traditional symbols and values. Malls make ideal public spaces, they substitute and absorb the essential functions of the city, and what is more important, they concentrate an impressive number of citizens.

If we accept the idea of regeneration through mall implementation, in this sense, we can say that every space/zone/ part of the city can be rebuilt as a mall, by its simple transformation into an area for pedestrians. I strongly believe that in fact is about a concentration of shopping and not a recovery of the urban and that the regeneration of central area must not be resumed to the

consumerism politics. We will only have the impression that we recreated new links and regained the continuity of the urban form, but in fact, the reality is different.

Successful urban regeneration projects are those implying a strong involvement with the pre-existing community and local identity. Culturally based urban regeneration processes should not aim for the widest choice of cultural opportunities for the creative class. Instead, they should rediscover a sense of place, history and belonging. This is linked to a larger debate on who should be the target for cultural development in cities. While the local community can have a long-term interaction with the development, it may not have high-spending capacity. Visitors, with their short-term use of the city, may generate greater economic returns.[10]

To achieve the long-term success of urban and cultural regeneration it is important to attain throughout the process the involvement and integration of the local community at all levels, and enhance and consolidate place identity, all in respect of economic, social and environmental sustainability.[9]

A general definition for a city center recovery strategy cannot be provided, there can exist instead a conceptual one that can be applied in a general manner. There are no standard solutions for this problem; there can be instead, elaborated plans for the recovery of city centers. Architects, together with the authorities, sociologists, urban planners an especially taking into consideration the citizens' opinion must shape them. By no means, the measures for the revitalization of city centers must be taken together with a set of measures, coherent and in a logical order.

The analyses presented in this study are not definitive, nor do they necessarily indicate possible causal relationship between the dying center and the mall. There are wider implications for the research agenda and how this has moved forward our understanding of cities work and especially how a city center is being influenced or influences the city itself.

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City and Rules -About the Quality of Urban Space

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Abstract

This work approaches the problem of the quality of built space from the perspective of the rules (regulations) that exist (and don't exist) in Romania today. The quality of the urban space is a relevant subject nowadays because negative interventions (an increasing number of them) need to be remediated. The measures to do so can be efficient only if they act as rules. The purpose of this work is to identify the existence of rules in Romania, the value and applicability of these rules, and the interventions needed to remediate the degradation of the quality of urban space.

Rezumat

Lucrarea de față abordează problematica calității spațiului construit din perspectiva regulilor (regulamentelor) care există (dar mai ales nu există azi în România). Calitatea spațiului urban este un subiect de actualitate astăzi pentru că intervenţiile negative (fiind din ce în ce mai numeroase, pentru ca ele se cumulează) necesită măsuri de intervenție. Aceste măsuri pot fi eficiente doar dacă sunt formulate şi aprobate in aşa fel încât să devină reguli. Scopul acestei lucrări este de a identifica dacă există reguli in România, care este valoarea şi aplicabilitatea acestor reguli, şi cum se poate interveni pentru remedierea degradării calitative a spațiului urban.

Keywords: urban space, built space, rules, quality, city

1. About rules

Rules [1] appeared as a result of people living together – without them day-to-day live would be more difficult. There are written rules and unwritten rules. The content, complexity and level of applicability of rules show the level of civilisation of a group of people, a community or society. Written rules are, generally, a characteristic of society-these rules are written by the authorities (the ones with legislative power), they are published in official documents (for example, the Official Monitor), and the state's organs make sure they are followed.

Unwritten rules are, generally, a characteristic of a community-these rules are shared and followed by the majority, they reflect cultural attributes (in an anthropological sense of the term) and following them is supervised by the members of the community. Written rules come, most of the times, from unwritten rules which attain a bigger level of applicability and become more general,

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thus applying to a society and becoming laws (for example, the Civil Code).

When analysing the domain of architecture through the context of a city and its rules, we realise that architecture is linked to urbanism. Firstly, we need to acknowledge that there is a distinction between urbanism (which refers to an administrative-territorial unit) and developing an area (which refers to more of those administrative-territorial units). [2] This work presents what the situation is like in Romania today. As we're about to show, most of the rules that apply to the domain of architecture come from urbanism.

2. Rules in the domain of urbanism

It's necessary to take a short trip through recent history. Until 1990, the domain which took care of developing areas was called "systematisation"; after 1990, it was called "developing territories and urbanism".
The urban regulations that appeared after 1991 are as follows:
   – 1991: Order 91/1991 [3] completes Law 50/1991 [4] (law which will be modified and completed numerous times to this day)
   – 1996: General Regulations for urbanism (also known as HG 525/1996) [5] (which remained basically the same over time, only slight modifications were made)
   – 1999: Guide regarding the methodology of elaboration and the frame-content of the General Urban Plan: GP 038/99 [6]
   – 2000: Guide regarding the elaboration and approval of Local Urban Regulations: GM-007-2000 [7]
   – 2000: Guide regarding the methodology of elaboration and the frame-content of the Detailed Urban Plan: GM 009-2000 [8]
   – 2000: Guide regarding the methodology of elaboration and the frame-content of the Urban Plan on Areas: GM-010-2000 [9]
   – 2001: Law 350/2001 regarding the development of territory and urbanism [10] (law which was modified and completed several times)
   – 2010: The methodology for informing and consulting the public regarding the elaboration or verification of development plans of territory and urbanism [11]
It should be noted that the vast majority of technical regulations referred to procedural aspects (what should be included in documentation in regards to written and drawn, documents and notices); the only real technical regulation that offers elements of actual applicability in the domain of architecture and urbanism (from the perspective of rules) is the General Urban Regulation approved through HG 525/1996, which we will refer to further.

3. Rules in the domain of architecture

In the domain of architecture there are applicable norms (rules, technical prescriptions) which come from a few normative acts such as the following:
   – State standards (STAS) issued before 1990 but also applicable today- for example, STAS for calculating surfaces [12]
   – Elements included in the general legislation- for example, the Civil Code [13] (there are some law articles which refer to passing servitude and others which are linked to the process of designing in architecture)
   – Elements included in laws aimed at certain specific problems- for example, the Law of Domicile [14] (with elements such as minimal areas for domiciles which are mandatory rules for designing in architecture)

- Technical prescriptions included in design guides (shortened as DG), design norms (N or DN) dedicated to a certain function- for example, the Norm regarding designing, realising and exploiting constructions for schools and high-schools [15]
- Technical prescriptions included in norms from adjacent domains, but with applicable elements to designing in architecture- for example, the Norms of hygiene (OMS 536/1997) [16] or the Norm for safety to fire of constructions (P118-99) [17]

When discussing the quality of urban space in general, there is a need to refer to the rules, meaning clear and objective criteria meant to avoid subjective appreciation. There is a series of elements which contributes (as premise) to the configuration of a quality built space, elements that can also be found in regulations (rules) which can be identified in normative documents (for example, urban identifiers POT and CUT [18], the required number of green spaces [19], the size of circulation areas [20], the distance between buildings [21], and more). It can be noted that these regulations are part of the domain of urbanism or of an adjacent domain.

The institutions of higher education in architecture in Romania teach future architects the elements necessary for creating objects of architecture or quality urban spaces through composition courses, but especially through architecture design classes. There are taught and then exercised rules of composition, of full-empty relations, of colour and more over six years. However, these rules are not found in legislation. It can be stated that written rules are completely inexistent when it comes to the exterior aspect of the object of architecture.

Regarding built space (here the object(s) of architecture interact with all the other exterior elements: circulation spaces, green spaces, urban furniture, etc., being perceived at the same time) the only written rule is so general that it becomes useless; this rule can be found in the General Urban Regulation and is as follows:
"*The exterior aspect of structures:*
1. *The authorization for executing structures is given only if their exterior aspect does not go against their function and does not deprecate the general aspect of the area*
2. *The authorization for executing structures, which, by conforming, volumetry and exterior aspect, contradict the general aspect of the area and deprecate the generally accepted values of urbanism and architecture, is forbidden.*" [22]

Which values of urbanism and architecture are generally accepted? When a juror/judge asks this question he expects an answer that refers a rule (technical norm). According to what rules can we decide if the exterior aspect of a structure contradicts its function? There are no written rules for this subject. How can it be decided if the exterior aspect of a structure deprecates the general aspect of an area? There are no written rules for this either.

These questions could be asked by anyone (for example, an architect who is designing a building) who would be accused of the fact that a certain building doesn't fit in an urban context, that it's distasteful, out of proportions, etc. Moreover, there are examples in history which prove that structures perceived as ugly by some, were then perceived entirely different- for example, the Eiffel Tower in Paris which wasn't appreciated by art critics at first, but then became the universally known symbol of Paris. [23] Are you wondering if an untalented architect dares to compare his unfortunate (and not understood by his fellow members) creations to the situation of the well-known tower? Yes, I have seen cases.

The lack of written rules (regulations) for the domain of the quality of urban space and of the aesthetic of the architectural object leads to nonsense in architecture with really negative consequences that have as an effect the deprecation of the built spaces- those that already exist, as well as those recently formed. Is there anything that can be done? I have asked this question to

several of my colleagues with experience in urbanism and architecture (especially those involved in administration, who are/were chief architects or who activated in the former MPLAT). Most of them stated that rules regarding the quality of the built space (referring to the built space or the architectural object) are wanted but there is little probability of them being adopted. There were different opinions when talking about creating a formula for such a rule.

Despite the scepticism of my fellow colleagues, I am convinced that the most important thing would be that this process regarding regulations is started. If the set of rules formulated isn't good enough (meaning complete, balanced, applicable), it can be modified and completed over time. It's important for the process to start, for the rules to be formulated; the rules can be modified or even dropped according to need, they can be completed, improved. The worst thing would be doing nothing which would mean the situation wouldn't change- the urban space would continue being occupied by ugly objects: experience has shown that bad architects are more active than the good ones (there's a simple explanation for that: the bad ones are cheaper and so they have more clients).

4. Intervention proposals

Here are some ways for actual action. I propose three types of possible interventions: 1. Updating the legislation for urbanism; 2. Setting rules for the aesthetic of the architecture object, on a level that is either national (general), area-orientated (for areas with the same characteristics) or local (for every town/city); 3. Creating a mechanism for debating the possible need to derogate from the rules.

4.1. The legislation for urbanism has to be updated, especially the General Urban Regulation. This normative act was published in 1996 (18 years ago). It's necessary to update it because it has been determined that there are a lot of gaps (for example, the lack of urban indicators CUT for functional areas, or the lack of specifications for de urban indicator POT for homes situated in functional areas other than residential). Also, some data needs to be updated (for example, the rules about the number of parking spaces are outdated; there aren't enough parking spaces because there has been a general growth in automobiles) because the economic conditions have changed essentially; the lack of updated technical elements led to a lot of dysfunctional situations, especially regarding circulation.

4.2. Updating and completing the urban rules would solve a lot of the urgent problems of the built space. However, that wouldn't be enough; it's necessary to have a set of rules which aim to assure as little as possible a negative effect of low-quality architecture.

The rules regarding the aesthetic of the architecture object could be written along with examples, in a manner similar to GM 007-2000 (but with more elaborate graphic presentations, of course, maybe even with photographs). For example, a rule about the interdiction of removing decorative elements from the façades (borders, jambs, etc.) of buildings with architectural value can be easily illustrated with pictures. An example that such an initiative is possible is represented by the informative displays placed in some rural localities from the counties of Brasov and Sibiu by the Monumentum Association [24], supervised by the Ministry of Culture (also interesting, 'Small Guide of Architecture' by the same NGO).

4.3. Rules don't need to be constricting and abate creativity. Positive interventions can surpass (go beyond) the frame of rules established at some point. A way that allows another approach beyond the rules is a mechanism specific to derogation; but for the derogation to not become an instrument that doesn't solve the core problem but allows breaking a rule, this mechanism also needs to have a stage of supervised evaluation.

Monitoring the derogation from rules (in this case, aesthetic) can be assigned to a commission of specialists. Such a commission has to include architects and urbanists, along with the chief architect of the locality for which the intervention evaluation is done (but only if the chief architect is an architect or urbanist). After this, there would be more discussions about the hierarchic subordination of the commission (whether this commission should be completely independent, subordinated to the local administration, the county administration or another entity similar to OAR or RUR), about the competence of naming the members of such a commission (who names them and according to what criteria), also about the requital of the commission members (whether they work for free or if they get paid-and if so, how much).

5. Conclusions

The quality of urban space- both the existing one and the newly created one- cannot be assured without the support of specific regulations (that are non-existent today). These rules won't appear by themselves or from an authority capable to set regulations without incentive, without pressure. Such an incentive can only be generated by those who perceive the degradation of urban space, the people who are aware of this phenomenon; out of these people the specialists (architects, urbanists) are the ones who have to take initiative, and organized groups and professional associations have the chance to be heard the best.

6. References

[1] Definition of 'rule': a principle or regulation governing conduct, action, procedure, arrangement, etc.

[2] This distinction is defined by Law 350/2001 (Legea 350/2001)

[3] Order No. 91/25.10.1991 of MPLAT; Order regarding the approval of forms, authorization procedure and content for the documentation stipulated by Law 50/1991 (Legea 50/1991), published in the Annex to the Official Monitor No. 228 from 14th November 1991

[4] Law No. 50 from 29th July 1991 (Legea 50/1991) regarding the authorization for executing structures, published in the Official Monitor No. 163 from 7th August 1991

[5] The Government Decree No. 525 from 27th June 1996 (HG 525/1996) for approving the General Regulations for urbanism, published in the Official Monitor in 27th November 2002

[6] Order No. 13N from 10.03.1999 of MPLAT regarding the approval of the technical regulation 'Guide regarding the methodology of elaboration and the frame-content of the General Urban Plan' GM 038/99

[7] Order No. 21/N/10.04.2000 of MPLAT regarding the approval of the technical regulation 'Guide regarding the elaboration and approval of Local Urban Regulations': GM-007-2000

[8] Order No. 37/N/08.06.2000 of MPLAT regarding the approval of the technical regulation ': Guide regarding the methodology of elaboration and the frame-content of the Detailed Urban Plan': GM 009-2000

[9] Order No. 176/N/16.08.2000 of MPLAT regarding the approval of the technical regulation ': Guide regarding the methodology of elaboration and the frame-content of the Urban Plan on Areas': GM-010-2000, published in the Official Monitor No. 399 from 25.08.2000

[10] Law No. 350 from 6th July 2001 regarding the development of territory and urbanism, published in the Official Monitor No. 373 from 10th July 2001

[11] Order No. 2701 from 30th of December 2010 of MDRT for approving the Methodology for informing and consulting the public regarding the elaboration or verification of development plans of territory and urbanism, published in the Official Monitor No. 47 from 19th January 2011

[12] STAS 4908-85, Civilian, industrial and agrozootechnical buildings, Conventional volumes and areas

[13] The first version of the Civil Code was issued in 1864 and became effective on the 1st of December 1865; it was active until the 1st of October 2011 when a new Civil Code was issued

[14] Law No. 114 from 11th October 1996 (Legea 114/1996 – Legea locuinței), the Law of Domicile, published in the Official Monitor No. 254 from 21st December 1996

[15] Order No. 5/N/ 22.01.1997 of MPLAT 'The Norm regarding designing, realising and exploiting constructions for schools and high-schools': NP 010-97

[16] Order of the Ministry of Health No. 536/1997 (OMS 536/1997) for approving norms of hygiene and recommendations regarding the life environment of the population, published in the Official Monitor No. 140 from 3rd July 1997, updated in 2014

[17] Order No. 27/N/07.04.1999 of MPLAT regarding the approval of the technical regulation 'Norm for safety to fire of constructions': P118-99

[18] Urban indicators are defined according to Law 350/2001, updated in 2007 and 2008, to Annex No. 2: Defining terms used by law , and they are the Percentage of Occupation of Territory (POT) and the Coefficient of Usage of Territory (CUT)

[19] Law No. 47 from 19th March 2012 for modifying Law No. 24/2007 regarding the regulation and administration of green spaces inside localities, published in the Official Monitor No. 185 from 22nd March 2012, where Article 6, indentation 3 specifies that residential areas must have at least 20 square metres of green space per inhabitant and a minimum of 5% public green spaces

[20] HG 525/1996 Art. 25, 26 and Annex No. 4

[21] OMH 536/1997 updated by the Order of Ministry of Health No. 119 from 4th February 2014, published in the Official Monitor no. 127 from 21st February 2014

[22] HG 525/1996, art. 32

[23] See: Ragon, Michel - „Histoire Mondiale de l'Architecture et de l'Urbanisme Modernes", Casterman, Paris, 1979

[24] Monumentum Association is a NGO formed in 2012, http://asociatiamonumentum.ro

The Jewish Community – Presence and Absence in the Urban Space. The Case of Kazimierz

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Abstract

The "Jewish" spaces in contemporary Europe recall a past that is rather strain for the non-Jewish population, but significant for the Holocaust survivors and their families or, generally, for the contemporary Jewish communities (however small they would be). In the same time, they represent, again, as they did for centuries, cultural crossroads of European civilization (reuniting people with different nationalities, identities, traditions, religions, and languages). In addition, defined as cosmopolite social and cultural centres, the former Jewish quarters (centres of Jewish life) exert a great force of attracting tourists and consumers of Jewish culture, the majority being, paradoxically, non-Jews. Why? The paper tries to explain this fascination on Jewish heritage and actually to highlight, through an objective appropriate case study, its impact on the contemporary society. Accordingly, in Kazimierz, the Jewish quarter of Krakow, "Jewish history" continues to be written, even though Jews do not inhabit it anymore. Here, the Jewish memory and legacy have significantly contributed to a real urban rehabilitation and "renewal" process. Hence, the Jewish cultural heritage means not only museum exhibits or tourist attractions, but also continuity of life and the future, although, sometimes, a "high price" has to be "paid", by today's communities, to ensure the perpetuation of the Jewish life of tomorrow's Diaspora.

Rezumat

Spațiile „evreiești" din Europa contemporană evocă un trecut care este aproape străin populației neevreiești, care actualmente le locuiește, dar care este plin de semnificații pentru supraviețuitorii Holocaustului, familiile lor sau, în general, pentru comunitatea evreiască din prezent (oricât ar fi ea de mică). În același timp, ele reprezintă, din nou, așa cum au făcut-o timp de secole, răspântii culturale ale civilizației europene (reunind oameni de naționalități, identități, tradiții, religii și limbi diferite). În plus, definite ca centre culturale și sociale cosmopolite, fostele cartiere evreiești (centre ale vieții evreiești) exercită o mare forță de atracție asupra turiștilor sau consumatorilor de cultură evreiască, care paradoxal sunt majoritatea neevrei. De ce? Articolul încearcă să explice fascinația pentru patrimoniul evreiesc și să evidențieze, printr-un studiu de caz concret, impactul pe care îl poate avea acesta asupra societății contemporane. Astfel, în Kazimierz, cartierul evreiesc din Cracovia, se scrie în continuare „istorie evreiască", chiar dacă acesta nu mai este locuit de evrei. Aici, memoria și moștenirea evreiască au contribuit considerabil la o adevărată „renaștere urbană". Dar, moștenirea culturală evreiască nu reprezintă numai exponate muzeale sau atracții turistice, ci continuitatea vieții și viitorul, deși, câteodată, comunitățile de astăzi trebuie să „plătească" un „preț ridicat" pentru a asigura perpetuarea vieții

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evreieşti în Diaspora de mâine.

Keywords: Jewish sites in Europe, Jewish cultural tourism, Jewish Krakow, Kazimierz, „Schindler's tourism"

1. Introduction

The fall of communism has reopened the "Jewish routes" between Berlin, Bucharest and Sofia, through Prague, Budapest, Bratislava, Warsaw, and Krakow. Being different compared to the West, regarding matters of culture, religion and traditions, Eastern Europe still bears the burden left by the Second World War. While France and England have 700,000 and, respectively, 300,000 Jews, the Czech Republic has only 13,000, Hungary (with the largest Jewish community in Eastern Europe) 100,000, and Poland (which once had about 3.5 million Jews) circa 8,000. Nevertheless, recently, more and more Jews acknowledge their "national" belonging and origins, so that, community leaders state that there can be, yet, thousands of Jews still living quietly, in the shade. The information comes from *A Travel Guide to Jewish Europe*, which also argues that anti-Semitism, although a phenomenon spread all over the world, is "blooming" especially in Eastern Europe, being labelled as "anti-Semitism without Jews". This fact constantly keeps the community leaders concerned / worried, yet avoiding panic, because history has taught them that "the price of liberty is eternal vigilance". If Western Europe confronts the Jewish communities with the assimilation, in the East, one may speak about "a rebirth" of the communities, even if the number of mixed marriages is increasingly high. Therefore, in this context, the purpose of communitarian building types would be to seek to discover and to educate those who voluntarily or involuntarily have hidden or continue to hide / ignore their Jewish origin. Despite the economic difficulties, which they have to face, the Jewish communities strengthen, more and more powerfully, their position. [1, p. 17]. The direct manifestation of this phenomenon is clearly reflected in tourism and in the approach (from the touristic point of view) to the Jewish cultural heritage.

2. The Case of Kazimierz

Nowadays, Poland is fully recognized worldwide as a preserver of a considerable inheritance, with universal value, of the European Jewish culture. We present, below, such an "asset", which we consider significant: *the case of Kazimierz*, the former Jewish quarter of Krakow – one of the most popular Jewish sites of the Diaspora, due to a "touristic industry", purposefully established for promoting and enhancing it.

The famous guide *Frommer's*, about Poland, of the year 2009, proposed a five-day touristic itinerary to visit the Jewish heritage – "A Five-Day Focus on Jewish Heritage" [2, pp. 55-57, 85-86] – covering a significant part of the history of Polish Jews, structured as follows: Warsaw, the industrial city Łódź, Krakow, Auschwitz and Birkenau. In Warsaw, the guide recommends a walking tour through the former ghetto, the largest ghetto during the Second World War, drawing particular attention to the monuments and museums (the Monument to the Ghetto Heroes, the Jewish Theatre, Museum of the History of Polish Jews, the Jewish Historical Institute, the Jewish cemetery, etc.). In Łódź, where during the interwar period, used to live more than 200,000 Jews, the largest Jewish community in Europe after Warsaw, the Jewish inheritance is the most interesting: the former ghetto, the cemetery, the Radegast Station (from where the special trains were leaving towards the concentration camps), the museum of history (the former residence of the great industrialist Izrael Kalmanowicz Poznański), with the recommendation to try a meal at a traditional restaurant. In Krakow, which once was one of the most important centres of Jewish learning, the guide provides a tour of the former Jewish quarter Kazimierz and of the former Podgórze ghetto (situated nearby). In the end, a full day is reserved for visiting the former

concentration camps of Auschwitz and Birkenau. For those who are interested, the Warsaw Jewish Historical Institute (Instytut Żydowski Historyczny), specialized in the study of history and culture of the Polish Jews, is the most appropriate place to start a thorough research. Being the depository of the largest collections and archives of documents, books, newspapers, art and religious artefacts in the country, the Institute is aimed on the preservation and enhancement of over ten centuries of Jewish life in Poland [3].

Former capital of the Kingdom of Poland, Krakow [4, pp. 325-329; 5, pp. 256-263] has a long tradition on Jewish history, which is lost in the mists of time. The documents on the Massacre of 1348 show that, in those times, Jews lived in the town and owned houses. In 1400, King Vladislav Jagellon bought the house of a Jew named Jossman to found the University. Due to the numerous riots and pogroms against the Jews during the 15th century, King John Albert ordered in 1494, that they should be confined to live in Kazimierz, which was then an independent settlement nearby Krakow. However, because Jews still had businesses and commercial premises in important parts of Krakow the discriminations continued. There is some evidence on the organization of the Jewish community at the beginning of the 16th century, reflecting a certain independence regarding marriages, institutions, charitable and philanthropic organisations, etc., proving the Jew's freedom in managing the internal problems of the community. The Plague of 1623 had serious consequences on Jewish neighbourhoods, too. The allegations and atrocities continued and culminated with the horrendous Massacre of 1655. The 18th century found the Jewish community deeply in debt and seeking solutions to prevent its dissolution or even a possible exile. After the division of Poland, in 1795, Krakow came under Austrian rule, which, for the Jews, meant a harder situation, worse than it was before. The formation of the Duchy of Warsaw, in 1810, allowed, at least theoretically, the emancipation of the Jews, and then, after the proclamation of the independent state of Krakow (the Republic of Krakow or the Free City of Krakow – *Rzeczpospolita Krakowska*, between 1815-1846), their situation became, according to *The Jewish Encyclopedia*, "the most deplorable in Europe". In 1846, Krakow, as a part of Galicia, was incorporated into Austria and its Jews shared the fate of the other communities in the Empire. After the real emancipation of 1861, Jews spread all over the city, but Kazimierz continued to maintain its Jewish character and its tradition of "Judenstadt". Here, in the interwar period, 119 synagogues and houses of learning ("Beth Midrash") used to function. In 1939, about 56,000 Jews lived in Krakow; persecutions began soon after the German occupation. Forced by circumstances, about 35,000 Jews left the city, and, in 1941, when the ghetto was established, 20,000 Jews became prisoners in their own city. Many were killed in the ghetto, but the most were sent to concentration camps in the surrounding area. The final extermination began in 1943, with the deportations to Auschwitz. Very few of Krakow's Jews have survived the Holocaust. After the War, about 3,000 Jews gradually settled in Krakow, but preferring, in general, other areas of the city than the former Jewish neighbourhood, fearing a possible pogrom. The last Jew left Kazimierz in 1968. The community slowly declined, reaching from about 700 members in the 1970s, to a few hundred in 1990, and to about 150 in 2004. Yet, the atmosphere here is overwhelming: time seems to have stood still; old historical sequences are overlapping with the new ones; traces of happy and accomplished lives are to be found together with those of physical torments, oppressions and terrible crimes; a vanished past is both present and absent, and even though, time itself has not gone backwards, Kazimierz is the place where Jewish life pulsates powerfully, even without its former thriving community. Therefore, Kazimierz (and thus Krakow) is one of the largest and most spectacular contemporary "witnesses" of the *presence through absence*. [q.v. 6]
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The Jewish historic quarter, ranked on UNESCO's World Heritage Sites list, occupies no more than an area of 300x300 m, which has concentrated, in time, and preserved so many meanings, facts, and evidences, that became *the most important Jewish centre in the country*. Along with the Josefov of Prague, it is also among the most spectacular architectural ensembles of their kind in Europe. Nowadays, the atmosphere of the olden days is maintained by the architecture of "traditional" houses with commercial spaces on the ground floor (many of which still retain signs of the past), by

the "typical" (kosher) restaurants and cafés, by the various kosher or "specific" Jewish shops, all of which are cheerfully accompanied, at night, by klezmer music shows. Unfortunately, the crowds of tourists do not pay attention all the time, to the strange voices, shadows or moving characters, which accompany them, at every step; and it is not just *the wind*…

Figure 1. *Stara Synagoga,* Kazimierz, Krakow. The oldest synagogue in Poland, probably dating from the second half of the 15th century, reconstructed at the end of the 16th century.

Figure 2. *Synagoga Izaaka* or *Synagoga Izaak Jakubowicz* Kazimierz, Krakow, dating from the first half of the 17th century.

Figure 3. *Synagoga Wysoka* Kazimierz, Krakow, dating from the middle of the 16th century.

Figure 4. *Tempel Synagoga,* Kazimierz, Krakow, dating from the second half of the 19th century, built in Neoromanesque style, with Neogothic elements.

Following the War, only seven synagogues have been preserved, of which only two are still functional: *Stara Synagoga* (now housing the museum of Jewish history, Fig. 1), *Remuh* (dating from the middle of the 16th century, now a functional orthodox synagogue, housing a museum, too), *Synagoga Izaaka* (currently an orthodox prayer house and a museum, too, Fig. 2), *Synagoga Wysoka* (sheltering exhibition spaces of the community, Fig. 3), *Tempel Synagoga* (functional reformed synagogue, opened to public, Fig. 4), *Kupa Synagoga* (dating from the middle of the 17th century, now used as a space for exhibitions and concerts), *Synagoga Poppera* (dating from the beginning of the 17th century, now housing the Youth Cultural Centre). The *Muzeum Galicja* (inaugurated in 2004, through the functional reconversion of industrial premises, Fig. 5) is

dedicated to the memory of the Holocaust victims and to the local history of the Jews. Moreover, the major sights also include the fragments of the ghetto wall, the former Oskar Schindler's Enamel Factory, and the three cemeteries: *Remuh* (Fig. 6), *Abraham,* and *Nowy cmentarz żydowski* (the *New Jewish Cemetery*; the only functional Jewish cemetery in Krakow) [7, pp. 185-189]. The "Oskar Schindler" museum is the result of the functional reconversion and architectural rehabilitation of the administrative headquarters of Oskar Schindler's former factory (*Fabryka Emalia Oskara Schindlera*, Fig. 7). Here, visitors confront with a memorial exhibition that proposes a unique and very special experience. The permanent exhibition of *Oscar Schindler's Factory Museum*, inaugurated in 2010, is entitled "Krakow under Nazi Occupation 1939-1945" [8].

Figure 5. *Muzeum Galicja,* Kazimierz, Krakow. Interior view.

Figure 6. The precinct of the inactive *Remuh Cemetery,* Kazimierz, Krakow. Dating from the first half of the 16th century, it is also known as the *Old Jewish Cemetery*.

Figure 7. *Oscar Schindler's Factory Museum* (*Fabryka Emalia Oskara Schindlera*), Kazimierz, Krakow. View of the original interwar administrative headquarters of Oskar Schindler's former factory.

One can observe the effects of a touristic hyper-marketing in Krakow, where tourists are attracted / invited to discover the Jewish neighborhood Kazimierz or the surroundings of Krakow, connected to Jewish memory. Organized tours are available at every corner, and there is even an "old-fashioned" sightseeing tour, by riding a historical tram. Although dedicated to Jewish heritage, these tours target cultural consumerism, rather than the emotions generated through personal experience. That is why, visitors should search for the clues or cues of the past and experience intensely the authentic Jewish atmosphere and not just "pass through" them, as though they were in front of museum showcases. It is about life and destiny, not only touristic sights, pictures, food and drinks or souvenirs; but, surprisingly, it is happening exactly the other way. Tourists see the life of the real Jewish neighborhood more like a museum exhibit, which they experience in the most

"profound" manner, possibly through gastronomy, while the reconstituted life (as museum artefact) is "lived", literally, more intense in the museum that functions in the former premises of Oskar Schindler's Enamel Factory (Fig. 7). Another explanation would be the effect of the film *Schindler's List*, broadcasted in 1993, directed by Steven Spielberg.

If the communist regime intensively contributed to the oblivion of the Jewish past of Krakow, after 1990, things have completely changed. The *Spielberg effect*, consequence of the renowned film, awarded on several occasions, meant the *rebirth*. Although Kazimierz served only partially as the real "décor" of the shooting locations, it was enough to attract worldwide attention, becoming a place of touristic pilgrimage. Ever since, the city has been flooded with visitors – not only Poles, but especially foreigners –, for whom experiencing / living the specific atmosphere means, mainly, accommodating in a local hotel, eating or drinking in kosher restaurants or cafés, and visiting the most famous touristic attractions. Unfortunately, wandering the winding streets or investigating the picturesque and colourful old houses, with their strange courtyards, comes only secondly (Fig. 8, Fig. 9, Fig. 10).

Figure 8. The famous Szeroka Street, in Kazimierz, Krakow, evoking the typical atmosphere of the Jewish neighbourhood.

Figure 9. The famous Szeroka Street, in Kazimierz, Krakow, with its specific Jewish shops and cafés that delight the tourists.

Figure 10. The famous Józefa Street, in Kazimierz, Krakow. On the right, one can see the *high* silhouette of the interesting synagogue *Hoyche Shul* or *Wysoka*.

Thus, tourists crowd to visit the filming locations or those related to the subject of the movie, which has revived the life of Krakow's Jewish neighbourhood, in a very special, quite unique, director's vision and scenography. Therefore, they prefer the illusory décor associated to the real history, instead of the authentic and vibrant Jewish atmosphere, which, consequently, remains almost unexplored. Generally, only Jewish tourists or non-Jewish connoisseurs "sought" and "test" the unique features of Kazimierz. In fact, a series of overlapping meanings take place, creating confusion between the real Jewish neighbourhood (which provided the filming framework for the Podgórze ghetto), the site of the former ghetto in the Podgórze neighbourhood (where Schindler's former factory is actually situated), the locations evoked in the movie, and the real locations in Krakow and its surroundings, where the shootings took place (taking into account that the concentration and extermination camps in Płaszów and Auschwitz were reconstituted in the movie, because filming in the real locations was not authorized). In addition, almost regardless of the accommodation, leaflets or other means of touristic marketing promote the possibility of organizing "private", custom-made visits to Płaszów and Auschwitz and guided tours in "Jewish Krakow", on foot or by a vintage tram (as to "perceive" even better the atmosphere of the old times). Sightseeing tours of the locations in Spielberg's movie are also available; they are even called "*Schindler's List tours*". Of course, from the economical point of view, this is a good thing, because, on one hand, generally, it contributes to making Poland a popular destination, in the top of the European Jewish and touristic routes and, on the other hand, it brings an important financial gain, which ensures a great material support to maintain, preserve, rehabilitate, and enhance the Jewish heritage. This fact is proved by the extensive urban area rehabilitation processes conducted, continuously, since the late 1990s. Tourists come and go, as they like, but through them, this "vicious circle" of the development of cultural tourism closes, following, encouraging, and sustaining *an artificially created system*.

In 1994, the British newspaper *The Guardian* called this phenomenon "Schindler's tourism", highlighting both the negative aspect, in relation to authentic culture (i.e. many tourists, because of confusion, seek to identify the filming locations, instead of to discover the true charm of the historic city; in fact, this is and, in a way, has to be the price paid by history to save its pride – "when it comes to attracting the crowds, six centuries of history count as little compared to a couple of hours of screen time") and the positive one, which popularizes Krakow (by "free" advertising, literally and figuratively!), as an important Jewish centre (for life, culture, religion), despite of the contemporary community's reduced number of members. [9, pp. 55-56; 10]

Accordingly, Krakow becomes the perfect example of *Jewish tourism, Jewish culture,* and *Jewish life "without" Jews* (as it will be discussed further on). The spectacular success of the annual *Festival of Jewish Culture* and the high number of tourists (mostly non-Jews) reinforce this assertion. For the locals or for those who are interested, Krakow is now littered with themed museums and galleries or "Jewish" institutions such as the Jewish Community of Krakow (the association of the religious congregation), the Jewish Community Centre of Krakow, and the Youth Cultural Centre, which organize conferences, symposia, exhibitions, educational and cultural programs, free guided tours of Krakow, dance and art classes, creative competitions in various fields, and other activities for initiation into Jewish culture and traditions, stimulating and developing the creativity of community members of all ages, and, at the same time, the interest in Jewish culture, for the non-Jews.

For the direct interests of the Jewish community (but also for the general public), the most important is the Jewish Community Centre of Krakow (*Centrum Społeczności Żydowskiej w Krakowie*) [11], inaugurated in 2008, with the support of HRH the Prince of Wales (Fig. 11). It is a complex building type housed in a modern building, which assures the proper continuity of Jewish life, being suitable for the specific needs of the contemporary society and also a good example of *enhancing Jewish heritage through new constructions*.

Figure 11. The premises of the new Jewish Community Centre of Krakow (*Centrum Społeczności Żydowskiej w Krakowie*), a modern, multifunctional building dedicated to the social, cultural, and educational needs of the local Jewish community.

In Krakow, one might remark the absence of traffic restrictions in the "Jewish" area and of the excessive security measures, too, which, in other parts of Europe, are most present and disturbing. This confirms what Jonathan Ornstein, the director of the Community Centre, said, in an interview, when talking about Krakow as "a safe place": "I walk on the streets of Krakow every day and I wish for Jews in Europe to feel as safe as here. It's getting harder to be Jewish all around. In Poland it's getting more and more easier." [12]. In other words, in nowadays Krakow, Jews feel at home, and thus, although, practically, they are not a numerous community, by the force of their "absence", the Jewish "presence" becomes all the more meaningful and overwhelming.

3. Jewish Cultural Tourism. Between "Explanation" and "Solution"

The phenomenon of "Jewishness without Jews", defined by Ruth Ellen Gruber and reported in her book *Virtually Jewish: Reinventing Jewish Culture in Europe* [13] is a metaphor of *presence by absence* describing the traditional European space where the Jewish population used to be numerous, but which is nowadays inhabited, mostly, by non-Jews. It is *the space* where, for some decades, the Jewish tradition was interrupted *de jure,* but has survived *de facto* and stands as *a main link between past, present, and future*.

In this context, cultural tourism is, to a great extent, both an "explanation" and a "solution". Initiated in Europe, in the 19th century, cultural tourism has become, in the last couple of decades, a real tradition for the Jewish world and its values. Many people are fascinated with Jewish heritage and the attention focuses especially on architecture, applied arts, and funerary art. Countries of Central and Eastern Europe are favourite destinations. This "phenomenon" has generalized the occurrence of numerous art albums, various travel guides, travel agencies or websites dedicated to promoting European Jewish heritage. The former Jewish quarters that have now become famous, with their synagogues and cemeteries, with their narrow streets and picturesque markets, oozing history, are altogether reminiscent of a colourful typical atmosphere, reflecting unique aspects of Jewish life through their cafés, restaurants, and pubs, all with retro furnishings, kosher shops, themed art galleries, and museums. All of them have recently entered the category of "must see" (becoming real touristic landmarks) and former ghettos and extermination camps have developed as places of touristic pilgrimage.

Cultural tourism is encouraged in countries like Germany, Austria, Poland, the Czech Republic, Romania, Italy, Bulgaria, Ukraine, and the Baltic States, even generating a real *trend*, in terms of touristic marketing. In this way, in many cases, the monuments, places, and sights, related to Jewish culture or history, receive the role of a real *cultural brand* (sometimes with the risk of creating, through an excessive advertising management, logos, products, and services that promote even *non-*

value). In recent years, *themed festivals* have developed, promoted by events such as performances, happenings, workshops, concerts, exhibitions or conferences, intended to draw attention, more intensely, to Jewish heritage. There are dozens of museums dedicated to Holocaust and to Jewish memory, and, lately, it has become fashionable to restore / rehabilitate / reconvert synagogues and open them to public, generally for artistic, educational, and cultural purposes, but sometimes, even though it is rarely happening, commercial or residential functions are envisaged, too.

Following this idea, Jonathan Webber presents in detail *the issue of this specialized tourism*, in the era of consumerism, when different signs and symbols, meanings and explanations, values and stereotypes overlap themselves continuously. "For example in the heritage tours [...], the nothingness of destroyed cemeteries, or the silences of market squares in the shtetls once heavily populated with Jews: all these places pass before the visitor in a tangled web of experience that does not have to be disentangled in order to be authentic." [14, p. 326]

Webber demonstrates, using statistical studies on Poland, Sweden, Italy and Belgium, how insignificant the density of Jewish population is, compared to the multitude of cultural events with Jewish specific. In these four countries, with such distinctive geography and historical development, more than 450 cultural events dedicated to Jewish culture were recorded in a 12-month period. This would mean, on average, an event for 225 Jews, showing that there is no correlation [and it is neither necessary such a correlation!] between the percentage of Jews and the amount of "cultural production" of a country. Successful festivals, such as the one in Krakow, which has already become a tradition, take place increasingly more often and more enthusiastic, even in smaller towns, and frequently at the initiative and with the substantial contribution of non-Jews [14, pp. 331-332]. This happens also because non-Jews represent a large percentage of the consumers of Jewish culture: "One might have thought that Jewish cultural events would require a critical mass of Jews, though what is clear [...] is that a very large percentage of the consumers are non-Jews." [14, p. 331] An explanation would be that the great Jewish inheritance, represents if not a glorious past, then at least a past with certain achievements that unite the non-Jews and the Jews, as creators of European civilization: "Jewish culture combines traditional forms together with outside influences and – also most importantly – a sense of occasion, an event for the cultured person." [14, p. 325]

Furthermore, in 2001, the Festival of Jewish Culture in Krakow was the biggest and most important event of the year. Thus, for one week, Krakow became the city of Jewish cultural events: exhibitions, theatre performances, klezmer music concerts, liturgical concerts, conferences, Yiddish language courses, Yiddish film screenings, various workshops, and organized guided tours of Jewish heritage, etc. All these happened with the support of local and national authorities, and local sponsors. In his opening speech, the President of Poland pointed out that this Festival of Jewish Culture "has staked a lasting place for itself in the cultural tradition of the city", demonstrating that, through itself, Jewish culture "continues to develop... [and] offers inspiration to growing numbers of new artists, not all of whom are Jewish. *This is an outstanding sign of our times*" (our italics) [14, p. 332].

Thus, *an artificially created touristic system* is often the result of the projection of various types of human interests (depending on the country and social or ethnic group, on professional training, education or personal experience, etc.), concentrated on the heritage of a particular place. They generate focal points of touristic interest, lists with top-rated tourist attractions and most popular tourist destinations (top tourist rankings), contributing to increasing the interest on some sights – which actually is, economically speaking, extremely positive. However, at the same time, and for the same financial reasons, the most popular locations are also the most exploited and, sometimes, this situation creates confusion among most of the amateur tourists (uninitiated tourists) or a deep frustration for the connoisseurs (initiated tourists). This "exploitation" of historic sites and cultural objectives of major interest, only for economic purposes, related to material benefits and severely

damaging the genuine and pure culture, can degenerate, developing negative consequences for common tourists. In fact, it might be the source for creating serious perceptual defects, establishing chaotic associations, thus decreasing the interest for precise information or rigorous sources, generating cultural inconsistency and errors of judgment. The direct consequences are inevitable: arousing of curiosity and cultural needs fulfilment through issues that are rather profane, simple and affordable, sometimes even from the sphere of kitsch, imitation, and simulation, to the detriment of the genuine, original, complex, and profound aspects. Should we pay "the price of oblivion" and close our eyes only for the sake of profit? The hyper-development of "Jewish cultural tourism" in the Kazimierz neighbourhood of Krakow is, to a certain degree, such an example.

The other aspect of such a touristic system is connected to the "cultural" (and often implicit) "links" established through the well-known "European Jewish routes" [15, 16]. Many European countries offer interesting programs and travel itineraries following the *internal* "Jewish routes", which are also connected to *the international ones*, attracting tourists either through the Internet or through free promotional materials (Jewish-themed travel advertising, specialized brochures, maps, leaflets, and flyers), distributed at the terrestrial / aerial access points in those countries (train stations, airports, bus terminals, etc.) or through tourist information centres, souvenir shops, hotels, embassies, etc. Thus, every part of the "Jewish heritage", whether of artistic interest or of culinary delight, is on the list of "must see" or "should not be missed" (e.g. the Czech Republic, Poland, Hungary). Hence, even *kosher travelling* has developed (e.g. Prague [17]).

Either in Prague, Cracow, Łódź, Budapest, Oradea or Bucharest, the "European Jewish routes" open the way to a journey in a world that evokes the once thriving life of the European Jewish communities, or on the contrary, the drama caused by the Holocaust (museums, memorials, testimonials, research and investigation institutes, kosher restaurants or cafés, kosher hotels, souvenir shops, guided tours of the former ghettos, Jewish quarters or shtetls, cemeteries, synagogues, sites of torments and massacres, concentration and extermination camps).

The tourist industry has annexed the cultural domain. The development of communication technologies and the Internet allow almost without limits, the circulation of information, images, recordings, videos, etc. Actually, this contributes to a radical change of the relationship between tourists and culture (touristic sights, major attractions, memorial sites, various institutions, accommodation and catering facilities, etc). The rich existing (preserved) Jewish heritage, the growth of leisure time, the airline transport comfort and accessibility, the variety of holyday offers adapted to the means of various social groups, and, recently, the development of strong local communities require new investments, appropriate to the contemporary needs of society, but also to those specific to Jewish communities. From the architectural point of view, these are acquired through *modern building types* (such as community centres and cultural centres), associated with traditional functions and facilities, housed *in old buildings* (which may be, thus, subject to *rehabilitation, restoration or functional reconversion*) or *in new ensembles* (i.e. *enhancing heritage through new constructions*, which is the subject of another study, to be prospected further, in the light of this research).

Acknowledgements

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The Role of Green Spaces in High Density Cities

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(Accepted 15 December 2014)

Abstract

In our days urban sprawl and new urban development increased the number of buildings and population for specific areas within the city limits creating new high density areas. The growth of build areas emphasized the Urban Heat Island *phenomenon (UHI). The main cause of this phenomenon is the replacement of green spaces with buildings and pathways that accumulate through materials solar heat. Lack of consistent vegetation that works as a shield, prevents natural cooling for the surrounding air. Another problem which has a consistent role to the UHI is the lack of moisture caused by rigid surfaces that do not absorb rain water, redirecting it quickly to underground sewer networks. Finally, car pollution and energy consumption of air conditioning units, contribute to the pollution and the greenhouse effect, which also aggravates the UHI effect and favors the smog accumulation, threatening its users health. Green areas are considered the most useful solution for all the problems listed above. The amazing effect of vegetation can reduce the temperature in urban areas raising in the same time the quality of life, making public space more attractive. Based on the problems already mentioned and also as a demand from users urban design must combine high density building with the appropriate amount of green surfaces. This article aims to argue the need of green spaces within the city's limits as it tries to expose possible directions for green area insertions in order to control the UHI effect.*

Rezumat

În zilele noastre, noile dezvoltări urbane au crescut numărul de clădiri şi populaţie pentru zone specifice în interiorul limitelor oraşelor, creând zone noi cu densitate ridicată. Dezvoltarea zonelor construite au accentuat fenomenul de Insulă de Căldură Urbană *(Urban Heat Island - UHI). Înlocuirea spaţiilor verzi cu clădiri sau căi de circulaţie, care acumulează căldură prin masivitatea termică a materialelor de construcţie, reprezintă principala cauză a acestui fenomen. Lipsa zonelor de vegetaţie, consistente, care acţionează ca un scut, împiedică răcirea naturală a aerului. O altă problemă, care are un rol important în UHI, este reprezentată de lipsa de umiditate, cauzată de suprafeţele rigide, care nu absorb apa din ploaie, redirecţionând-o rapid către reţelele de canalizare subterane. În cele din urmă, noxele şi consumul de energie pentru unităţile de aer condiţionat contribuie la poluare şi la efectul de seră, care agravează, de asemenea, efectul UHI şi favorizează acumularea de smog, ameninţând sănătatea oamenilor. Zonele verzi sunt considerate a*

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fi soluţia cea mai utilă pentru toate problemele enumerate anterior. Efectul uimitor al vegetaţiei poate reduce temperatura din mediul urban, în acelaşi timp, crescând calitatea vieţii şi făcând spaţiul public mai atractiv. Bazându-ne pe problemele anterior menţionate şi pe cerinţele utilizatorilor, designul urban trebuie să combine densitatea ridicată de clădiri cu cantitatea corespunzătoare de suprafeţe verzi. Acest articol îşi propune să argumenteze necesitatea spaţiilor verzi intravilane şi încearcă să releve direcţiile posibile de inserţie a zonelor verzi, în scopul de a controla efectul UHI.

Keywords: green area, park, green roof, vegetation, landscape architecture, UHI effect.

1. Introduction

The modern society has changed during time, and now we have a new, changed and evolved society with new aspirations and demands. This evolution process developed a series of problems which scientists say that we can solve by allowing more nature in our cities. Since December 2006, more than 50% of the world population lives in urban areas. The number of cities and megacities has continued to be on the rise. There are now more than 20 so-called megacities (cities with a population of more than 10 million), and more are being added to the list every day. More than 400 cities worldwide now have populations exceeding 1 million. Urbanization and higher-density living is an irreversible path of human development [1, 2].

2. Contemporary Urban Living

In our days, a few elements can distinguish themselves as being city growth generators. Thanks to them, a continuous and more accelerate growth is reflected in the city's development. All elements are sustained by a key component, represented by the economic growth, measured by specialists in GDP (Gross Domestic Product). Generally speaking higher GDP means more and better paid jobs for its users, which represents the main factor in migration towards urban areas. The amount of jobs available and the associated wages are key factors for urban living. Better jobs means higher quality standards for education, health and medical services and not least culture and social interactions. Access to those components attract population towards urban living**.** In the last century big cities have evolved around them in order to provide the best for its users. High density cities are the result of those components and this type of development has generated mutations in urban structure such as higher plot ratio, agglomeration, urban congestion, car traffic and more built surfaces. As an effect of those mutations, issues such as Urban Heat Island effect[3], low humidity within city limits, high car pollution, smog accumulation, noise pollution [4] or a higher energy consumption rate for cooling all interior spaces heated due to UHI effect [5], became problems that need solving for many of the big cities worldwide.

On the other hand some parts were left out from the recipe and now the society wants them back. In addition to that some new concepts upgraded the functional aspect of those left out parts. If a few decades ago parks were used as a recreational space, in our days they are seen also as pedestrian or cyclist route connecting different points of interest in the city. Also, since a few decades ago, parks received a new function, one that attracts people trough performing arts [6]. The aspect of local identity and aesthetic of the green are new concepts present in our days. All of the above are seen by contemporary society as new step towards high quality living [7].

3. Green areas as a solution

We can use green areas as a solution for all issues already mentioned. The plants are well known for cooling the surrounding air. Trees are able to absorb between 60-90% of the incoming solar radiation trough evapotranspiration and latent heat effects [7], [8]. Their capability to transform carbon dioxide into oxygen is also a useful feature. They can also be used as a protective shield for building facades against solar radiation, preventing heat storage in built surfaces [9]. Unlike rigid paved surfaces that guide rainwater to sewage systems, earth stores water and evaporates it, generating air humidity during hot days [10].

The advantages, mentioned above, lower the Urban Heat Island Effect, preventing smog accumulations [7] and last, but not least, green areas offer mental and physical health benefits [11]. In his studies, Yu Chen analyzed green areas in urban environment, developing a concept which helps us to visualize the role of such spaces regarding the Urban Heat Island Effect. In his opinion, the plants should be seen as mediator between climate and built environment, meaning that lower green area insertions in urban areas allow higher UHI effect (Figure 1a). Introducing more green areas between build surfaces will lower the UHI effect also will raise the quality of life and health for its users (Figure 1b).
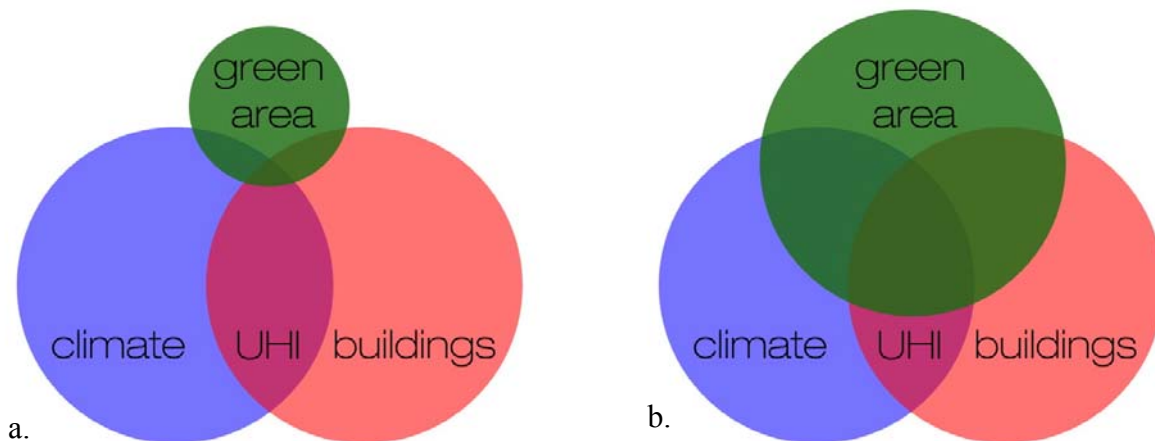

Figure 1. Drawing after Yu Chen's principle [12]
a. lower green area insertions in urban areas – higher UHI effect ;
b. more green area insertions in urban areas – lower UHI effect.

A few ways are used to insert and develop new green areas in the cities:

Urban Parks
Every single tree is relevant to the climate but a group of trees is better (Figure 2a, b). Parks come in different shapes, sizes and configurations. The type of use is essential in terms of design. Each type its defined by its location, functions and users. All area parks, local parks or neighborhood gardens can work as open parks or enclosed parks. The main issues that can occur are related to difficult security options available for this kind of urban areas, due to considerable size and topography of the development [13]. Crime rate and vandalism can be also considered problematic aspects along with litter, unclean washrooms or broken facilities.

Green pathways and cycling routes
Along topographic landmarks or natural barriers, a new typology has evolved. It's similarities to

urban park typology are obvious, but the main difference has its origins in the form. Usually developed as a green ribbon the green pathways and cycling routes establish connections between multiple points of interest found within city's limits (Figure 2c). This typology can include facilities such as resting areas, washrooms or belvedere points but they are not a necessary feature [14]. Only low and high vegetation are recommended in order to avoid creating areas with low visibility, that can decrease the level of safety. The usage must be free of charge, accessible to its users and able to assure security at any time, in order to be a viable alternative to common routes. Issues such as vandalism, litter, unclean washrooms or broken facilities can deteriorate this type of landscape.

Figure 2. a. b. Central Park, New York – photo by author,
c. New York High Line – photo by Iwan Bann -
Source: http://www.nycgovparks.org/parks/the-high-line/photos

Landscape design within the vicinity of buildings
Another way to insert vegetation in an existing city is by using the vicinity of buildings for landscape architecture. The possibilities for such a development are almost infinite as long as it serves its users. Few rules can be set by local authority in order to achieve a visual unity for the neighborhood, but this type of land use is also seen as a local identity component. Even if it works as a playground, landscape architecture or urban farming, this solution is addressed mainly to users of the building near it. It can be public or private, with or without enclosures, and include all types of vegetation. Degradation due to poor maintenance is seen as a main issue, but also vandalism and litter can damage such spaces.

Road trees
Road trees first appear as a natural shading system for pedestrian, in time, their qualities transform this typology in efficient way to cool the surrounding air and protect the buildings nearby from phonic pollution, dust and car emissions (Figure 3a). Vandalism, litter or poor maintenance can be problems to this typology.

Green facades
A few years ago the green façade became a popular way to cover a building. Two systems are available for this typology, one based on climbing plants, rooted in soil containers and a new technology based on vertical soil or hydroponic system to root the plants. Both green wall (Figure 3c) and living wall (Figure 3b) typologies are debatable as a solution due to high maintenance needs, health issues or high risk of insect infestation that can occur. The efficiency against Urban Heat Island effect is obvious, but the initial costs and the energy used for maintenance can raise questions about their efficiency [15].

Rooftop gardens

A solution rediscovered in the last period due to technological advances in waterproofing and sealing materials is the rooftop garden. Based on the desired landscape design and the approval stage there are three types of rooftop gardens. The extended green roof is used on little load bearing capacity roofs with a limited range of options for plants due to low mineral layer depth. Semi-intensive green roof has a deeper mineral layer and can support low and medium vegetation offering more design options. In this case, more maintenance is required. Intensive green roof has the deepest mineral layer and must be conceived in the building design stage. All types of vegetation can be used, but this system generates extra costs for building structure and waterproofing solutions [16]. The debates regarding rooftop gardens are basically focused on the initial high costs for drainage layers, special waterproofing and structure. Main issues that can occur with this typology are degradation due to poor maintenance and the increased risk of insect infestation.

Figure 4: a. Kingsway, London
Source: http://www.buildingconservation.com/articles/street-trees/street-trees.htm
b. living wall, Time Warner Center W58th St entrance, New York – photo by author
c. green wall, South Branch Chicago River, Chicago – photo by author

Figure 3: The Rockefeller Center Rooftop garden – photo by vipnyc
Source: http://www.flickr.com/photos/vipnyc/1510233074/

In the last decade, a global awareness of lacking green areas has appeared. EU has imposed a need

of 2.4 square meters per capita and cities around the world took a step forward, towards car-free cities and complex green area network within their limits. New satellite cities such as Masdar City for Abu Dhabi or New Songdo City for Seoul are planned cities without car traffic, where 40% of the land is intended for green space [17]. Also City of Hamburg has announced a plan to create and link over 70 km of new and existing "car free" parks and pathways within the next 15-20 years [18]. Cities like San Francisco, Oklahoma City, Portland, Milwaukee, Seattle, Dallas, Boston, Rio de Janeiro, Madrid, Maastricht and Seoul chose to replace urban highways or unused urban railways with parks or green pathways [19].

The green façade or different types of green areas systems are concepts more present in future skyscraper design. According to Council of Tall Buildings and Urban Habitat (the organization that monitors everything that involves tall building and high density development) over 30 skyscraper projects which have complex green area systems in their design are approved for construction worldwide.

4. Conclusions

The idea of green areas within the city, as an essential component, in order to increase urban lifestyle and reduce effects of high density living is a new trend in urban development present in major cities across the word. Our role as urban planners, architects or landscape architects involved in the design or approval process is to acknowledge this issue and use as much green areas as possible. By doing this we get a healthy environment with less pollution and lower energy usage achieving high quality of life within beautiful urban spaces.

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The Four Urban Development Steps of the Ex Yugoslav Cities

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Abstract

After a morphological study, conducted on various cities of the size 80.000 to 2.000.000 inhabitants in the area of the former Yugoslavia, the ex Yugoslav cities appear to reveal four distinctive and readable urban development faces: they show four different structural entities in four periods: they were named the „core period", the „gründerzeit" period, the „socialist" period and the „turbourban" city development period. All of them can be seen as results of the city management streams and the power relationships throughout history and in the carefully constructed appearance of the »socialist urban planning« which established the „respect to the historical urban tradition" on one side and the „brave new development" on the other. The city structure comparison of the finally targeted five ex Yugoslav cities - Belgrade, Sarajevo, Split, Priština and Maribor - shows similarities that reveal the phenomena that is unique for all ex Yugoslav cities, be it in the socialist period or in the planning period of the last 20 years of urban management and planning. My paper for the occasion includes my latest research results of the city structure studies I am conducting during my dissertation preparation.

Rezumat

In urma unui studiu morfologic asupra diferitelor orase cu populatii intre 80.000 si 2.000.000 de locuitori, din zona fostei Iugoslavii, orasele ex-iugoslave par a prezenta patru fatete distincte si lizibile ale dezvoltarii urbane: acestea prezinta patru entitati structurale diferite, din patru perioade: perioada "nucleului", perioada „gründerzeit", perioada "socialista" si perioada "turbourbana". Toate acestea sunt vizibile ca rezultate ale curentelor in managementul urban si ca rezultate ale relatiilor de putere de-a lungul istoriei, precum si in aparenta atent construita a "urbanismului socialist" care a stabilit "respectul pentru traditia urbana istorica" pe de o parte, si "maretele dezvoltari noi" pe de alta parte. Comparatia structurilor urbane a cinci orase ex-iugoslave in final selectate - Belgrad, Sarajevo, Split, Priština si Maribor – prezinta similaritati ce reveleaza fenomene unice pentru toate orasele ex-iugoslave, fie in perioada socialista, fie in perioada ultimilor 20 de ani de management urban si urbanism. Prezenta lucrare include rezultatele cele mai recente ale propriilor studii privind structura orasului, realizate in cadrul cercetarii doctorale.

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1. The research frame

The comparison research was completed in 2013 and is based on a study of urban structure of more than fifty cities in central and eastern Europe with focus on former Yugoslav cities. According to the available aerial photograph digital data [1] cities of medium and large size (from approximately 100.000 to 2.000.000 inhabitants) were taken into consideration. The procedure included a detailed study of urban structure and urban fabric, research of the city urban development history and an observation of the entities and elements of the specific urban structures in comparison to the urban development facts. According to gathered data structural similarities in former Yugoslav cities were recognized and defined.

1.1 The quality of spatial data

The spatial data and aerial / satellite photographs are usable for the region since 2009 when all of the former Yugoslav territory and in general all Europe is covered in data that corresponds to a readably quality of at least 1:5000 scale. The scale is generally used in general and detailed urban planning and is suitable for various structural and studies of urban forms; data is easily and publicly accessible and the photographs depict enough actual state of the observed cities, i.e. the time gap between the photograph data and actual state of the city does not exceed three years.
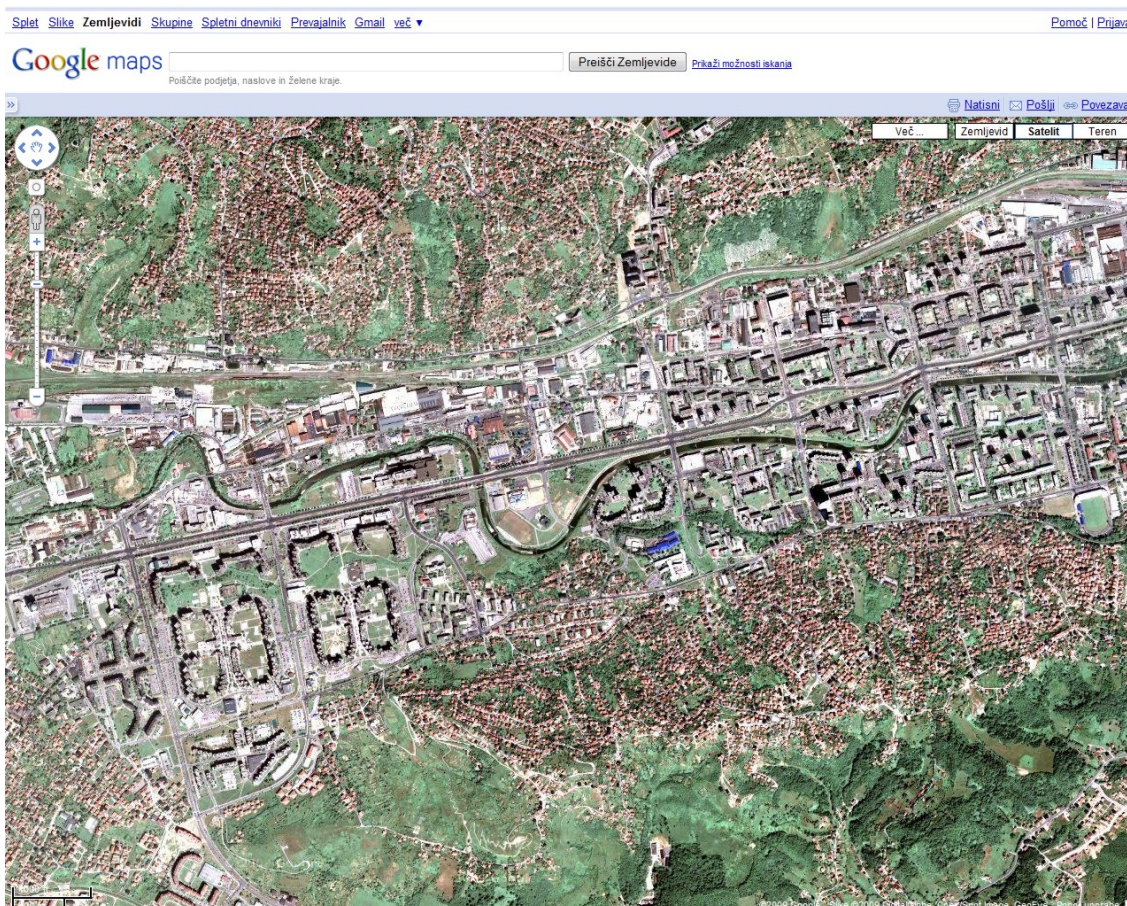

Figure 1. Sarajevo city viey, Google Maps, ©2014 Digital Globe.

1.2 The observation and comparison procedure

The chosen cities were thoroughly studied in all their urban territory, i.e. throughout the central

urban fabric and suburbias, including the green system of the city borders, the surrounding rivers or sea. The procedure included three view levels:

- City view: a structural study of the relationship built / non built environment,
- Urban structure view: a structural study of different city parts according to the readable and recognizable structural entities and
- Detailed view: detailed reading of the urban fabric up to the urban block size.

The procedure was captured in screenshot digital photographs that are representing the basic findings that were later used to compare the various city attributes. The research continued in second scan of detailed view study that was based on more thorough observation and additional check-up of the recognized phenomena.

1.3 The compared cities

In order to present the structural similarities a selection of fifteen former Yugoslav cities was made and five of them were chosen on the basis of a good ability to represent the common features in the best possible way: the cities chosen for the structural pattern quality were Belgrade, Sarajevo, Split, Priština and Maribor. In 2014 similar cities in the region (Subotica, Osijek, Pecs, Graz and Szeged) were thoroughly scanned to check and approve the "city fingerprint" analysis.

Belgrade was chosen as the big-scale city development of modernism and in the sense of importance as the "mother of ex-Yugoslav cities". According to many distinctive theoretic studies of a modernist functional city it is also a starting point for seeking for answers and defining the phenomena of an "ex Yugoslav city".
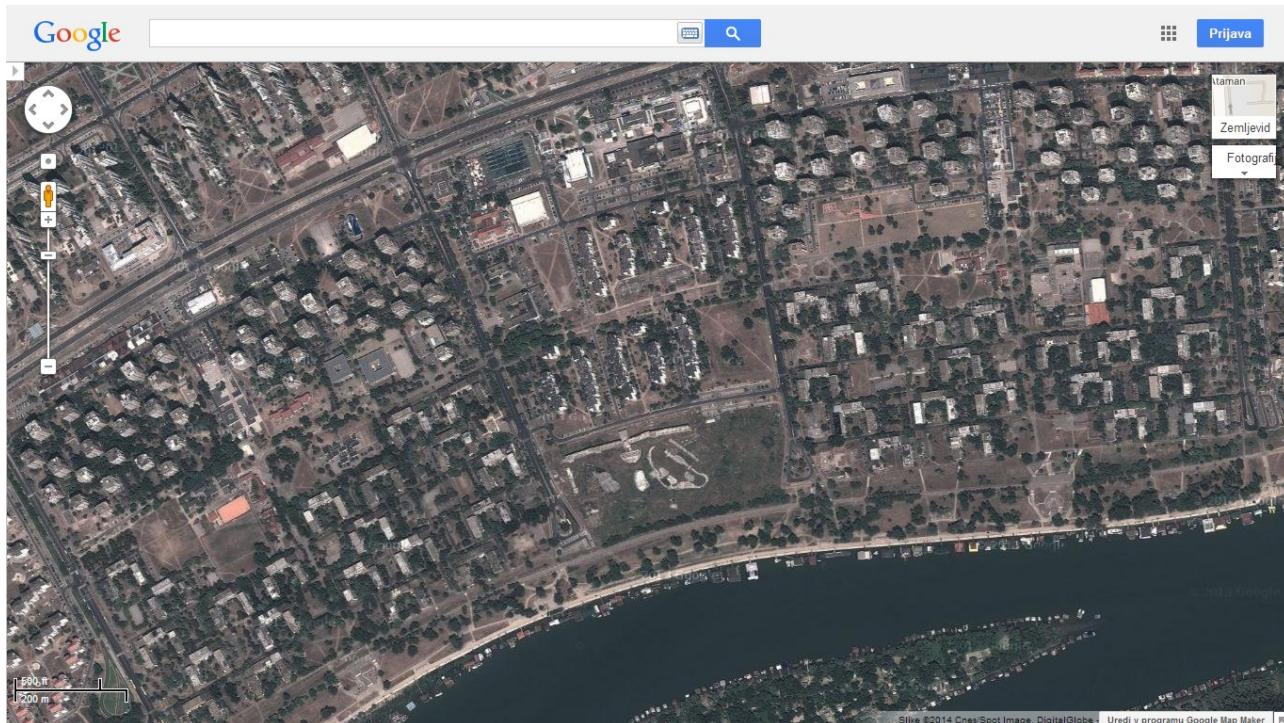

Figure 2. Belgrade, "Novi Beograd", south, Google Maps, ©2014 Cnes/Spot image, Digital Globe.

Sarajevo was chosen because of its clear linear readability: the urban development shows very clean development progress and all the true attributes of an ex Yugoslav approach to urban planning.

Split was chosen because of exquisite historical layers that were respected during all the urban development phases, and because of its very limited development possibilities due to the topographic circumstances and boundaries.

Priština was chosen due to its planned development and boost-up in the time of socialist modernism; the city was quickly overdeveloped and artificially equipped as a capital of an important region.

Maribor is one of the cities that belong to the central European urban tradition, yet shows all the development proceedings that are similar and unique for all the functional developments of former Yugoslavia.

During the research, all the cities were visited at least three times and the conclusions of the observations were discussed with several local urban planners. Subotica, Osijek, Pecs, Graz and Szeged were added to the research frame to compare the ex-Yugoslav and non – Yugoslav cities in a "twin city" relationship; the couples Graz / Maribor, Pecs / Osijek and Szeged / Subotica were checked by its city structure.

2. Positioning the ex Yugoslav city between the east and west Europe

The big question of the distinction of the "ex Yugoslav city" phenomena was opened at many discussions dealing with the modernist past of the former state urban development [2]. As the ex Yugoslav state differed from many European state forms, the urban planning and the resulting city structures show clear distinctions from the cities of western Europe on one hand and from the cities of eastern Europe on the other. Basically the western cities do not show as bold urban modernist development as the Yugoslav cities and the eastern cities show less respect the existing urban layers than the Yugoslav cities.

2.1 The attributes of the city development following the historic layers

The first distinctive attribute of a typical ex Yugoslav city is a clear respect of the historic urban fabric and the preservation of the readable historic layers. In the time when modernism and developments of the post 2nd world war "urbanisations" are a closed chapter, a clear principle is to be proven in all the observed cities: the highest level of respect for the historic urban structures is immanent to the cities of the same former Yugoslav tradition: city developments are performed in a way that at least affects the existing recognizable structure and in a way performed similar to the central European principles of city renewal and revitalisation. The principle of "not touching the historic entities" is extended to the functional city structures – they are mainly left out from the city developments in the period after 1990.

Following the historic layers means that the cities of former Yugoslavia have preserved an exquisite readability of the urban fabric; perhaps first performed in Sarajevo after 1878, the "culture of respecting the qualities of the old structures" and defining these qualities is a first root of the way to "urban structure preservation" which is immanent to almost all urban planning procedures in old city structure modifications.
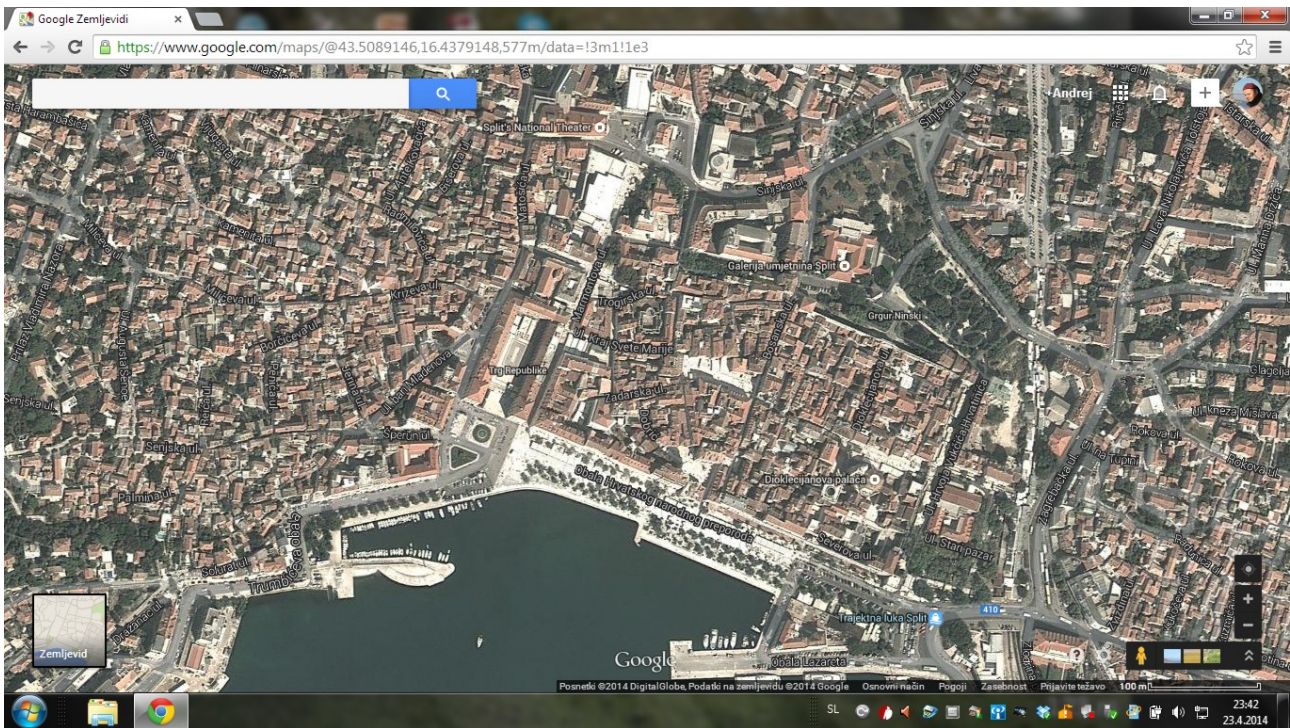
Figure 3. Split city core, Google Maps, ©2014 Digital Globe.

The proof for the unity of the "preservation of historic layers principle" lies in the fact that it does not matter what the historic layers are – be the ancient Turkish structure of the Tophane city part of Priština or the central European city core of Maribor, the remains of the roman Diocletian palace of Split or the Sarajevo's Baščaršija Turkish city business core with the mahala structures around it, be the Austrian "Gründerzeit" closed city blocks in Belgrade, Sarajevo or Maribor – the newer developments never interfere with the recognizable urban gestures, forms and structures of the past. In this way a sensible balance between old and new is achieved and it distinguishes the ex Yugoslav cities from the most cities in the eastern Europe neighbourhood. Perhaps it reveals the fact that the inhabitants of the former state never took any government or ideology for granted.

2.2 The pluralism of the two city building principles in the late 20th century

Apart from the glorious days of the urban modernist developments of the post 2nd world war urbanization it is impossible to overlook the two principles of city understanding. As Miloš R. Perović [3] confronts the two city principles, the "classical" city and the "functional" city in a harsh critical way, the reality shows that the city development and renewal have been done simultaneously and, from the time distance, without a real preference or harsh competition. Almost all the city developments in the former state oscilate from "functionalist" to "classical" right one after another or even simultaneously. The important fact is not the nature of development, but the understanding of both principles at the same time.

The society of ex Yugoslavia and the loose ideologic bonds of the architecture and urban planning have obviously tolerated, and have made both urban results possible: on one side the "brave new functionalist city" in the sense of the Athens Charter was built and right across the river, on the other side the old city core was renovated. Such a cohabitation of two procedures in urban planning was not possible in Bucuresti, Tirana or Skhodre and on the other hand large modernist urbanisations that created a competitive duality of two equally strong entities between the "new" and the "old" city were out of the question in Graz, Vienna or Basel.

Such pluralist city development is found in the majority of relevant former Yugoslav cities of the medium size.
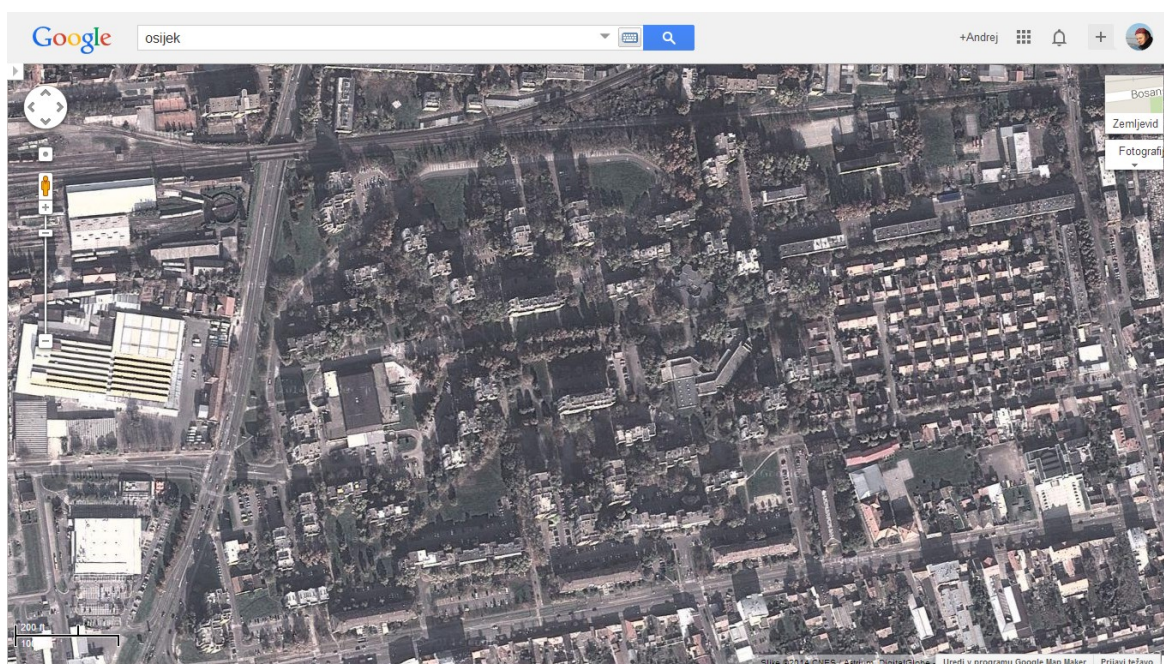
Figure 4. Osijek, "socialist" development, Google Maps, ©2014 CNES/Astrium, Digital Globe.

3. The four readable periods of the ex-Yugoslav city development

The research of the urban structure of the mentioned five cities shows that according to the principles notified as unique for the urban development in the former Yugoslavia there are four typical readable time and structure periods in the urban structure. [4]

3.1 The steps of urban development

After studying the urban structures of many cities it seems that the urban development does not happen in a linear way; it seems to be present in steps. The linear way would ask so much from the city government: a stable growth, wise city management, a history of independent power. These are not present all the time – city development just does not happen that way. More likely the city development happens in stair - like growth. The observed cities show three or four steps of it and this is yet to be proven.

Figure 5. Stair-like growth (sketch by the author).

The periods and modus of city expansion of ex Yugoslav cities can be outlined in the next four stages and types:

- The **core period** is the beginning of the city development. It does not matter if the background is initiated by the Romans (Split, Belgrade), Turkish reign (Sarajevo, Priština), southern German provincial border government (Maribor), the core is fully formed and developed at the end of the medieval age.

- The city development of the "**Gründerzeit**" – the emerging of the civil society and the reforms that triggered the building of the public city facilities form the "classical city", distinguished by three city elements: the urban block, the square and the city street. It is presented in the "dense" urban block form and the "garden" regulated suburban villa urban typology.
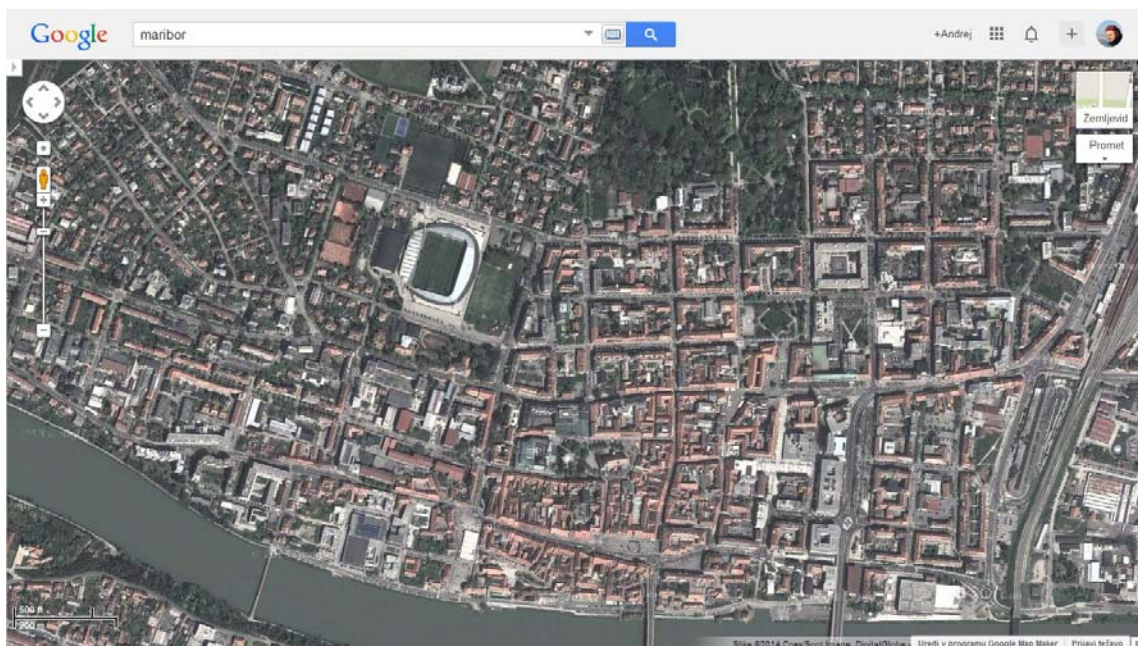

Figure 6. Maribor, core and "*gründerzeit*" structures, Google Maps, ©2014 CNES/Spot Image, Digital Globe.

- The functional city extension or the "**socialist city urbanization**" – almost all the ex Yugoslav cities have been extended in the time of the modernization to the large city parts, built by the rules of the Charter of Athens.

- The "under the carpet" city and the "**turbourban developments**" are the bastard children of the "official" urban planning and all the cities know them: although not recognized and hated by the urban planners the vaste entities of non-regulated or half-regulated, badly organized or congested city parts are a fact. On the other hand, they are vivid, livable, cheap to build, affordable and loved by the inhabitants.
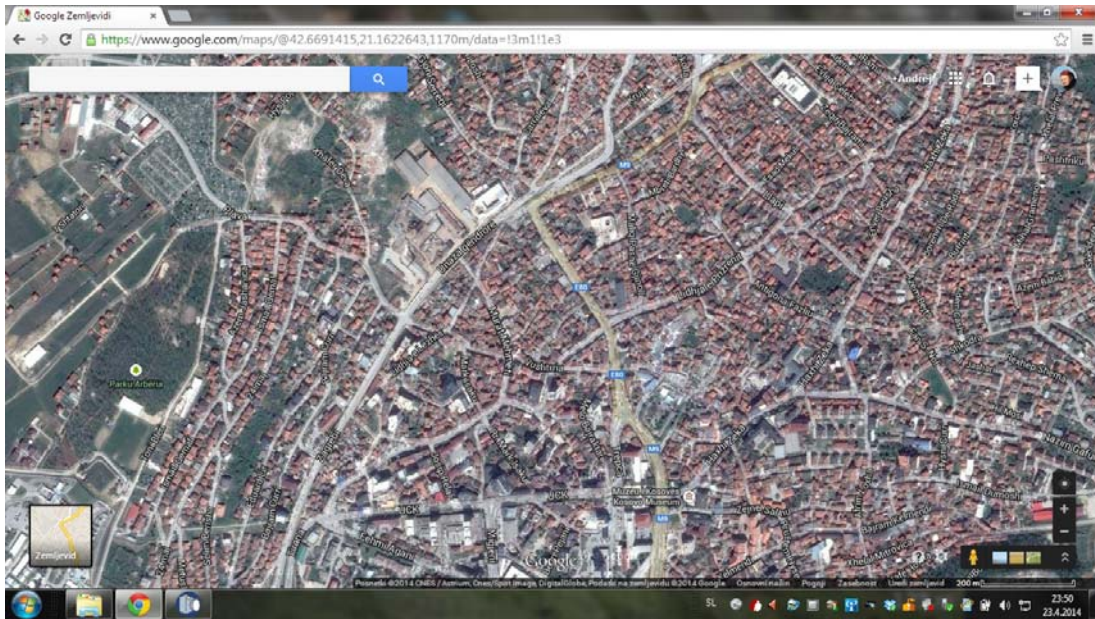
Figure 7. Priština, "turbourban" development, Google Maps, ©2014 CNES/Astrium, Cnes/Spot Image, Digital Globe.

3.2 The "city fingerprint"

As the city development happens in great steps, the four readable periods (1.urban core; 2.Gründerzeit; 3.Socialist; and 4.turbourban) can be explored, evaluated by the development range and success and captured in a simple graphic presentation.
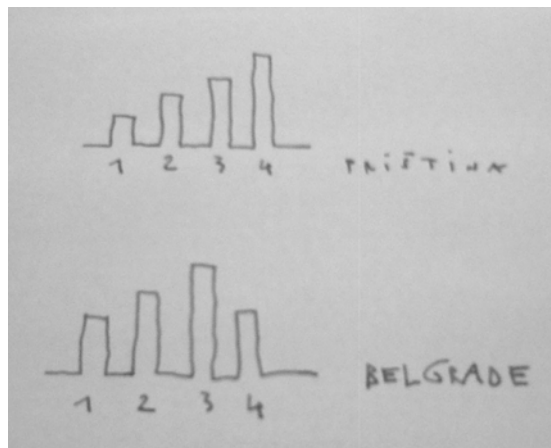

Figure 8. City fingerprints of Priština and Belgrade, (sketch by the author).

It becomes interesting when the city development periods are compared – the development procedure gives an unique „development fingerprint" to every city. This comparison can be caught in a graphic abstraction. On the x axis the periods are marked and on the y axis the "strength" or the "success" of the development period is shown.
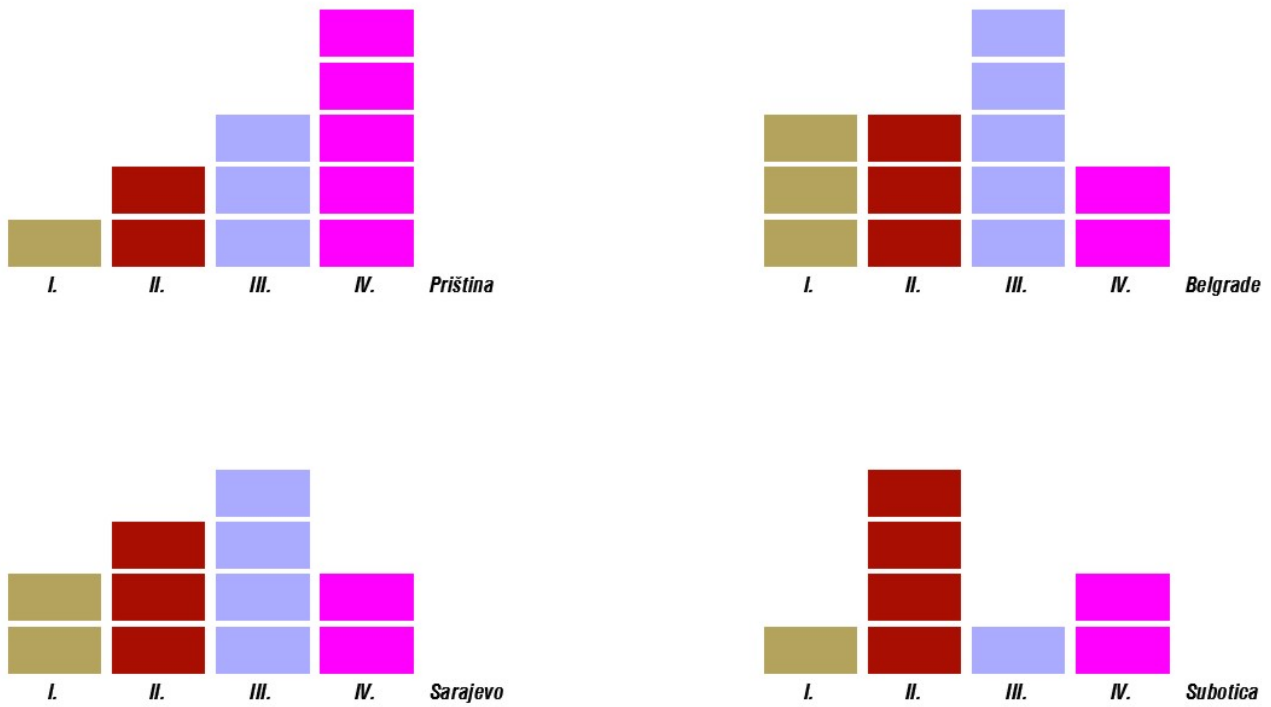
Figure 9. City fingerprints of Priština, Belgrade, Sarajevo and Subotica (graphics by the author).

4. Conclusions

The urban planning in the states that followed the deconstruction of Yugoslavia left a legacy of five decades which shows undoubted ideologic, aesthetic, functional and procedural similarities realized in common architectural and urban heritage. The new states and cities face almost identical problems. The largest of them is the one that caught the city governments without experience: cityes are reorganized, redesigned, upgraded and renovated, but in most cases less and less inhabited: the demography shows that almost no city extension is really justified since the population growth is poor and other needs for the city reorganization almost fulfilled and completed in the last two decades of so called transition.

The similarities do not mean unification, though. A simple graph showing the different time development periods of the cities and the strength of the city development period reveals simple unique development "city fingerprints". The most interesting result of this "fingerprinting process" is that when trying to compare the similar cities they really show their unique character.

The first task of my research – to explore and define the similarities of the ex-Yugoslav cities – meets the quite opposite conclusion – that the cities have similar development periods but at the same time they show unique fine characters through the strength of these periods.
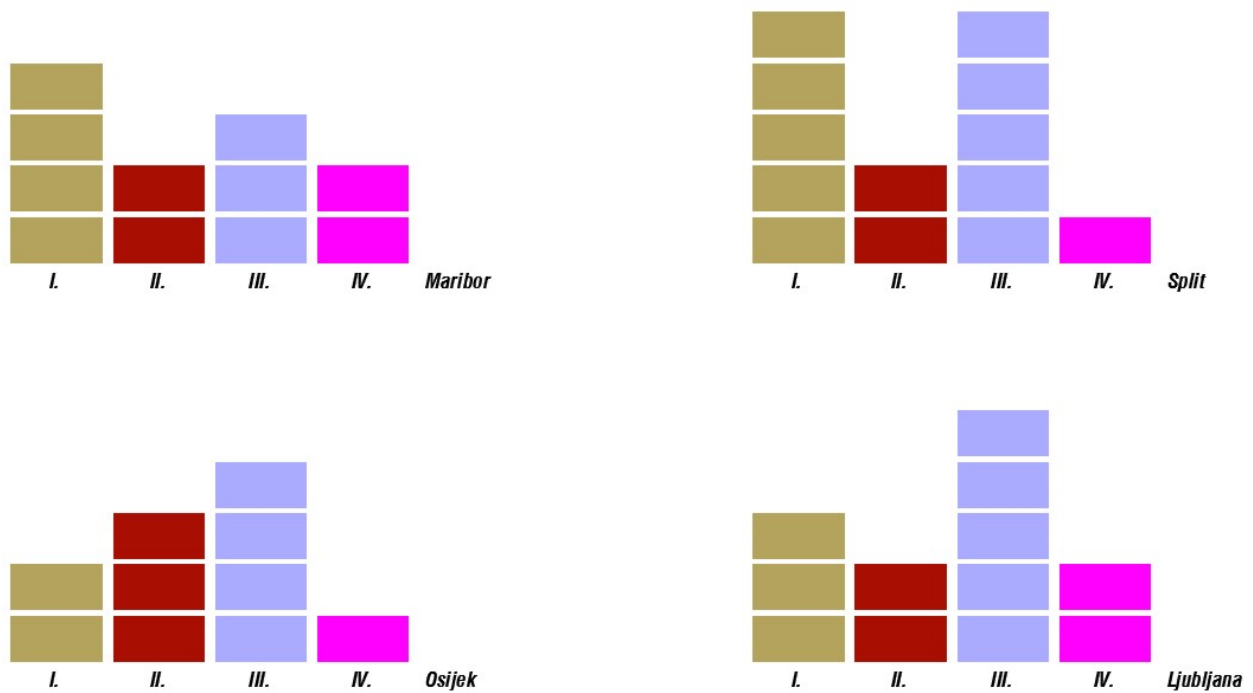
Figure 10. City fingerprints of Maribor, Split, Osijek and Ljubljana (graphics by the author).

6. References

[1] maps.google.com satellite photographs database.

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[3] Perović Miloš, R.: *Iskustva prošlosti.* Boegrad: Gradjevinska knjiga, 2008, p.24.

[4] Šmid, A.: Bye bye 20th century; similarities in the urban development of ex Yugoslav city, *International conference Architecture and Ideology,* ed. Mako Vladimir et al., Belgrade, 2012**,** p. 71 and digital proceedings.

Entre continuité et discontinuité, l'exemple du quartier de Kossodo à Ouagadougou

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Résumé

A partir de lectures du territoire, l'interprétation de la continuité et de la discontinuité appelle à des transformations dans notre manière d'investir l'espace. Ces transformations nous permettent d'orienter le regard sur les problématiques examinées à la grande échelle afin de renforcer notre réflexion sur le projet d'édifices. Dans le passage de l'analyse du territoire au projet d'architecture, des liens se tissent par réciprocité entre lectures et hypothèses pour transformer la ville. En tenant compte des spécificités du territoire qui contient la ville, notre imaginaire est sollicité par des renvois à plusieurs échelles pour aborder de nouvelles formes d'édifices répondant à des critères environnementaux. Les études développées dans le quartier de Kossodo à Ouagadougou, dont le programme consiste en des logements pour étudiants handicapés, prennent appui sur ces concepts lors de la «fabrication» du projet d'architecture.

Abstract

Drawing on territorial readings, the interpretation of continuity and discontinuity requires us to change the ways in which we approach space. These changes allow us to examine issues approached at the large-scale, in order to strengthen our reflection on the architectural project at the scale of the edifice. Passing from the territorial analysis to the architectural project, connections are formed by reciprocity between readings and hypothesis for transforming the city. Taking into account the specificities of the territory which contains the city, our creativity is challenged by references to the different scales, thus tackling new building forms that meet environmental criteria. The studies developed in the neighborhood of Kossodo in Ouagadougou, addressing the program of housing for disabled students, rely on these concepts while "fabricating" the architectural project.

Rezumat

Pornind de la lectura teritoriului, interpretarea continuităţii şi a discontinuităţii necesită transformări în modul nostru de abordare a spaţiului. Aceste transformări ne permit orientarea investigaţiei către problematici examintate la scară mare, în scopul consolidării felului în care abordăm proiectul la scara edificiului. În cadrul trecerii de la analiza teritoriului la proiectul de arhitectură, se ţes legături de reciprocitate între lecturile şi ipotezele care vizează transformarea oraşului. Ţinând cont de specificităţile teritoriului care conţine oraşul, imaginarul nostru e solicitat

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prin trimiterile la diverse scări să abordeze noi forme de edificii răspunzând unor criterii ecologice. Studiile dezvoltate asupra cartierului Kossodo din Ouagadougou, al căror program constă în locuințe pentru studenți cu disabilități, se bazează pe aceste concepte în scopul "fabricării" proiectului de arhitectură.

Keywords: territoire, ville, édifice, lecture, tentative, hypothèse, transformation, expérimentation.

1. Introduction

Depuis 2008, le Master « Aedification – Grands territoires – Villes » de l'Ecole Nationale Supérieure d'Architecture de Grenoble travaille sur le territoire du Burkina Faso. Une dernière étude au sein de ce Master propose deux hypothèses de projets de logements pour étudiants handicapés dans le quartier de Kossodo à Ouagadougou [1]. Grâce à ces expérimentations qui émanent d'une demande réelle de la part d'une association caritative [2], une réflexion devient possible pour aborder la fabrication du projet d'architecture à partir d'une lecture du territoire comme premier paramètre de la méthode. En introduisant le thème de la *continuité et la discontinuité dans les espaces de la ville*, un critère supplémentaire vient enrichir cette lecture pour fonder toute nouvelle hypothèse.

2. De la lecture aux hypothèses

La lecture comme principe d'analyse, en référence au célèbre *reading* [3] déployé par Giancarlo De Carlo, pose la question de comment interpréter les problématiques du territoire avant d'énoncer des *tentatives* [4]. Ces *tentatives* sont des essais telle une mise à l'épreuve d'un lieu pour devenir des hypothèses. Le principe qui sert de base pour remonter jusqu'à la source de toutes choses fait progresser nos recherches dans l'alternance entre lecture et tentatives. Et il ne peut y avoir de tentatives sans une lecture préliminaire, comme toute lecture perd son sens si nous n'avons pas déjà à l'esprit la volonté d'établir des hypothèses de projets. Par réciprocité, au moment où nous sommes guidés dans cette conduite, tout peut se mettre au pluriel pour renforcer les priorités qui s'inscrivent dans l'ordre du temps par différents niveaux de pensée. Lorsque le philosophe Bruno Queysanne [5] introduit la reconnaissance de la signification architecturale, il nous met en garde d'une interprétation trop littérale de la manière de lire l'espace. Pour comprendre le vaste monde des signes qui éclairent l'architecture, nous devons donc d'abord accepter qu'ils soient cachés. En apprenant à les extraire de leurs strates, nous initions ensuite leur interprétation. Par immersion dans l'étymologie grecque et latine, lire signifie « *cueillir, choisir, rassembler* » mais aussi « *parcourir un lieu, traverser la mer, faire des détours* ». Ainsi, nous restons partagés entre la mise en acte d'un rassemblement de ce qui est épars, de ce qui nous sollicite pour réveiller l'origine des formes prises dans leur unité et la notion de déplacement. Tel le voyageur infatigable qui arpente la terre, nous prenons de la distance depuis un départ à inventer (comme lieu du projet) pour effectuer tous les détours indispensables qui nous rendent complice du sensible. L'univers sensible devient source de la pensée qui anime le lecteur. Notre manière d'être va changer par un autre regard sur le monde. Ce nouvel accord partant d'un dehors s'associe au dedans de l'être pour participer à autant d'expériences de terrain que de décryptages de documents graphiques. Ils sont tous en attente d'une synthèse de notre part, cette synthèse participe de la valeur du projet en devenir. Dans cet état de concentration intense, l'architecte ne peut oublier les hommes qui habitent le territoire. « *C'est dans le territoire que l'humanité peut trouver des traces de son passé et des signes pour son futur, les indices de ses succès et de ses échecs, les causes de ses aspirations, tous les paramètres qui permettent de comprendre d'où elle vient et quel objectif elle peut se fixer pour l'avenir* » [6] nous livre De Carlo. Comprendre au présent le passé, c'est se tourner vers l'avenir. La pensée scrute le territoire pour faire surgir les traces du passé à interpréter dans l'avenir à partir de ses propres

ruptures. De façon discontinue, des fragments se répètent en substitution à la continuité.

3. La pensée du continu et du discontinu

Dans un article de Judith Revel [7] intitulé « *Michel Foucault : discontinuité de la pensée ou pensée du discontinu ?* », l'auteur nous projette dans les expérimentations de Michel Foucault et souligne que la seule continuité possible est la discontinuité comme limite nécessaire pour réaffirmer l'incessante mobilité comme processus continu de modification. Tout ceci pourrait nous suffire pour alimenter notre réflexion sur la lecture. Mais entre changement et absence de changement naît un processus dialectique a priori impossible à résoudre et dont la seule réponse serait la discontinuité. Grâce au changement, qui peut s'envisager par l'échelle à la fois spatiale et temporelle, l'identité du lieu est confirmée dans sa cohérence. Les deux modèles proposés par Foucault se déclinent entre une continuité engagée par l'absence de changement et le changement comme mouvement constant. Le changement continu et la continuité du mouvement nous permettent d'intégrer la notion d'inachevé dont les seuils restent à franchir par étapes et suivant des allers/retours continus, seul moyen pour aborder des expérimentations. Par des hypothèses de projets, l'inachevé, le suspendu, l'interrompu restent pourtant en manque d'unité dans un raisonnement classique, c'est-à-dire dans une pensée linéaire. Selon l'action d'obtenir un résultat, qui paraît néanmoins sans fin, la continuité est redéfinie en tant que discontinuité continue et l'unité prend alors appui sur de nouveaux principes en une différentiation infinie. Ce processus expérimental de l'unité permet de dénouer la pensée. La conscience se déplace pour porter l'invention d'une transformation sans perdre le contenu de la réflexion. Une réflexion en mouvement se reconstitue par l'intérieur pour ouvrir à des représentations. Une nouvelle distance est à prendre pour construire une pensée théorique fondée sur des hypothèses de projets d'architecture. Pour Vittorio Gregotti [8], « accumuler et ordonner des matériaux pour le projet d'architecture », c'est déjà alimenter une réflexion théorique. Et la théorie se mêle subtilement à l'histoire de l'architecture comme hypothèse d'ordonnancement. Les apparences et les structures du territoire construit renferment les marques du passé. Elles sont à décrypter. Dans leur interprétation, en démêlant les traces du visible laissées par le temps, le changement à opérer peut alors prendre forme. Pour désigner ce changement dont le premier contact est le sol, Gregotti emploie le mot « modification » en référence à la mesure et à la géométrie qui règle toute chose. Et il rajoute que le projet n'est jamais à considérer comme objet isolé. Sans qu'il nous le précise, nous comprenons toute l'importance de la relation à entretenir avec le contexte lié au sol. Tout comme en mettant le projet au pluriel, il se transforme en hypothèses, en expérimentations.

4. Hypothèses et expérimentations

Par les continuités et les discontinuités de l'espace envisagé, seules des expérimentations rendent la valeur donnée au lieu qui accueille ce qui va être édifié. A chaque étape de la pensée, l'imaginaire est sollicité dans un monde virtuel à partir du réel analysé. Le passage du réel au virtuel est complexe et appelle à se projeter. Le caractère dynamique de l'acte qui fabrique le projet d'architecture est autant intellectuel que manuel dans l'articulation de ces deux manières de faire. Le métier de l'architecte est en jeu. Projeter à partir du territoire, c'est aussi s'intéresser au climat, aux rythmes des saisons, mais aussi à la terre et sa nature, à l'eau tant apparente que souterraine, au végétal qui ne pousse que grâce à l'eau. Et sans oublier l'humain et ses activités dans une relation au construit déjà énoncé, toutes ces considérations liées à l'environnement appellent à des représentations qui rassemblent ou qui séparent les données analysées. Les documents à produire vont être multiples et le choix des échelles est déterminant. La méthode de lecture dans l'interprétation des documents graphiques interrogés permet de faire de nouvelles découvertes par

les problèmes posés par les faits, puis de les saisir. Ces lectures échafaudent des hypothèses à décanter par l'esprit. La ville tissée de pleins et de vides est décomposée au fil à fil de trames multiples. Les réseaux enchevêtrés sont à déchiffrer en partant du plus simple au plus complexe pour discerner des concordances, des variations concomitantes dont les causes, toujours cachées, se superposent. Paradoxalement, l'imagination est à l'œuvre par l'exigence d'un discernement avant d'être une expérience pour définir des hypothèses qui appartiennent au monde sensible.

Dans un acte rationnel, les données sont dépassées pour enrichir les suppositions. Les hypothèses qui sont sous la thèse fondent les propositions supposées. Elles participent d'une interprétation anticipée et rationnelle de la ville qui tient compte de l'imprévu pour résoudre plusieurs niveaux de contradictions. En vérifiant les hypothèses, la théorie du projet se soumet à l'épreuve de l'expérience. La pensée théorique est guidée. Elle observe avec précision les hypothèses, elle provoque et dirige l'expérience dans le but d'un contrôle raisonnable et permanent. Par déduction, les hypothèses sont examinées par le biais d'une médiation. Par étapes successives, cette médiation a pour conséquences la preuve provisoire de l'expérience. Les outils intellectuels remplissent leur rôle par l'idée anticipée et confirme l'expérience en la jugeant tout en modifiant l'idée. Pour résoudre ce qui s'oppose entre théorie et expérience, une pensée dialectique suggère de revenir à la théorie en révisant les faits et les idées dans leur contexte. En coïncidence, naissent de nouvelles questions, de nouvelles réponses. L'expérience n'est jamais indépendante de l'action par l'esprit pour que les actes rationnels s'inscrivent dans un système qui intègre le système théorique en chassant les habitudes. Mais l'acte reste provisoire pour s'unir aux causes. Il s'élargit par une observation toujours plus fine, plus subtile du champ intellectuel en transformation. La ville en devenir est toujours inachevée dans l'exigence d'un idéal qui se poursuit comme une ouverture sur le réel pour entretenir un processus de la pensée en acte à partir du territoire.

Le redessin d'une carte géographique ou celui du plan d'une ville permet de noter ce que l'on regarde véritablement. Chaque échelle contient un degré de résolution à définir. La situation du Burkina Faso par rapport à l'Afrique ne peut être montrée sur la même planche que sa capitale en relation au pays. L'organisation physique de Ouagadougou appelle également à être désignée sur des feuilles dissociées. La disposition des grilles qui fait la ville depuis son origine coloniale n'est pas forcément montrée sur le même document que celui qui indique l'étendue de sa ceinture verte. Tout comme la réserve d'eau constituée par trois barrages au cœur de la ville peut faire l'objet d'un dessin à part. Et pourtant toutes ces productions dessinées fonctionnent ensemble. L'esprit ne peut les séparer car elles participent toutes en tant qu'outils de pensée à ordonner ce qui va faire le projet.

Projeter c'est prévoir. C'est voir à l'avance le continu et le discontinu pour entretenir des rencontres inattendues par des propositions toujours plus fortes. Ces propositions à la valeur coordinatrice dans le littéral de représentations dessinées sont fécondes. Elles font surgir des projets au sens heuristique par l'attention portée aux futurs édifices comme hypothèses. Leurs limites constituent de nouveaux espaces de vie. Une grille, qui structure puis qui s'estompe, impose une belle simplicité dans la mise en équation du lieu et du projet par un modèle aux concepts forgés par l'expérience d'un plan quadrillé a priori uniforme. Il s'agit d'une prise de mesure qui teste la proposition dont le dessein module le terrain de l'expérimentation. Les dimensions à l'épreuve qui déterminent la grille prennent le pas sur le maillage de l'existant vérifiable. Plusieurs orientations sont envisagées. Le résultat est à la source d'une mise en œuvre implacable qui change petit à petit d'état pour prendre racine dans le réel en une représentation graphique. Manipulée par l'architecte, cette représentation dessinée se confronte aux étages multiples de langages spécifiques. Il s'agit de traductions dans le double sens du mot logos qui signifie à la fois raison et discours. La raison et le discours utilisés sont en mouvement par une évolution dont les racines se situent le plus souvent dans ce qui est oublié. Les systèmes en référence, dans leur structure, renvoient au passé dans un présent qui appelle le futur. Codifiée dans sa substance, la représentation dessinée des futurs édifices proposés s'ouvre à des transformations liées à des propos à défendre. Ce sont des propos

dont l'évolution est permanente. A partir de la connaissance et de la raison, l'action produite par des choix départage et se projette sans dépendance a priori. En considérant ces représentations en tant que substance, il devient difficile de les identifier autrement que par une approche sensible. De se « tenir » et de « dessous » qui est la décomposition même du mot substance, apparaît pourtant une permanence qui résiste à toute transformation pour éprouver et renforcer la stabilité des propositions au-delà des apparences. Ainsi, en parfaite connaissance de cause, le stable par la pensée peut se modifier par des mises en acte de présences nouvelles. Les hypothèses de projets proposés pour Kossodo en sont l'exemple.

5. Le choix du quartier de Kossodo, une décision concertée

Durant toute l'évolution de l'étude proposée pour le quartier de Kossodo, une concertation avec l'association des élèves et étudiants handicapés du Burkina Faso a été menée tel un défi pour mieux appréhender comment chacun peut trouver sa place dans la société et dans l'espace de la cité. Avec des personnes valides et invalides, de fructueux échanges ont permis de guider une réflexion sur le logement, les lieux d'enseignement ou associatifs, l'accessibilité et la mobilité dans la ville. Les modèles et les normes importés du continent européen ont été examinés, discutés, décortiqués puis transformés pour répondre au plus juste de leur destination. Dans ce travail participatif, aller à la rencontre de ceux qui sont au cœur du problème est une démarche essentielle qui contribue à l'intelligence du processus de conception. Si apprendre à connaître les usagers permet de traduire leurs usages en terme de mesure pour transformer la vie à partir d'un idéal, ce n'est pas une simple récolte de données en amont. Il s'agit plutôt de mettre en place une communication interactive qui va suivre toutes les étapes du développement des hypothèses émises. Le choix du site a également été évoqué en commun avec l'association des étudiants. Il fallait trouver un lieu intermédiaire entre la cité universitaire de Zogona et Ouaga 2 afin de réduire les distances toujours si difficiles à parcourir. Le quartier de Kossodo concilie cette aptitude [9].

Situé au nord/est de la ville et en limite de la ceinture verte de Ouagadougou, il est traversé par la route N4 raccordant Koudougou à Dori (Fig. 1). Dans la continuité de cette ceinture végétale, une frange maraîchère peu exploitée et bordée d'un canal s'inscrit perpendiculairement à l'axe majeur en goudron. Les lieux sont donc séparés en deux entités distinctes. L'une appelle au développement d'un nouveau tissu, l'autre sollicite la consolidation d'un tissu existant comme alternative à sa suppression. Dans les deux cas le site de Kossodo est riche en perspectives. Les discontinuités de ce site dédoublé sont porteuses de changement, de transformation. Elles redéfinissent toute rupture, tout saut afin de toujours renouveler le regard posé sur les apparences. Ce qui est visible se pénètre dans l'essence même d'une étendue à l'échelle territoriale en une réponse à la ville et par des édifices destinés aux étudiants en situation de handicap.

Figure 1. La situation de Kossodo par rapport à la ville de Ouagadougou.

6. Deux hypothèses de projets pour Kossodo

Kossodo côté nord se compose d'une cité étudiante inachevée en fond de parcelle et de bâtiments désaffectés proche de la route. De part et d'autre de ces constructions, nous trouvons une zone industrielle et une briqueterie longeant le canal. Au centre de cet ensemble, l'aire à bâtir apparaît suffisamment vaste pour accueillir de nouveaux édifices. Une grille aux dimensions mesurées est empruntée à la ville comme première tentative pour structurer l'espace avant de se subdiviser en îlots. De nouvelles constructions se projettent sur un maillage pour une autre manière d'habiter. Ce maillage change de statut et s'urbanise dans le collectif des vides du site appartenant à la ville. L'idée de l'habitat se projette par plans différenciés (Fig. 2).
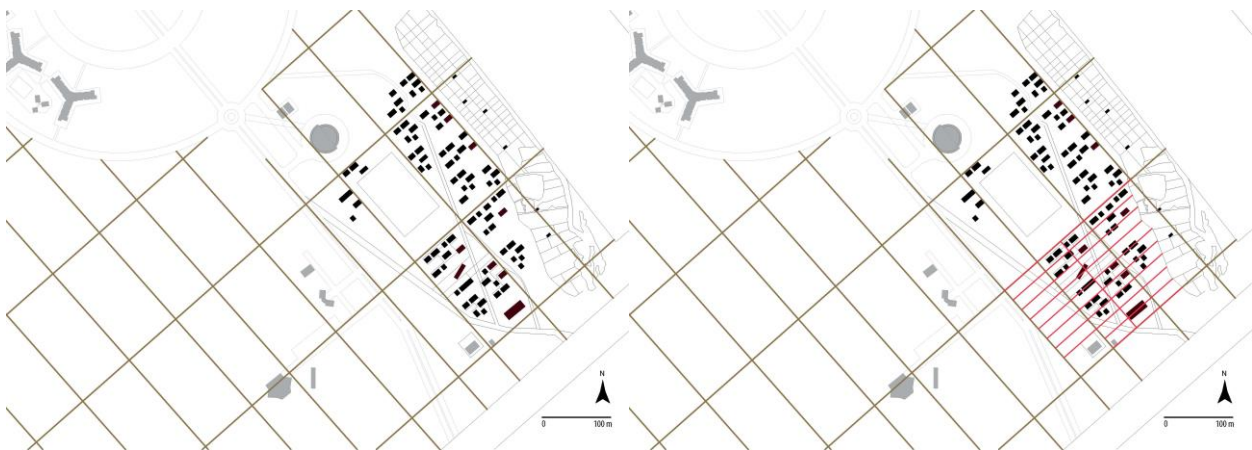

Figure 2. Concept de la grille et sa subdivision.

Ces plans répondent aux échelles allant de l'infiniment grand à l'infiniment petit dans l'application de la lecture des phénomènes extraits. Notre rapport aux phénomènes passe par l'idée pour définir un ordre dont la régularité exprime des relations hiérarchisées réordonnant l'esprit qui fonde la légalité de la pensée. L'entrée au site s'affirme et prend son départ au goudron par une voie

existante. Orientée à l'oblique, elle se ramifie à la maille en acceptant toute croissance. Une nouvelle organisation continuant la ville est posée. Mais le lieu reste inondable. Des socles à franchir à l'aide de rampes sont proposés pour élever chaque construction par rapport au sol. Ces surélévations s'étendent pour déambuler autour et entre les édifices. Le construit compte autant que le non construit. Pour les bâtiments neufs, les murs sont préconisés en brique de terre crue compressée pour leur qualité thermique et en raison de la proximité avec la briqueterie voisine. Les toitures aux dépassées généreuses sont dédoublées et inclinées (Fig. 3).
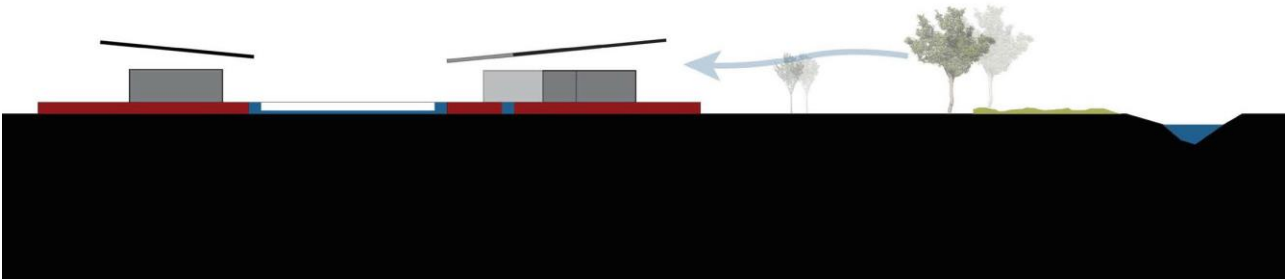

Figure 3. Coupe de principe pour les modules de logements.

L'espace entre les charpentes métalliques en fers à béton et les couvertures en tôles laisse passer l'air déjà rafraîchi par les arbres qui poussent entre les terres maraîchères le long du canal. Le vent provenant du nord/est contribue à changer la température ambiante. Quant à l'inclinaison des toits, elle permet de récupérer l'eau de pluie pour la stocker dans des bassins. Ce programme côté nord comprend des modules de logements partagés entre valides et invalides et des services nécessaires à la vie au quotidien. Pour les bâtiments réhabilités, l'un devient un centre social indispensable aux étudiants et l'autre une cyber-écurie pour se connecter au monde entier (Fig. 4 – Fig. 5).
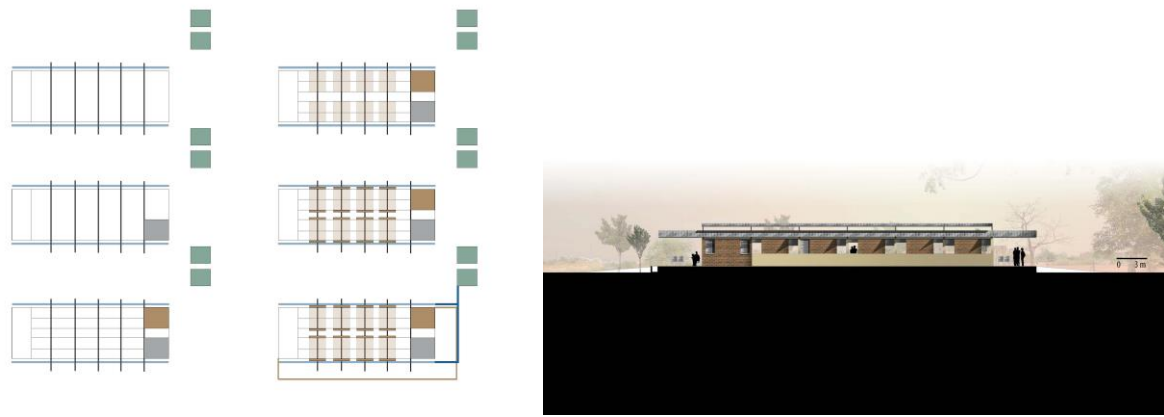

Figure 4. L'écurie, état existant.

Figure 5. Plans conceptuels de la cyber-écurie et son élévation sud.

Kossodo côté sud, le long de la route N4, entre un habitat loti et une zone de maraîchage s'inscrit le terrain des non lotis. La fragilité du statut de l'habitat spontané, au-delà de son illégalité, réside dans le fait qu'il n'est ni relié au réseau d'assainissement ni au réseau électrique de la ville. Pour conforter la position de ce tissu organique susceptible de disparaître, deux directions sont prises. L'une part d'un repérage des espaces se trouvant au dehors des parcelles et correspondant aux cheminements ou à toute connexion avec les lotis et le canal. L'autre consiste en l'étude typologique des parcelles elles-mêmes qui ne concordent en rien au système orthogonal voisin. Comme point de départ à cette double analyse et découlant d'un travail minutieux, des relevés in situ ont été effectués pour orienter la pensée du projet. Ces prises de mesures invitent au voyage dans un univers de limites. Les parcours métrés préfigurent tous les changements d'état qui participent à l'affranchissement d'une division partagée tout en acceptant les valeurs duelles qui interprètent l'actif et le passif des usages. Dans l'expression de cette partie de la ville, entre l'interne et l'externe, entre l'ouvert et le fermé, des passages se créent pour confirmer le franchissable et l'infranchissable (Fig. 6).

Figure 6. Kossodo côté sud, schémas des réseaux et des points d'impulsions.

Une limite naturelle, un cadre bâti sont de véritables dispositifs de correspondances en des faisceaux d'interprétation qui offrent des réseaux d'échanges aux voies multiples. Une restauration, une reconversion entraînent des conséquences pour reconsidérer le non loti. En se densifiant, la ville recentre le contenu paramétré d'enjeux fertiles. Chaque parcelle, de forme irrégulière, comporte un mur d'enceinte qui entoure l'habitation qu'elle contient. Plutôt de petite taille, celle-ci s'implante de façon variable. Cependant la constante est l'espace restant entre l'habitation et la cour. Il offre le potentiel d'être investi d'une construction. Inscrire un édifice supplémentaire demande une réflexion approfondie. La proposition se présente sous la forme de modules qui se décomposent en trois programmes. Le premier comporte un logement pour un étudiant handicapé

exempt de loyer et rendant des services. Le deuxième comprend un logement pour une famille qui paie un loyer à l'occupant initial de la parcelle. Et le dernier est un espace commun qui articule les deux autres (Fig. 7 - Fig. 8).
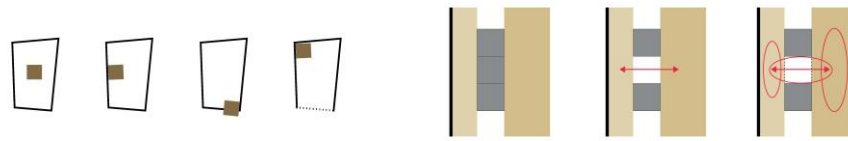

Figure 7. Typologie des dispositions au sein des cours et concept de l'espace commun.
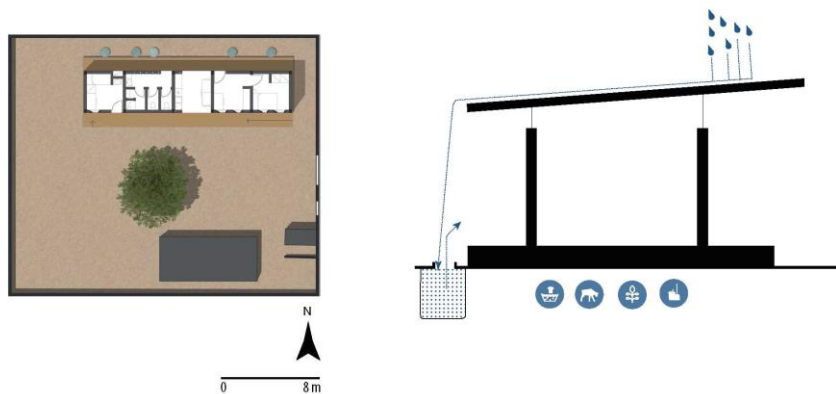

Figure 8. Hypothèse de projet au sein d'une cour, plan général et coupe de principe.

Cet espace commun loge des sanitaires, une cuisine et un abri. En fonction de la taille de la parcelle, un module étudiant ou familial peut être rajouté jusqu'à recevoir un atelier ou encore un commerce qui déborde du mur d'enceinte pour s'ouvrir sur la rue (Fig. 9).
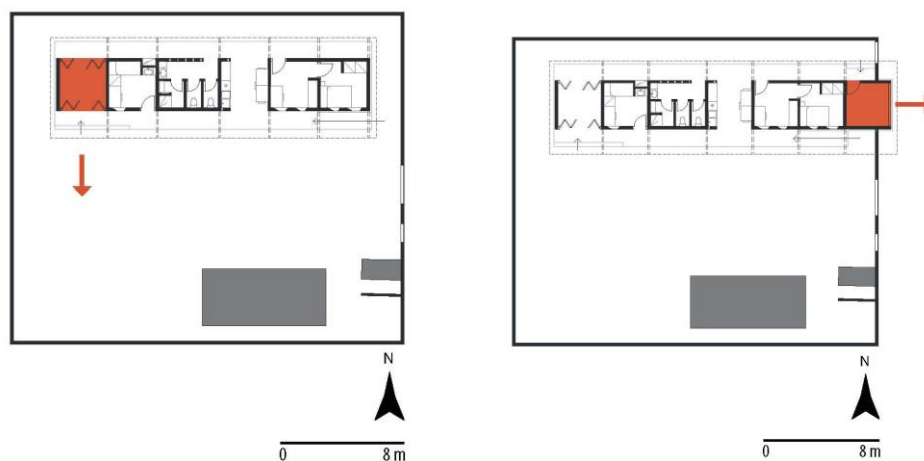
Figure 9. Evolution avec un atelier, évolution avec un commerce donnant sur la rue.

En quittant la cour, tout en emportant avec nous l'esprit de l'espace commun, nous passons aux rues et chemins reliant l'ensemble des parcelles. Dans leurs intersections, ces voies internes au site sont des lieux stratégiques pour implanter des bornes ressources. Ces bornes, tels des abris, comportent un point d'eau, une alimentation électrique et tous les éléments nécessaires à la survie au quotidien (Fig. 10 – Fig. 11).

Figure 10. Décompositon d'un point ressources.

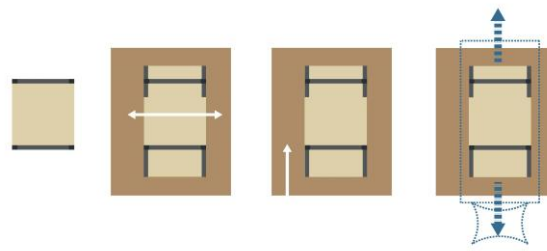Figure 11. Multiplication des points ressources à partir de la place centrale.

Et le principe de la borne peut aussi se développer le long du canal et dans sa zone maraîchère. En 2006, dans la continuité du plan directeur du Grand Ouaga de 1999, la ville de Ouagadougou a planifié l'expansion de l'agriculture urbaine et tout particulièrement le secteur de Kossodo. En implantant ces bornes maraîchères au sein de la zone agricole, un lien se crée entre lotis et non lotis, entre les familles et les étudiants valides ou non valides à partir d'une terre nourricière en acte porteuse de revenus. Par la mutation de ce secteur informel, la création d'un éco quartier composé à partir d'interstices déclenche une transformation urbaine progressive pour faire passer les habitats de l'informel au durable avec l'eau comme vecteur d'une reconquête urbaine.

7. Conclusion (Ville et territoire, l'écosystème se pense à plusieurs échelles en même temps)

L'ensemble de ce travail, qui sert aussi de prétexte au croisement entre la recherche architecturale et l'enseignement du projet d'architecture, aborde la ville comme l'une des modalités du territoire. Par cette façon de faire, la conception des phénomènes d'urbanisation devient autre. Les spécificités des qualités de la vie sont réaffirmées pour aborder de nouvelles formes d'édifices répondant à des

critères environnementaux. Pour les deux sites de Kossodo, l'objectif a été de mettre en place une stratégie de développement en intervenant toujours à plusieurs échelles. L'écosystème mis à l'honneur active localement une mise en relation des espaces verts et les espaces bâtis, existants ou futurs (Fig. 12).
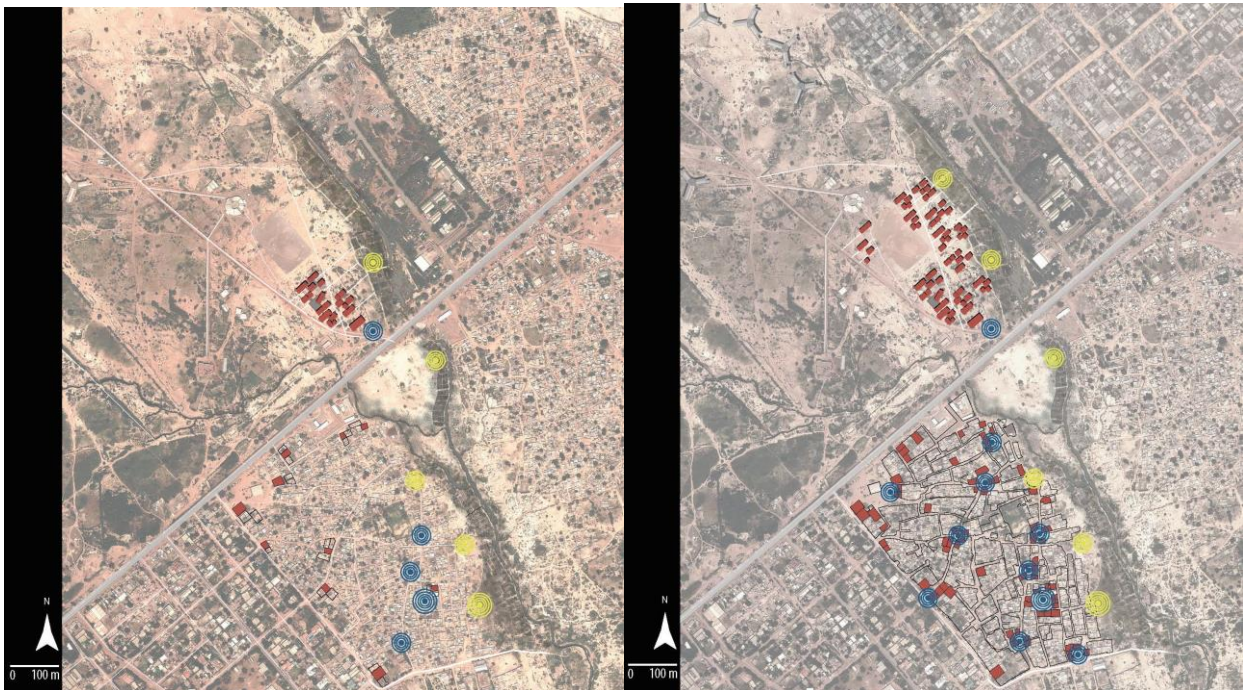

Figure 12. Hypothèses pour 2015 et son évolution pour les trente prochaines années.

Sur le mode d'une valorisation réciproque, ces hypothèses rejoignent le maintien et la promotion de la Ceinture verte de Ouagadougou dans une relation symbiotique entre la ville et les espaces végétalisés. La force de la Ceinture verte est qu'elle s'enroule autour de la ville attirant avec elle le construit et le non construit, le végétal nourricier et des arbres porteurs d'ombre. Tel un fil d'épaisseur variable contenant l'extérieur et l'intérieur de la ville, elle devient l'infrastructure protectrice qui aiguille un tissu fertile d'une mixité aux ressources insoupçonnées. Ce fil vert qui attend l'eau provenant du nord du pays se gonfle pour s'épanouir au courant des saisons. Pour interroger le grand territoire dans ses limites aux sources reculées, il faut sillonner l'ensemble des régions qui bordent la ville pour comprendre l'origine même du parcours de l'eau. Ses itinéraires multiples donnent à lire une topographie aux courbes défiant la géodésie. Cette eau tant attendue n'arrive pas en continu, il faut la capter et la garder précieusement en réserve. Grâce à l'eau et au canal de Kossodo, une nouvelle lecture de la ville passant par des expérimentations est en marche pour reconsidérer les lieux de l'artificiel et du naturel. Ces expérimentations sont soumises au verdict de l'expérience par un processus qui constate et qui prépare à l'action. Tous les dessins préparatoires deviennent concrets dans l'espace urbain pour se coordonner à ce qui existe. Cette méthode expérimentale cherche à compenser les faits, à les intégrer à un système de conceptions théoriques en lien avec l'existant vérifiable. Observer les faits conduit à proposer des explications qui sont les hypothèses de travail. Les hypothèses retournent à l'expérience pour les vérifier et à chaque fois l'activité de la raison est engagée. Sans oublier l'intuition dans l'interprétation de cartes ou de plans, la volonté de dépasser des données empiriques à partir d'un regard supérieur depuis le ciel reste toujours présente. Ces données s'intègrent à celles de l'existant depuis la terre par une étude attentive liée au sol physique de la ville pour répondre aux nécessités humaines. En résonnance à l'échelle locale, chaque approche le long de la N4 a tenté d'y correspondre par des axes de réflexion particuliers avec des spécificités liées au site dans le continu et le discontinu. Et toutes ces hypothèses ont en commun le thème de l'habitat pour les étudiants en situation de handicap comme lieu d'échanges, de partage et d'entraide.

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[2] Fondation Abbé Pierre, 3 rue de Romainville, 75019 Paris.

[3] Le terme de *reading* est né à l'ILAUD. L'International Laoboratory of Architecture and Urban Design a été constitué en 1976 par Giancarlo De Carlo sous la forme d'un séminaire d'été qui regroupait une dizaine d'écoles d'architecture. Ces séminaires ont eu lieu à Urbino, à Sienne puis à Venise.

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[9] Le campus principal de Ouagadougou a été fondé en 1974 dans le quartier de Zogona et reçoit aujourd'hui plus de 40000 étudiants. Pour compenser le manque de place, certains cours sont donnés au SIAO (Salon International de l'Artisanat de Ouagadougou) dans des locaux et des conditions malheureusement peu adaptés à l'enseignement. La Cité Universitaire de Ouaga II, en cours de construction depuis 2008 et située à presque vingt kilomètres du centre de la ville, peut difficilement correspondre aux étudiants en situation de handicap (voir plan de la figure 1).

European Capitals of Culture – Urban Regeneration through Culture

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Abstract

Ever since the *European Capital of Culture* (*European City of Culture*) concept came into being, the idea of using culture to forge new bonds between countries of the European Union has been, for the most part, a success. The fame surrounding the event is viewed as an opportunity for promoting the city through cultural activities, but also emphasizing local cultural heritage, community values, traditions, and last, but not least, the European dimension – emphasizing similar features among Europe's countries and the fact that they all belong to the greater, European Community. Having *culture* as a prerequisite, many cities have benefited from their year as European Capital of Culture (ECoC). Although not all former ECoCs managed to obtain significant results, in some cases the event has helped dissolve some issues within the community and had a great impact on the city's image, reactivating areas that had been abandoned by public attention and improving quality of life. Can a city be "healed" through culture? If so, does it produce lasting effects? This paper proposes a discussion based on the way the ECoC event helped regenerate cities, why such initiatives have not always been successful and will finally attempt to draw some conclusions regarding the phenomenon by studying former European Capitals of Culture.

Rezumat

Încă de la formarea conceptului de Capitală Culturală Europeană (Oraş Cultural European), idea de a folosi cultura pentru a crea noi legături între ţările Uniunii Europene a fost, în mare parte, de succes. Popularitatea de care se bucură evenimentul este privită ca şi o şansă de a promov oraşul prin activităţi culturale, dar şi evidenţierea moştenirii culturale locale, ale valorilor comunităţii, tradiţiilor şi nu în ultimul rând, a dimensiunii Europene – marcarea trăsăturilor similare pe care le împărtăşesc ţările Europei şi faptul că acestea aparţin Comunităţii Europene. Având ca premisă cultura, multe oraşe au avut de câştigat de pe urma anului în care au deţinut titlul. Cu toate că nu toate oraşele Capitale Culturale Europene (CCU) au reuşit să obţină rezultate semnificative, în unele cazuri, evenimentul a ajutat la dizolvarea unor probleme din cadrul comunităţii; a avut un impact major asupra imaginii oraşului prin reactivarea zonelor care fuseră abandonate de către public şi îmbunătăţirea calităţii vieţii. Poate un oraş să fie „vindecat" prin cultură? Dacă da, poate produce efecte de durată? Această lucrare propune o discuţie bazată pe modul în care statutul de CCU a ajutat la regenerarea oraşelor, de ce astfel de iniţiative nu au avut întotdeauna succes şi, în final, va căuta să tragă unele concluzii prin analizarea fostelor Capitale Culturale Europene.

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1. Introduction

The *European Capital of Culture* title has become one desired by many cities for numerous reasons, most of which are fed by the large number of visitors eager to take part in the cultural events, getting to know the city, its inhabitants, local customs and so on. In spite of its 28 year old history, the *European Capital of Culture (ECoC)* concept cannot be precisely defined and understood due to the fact that each city is special on its own and the way the cultural year affects its image, community or cultural pattern is very difficult, if not, impossible to map. In addition to having a solid cultural program and proper venues to host the events, it is very important that the *European Dimension* is reflected in the activities and general concept of the ECoC through projects that accentuate common aspects of European culture. The event allowed small cities to become known in Europe (if not even the World), promoting the country, the location and the cultural program as well. For capital cities, holding the title meant their rediscovery through highlighting cultural and artistic qualities.

Some information regarding the degree of success of the event was made available in 2004 when Palmer-Ray Associates published their report on the subject. According to their findings, "of the total responses received, 95% of respondents rated the ECoC action as successful, or partly successful. The justifications used by respondents described advantages to the designated cities, and the advantages to Europe. However, respondents were also critical of certain elements of the action. The most common negative views about aspects of ECoC concerned issues around the designation being too motivated by politics, the fact that many cities did not exploit the opportunity, the under-investments by some cities in terms of planning and resources and that too much focus had been placed on local issues, with insufficient focus on Europe. Other respondents referred to the complexity of the selection procedure and the limited lasting effects of being an ECoC." [1]

Generally, one can observe that during the preparation period, among the necessary investments made for the cultural program, some of the work focused on improving urban space and/ or existing built heritage (where and when necessary) by restoring or including forgotten spaces or historic buildings among the venues meant to host cultural events. This is a current practice that helps "heal" the city. It must reflect a valuable and consistent image, and reanimating lost pieces of it helps build such an image, thus getting closer to what the ECoC concept is all about. Some of the changes are still visible after the cultural year and can even become permanent. Positive examples have given way to lasting interest from tourists.

The term *culture* has more than one meaning, spanning from the different shapes of know-how, science and lifestyle, to the idea of civilization, to the idea of artistic creation, heritage and the difference between what is created and what changes – according to Dominique Wolton. [2]

Another perspective on the importance of culture is given by sociologist and philosopher Edgar Morin, who believes that "culture is an ingredient of the notion of homeland". [3]

Culture reflects itself on the image of the city. Architecture is a form of culture, part of the city's image. Architecture outlines the streets and squares of the city. It is the background for all events that unwind in public spaces. Thus, one can say that public space is also culture, or at least, an expression of culture. In the opinion of Marc Barani "cultures, today in any case, express themselves most in public spaces because when we say public space, we say space that we can bring closer to ourselves."[4]

Because of their undeniable importance during the cultural events, public spaces and buildings are

among the first that require attention during preparation works.

2. Urban regeneration

 "«Urban regeneration» has become a regulative policy concept providing a strategic articulation of planned socio-cultural transformation in its largest sense. Given its expansive concerns, urban regeneration has a suitable breadth of stakeholders – from property developers to cultural institutions to creative industries, business people to local government." [5]

Generally, the term describes any kind of change in the urban environment that helps in creating a better image, better spaces for people, breathing new life into unused urban areas or buildings, and so on. Considering the topic of the discussion, it is necessary to point out that in this scenario, culture is the reason for urban regeneration. Graeme Evans explains that *Culture-led regeneration* is "culture as a catalyst and engine of regeneration." [6] Culture fuels the improvement of urban areas and the acquired results become motivators for culture. Thus creating a somewhat "symbiotic" link between the way culture supports change and vice versa.

The ECoC event is a powerful tool for culture-led regeneration and an important motivator in all efforts of preparation and cultural awareness. Due to the significant effect culture had on the development of some cities around Europe, "it is interesting to consider culture as the forth pillar of urban development besides social, economic and environmental pillars." [7] The consistency of the cultural program, together with the availability of well equipped cultural facilities, as well as friendly urban spaces can help in planning a successful ECoC event.

"Cities need good quality infrastructure for culture and creativity. This includes a well-balanced distribution of cultural facilities in different parts of the city. Public spaces are needed for citizens to meet and interact." [8] Every part of the city deserves the same consideration. The people are all around the city and they have the right to benefit from the event or the preparations that precede the ECoC.

3. Culture and the city – case studies

 "The creative industries play an important role in the construction of life styles and the identities of individuals and groups of citizens within the society." [9]

3.1 Athens – First European City of Culture

Melina Mercouri, Greek Minister of Culture at that time, was the person that initiated the Europe-wide cultural movement making important steps toward rehabilitating a strong cultural expression for the city of Athens, and generally, increasing the cultural level of all European countries.

Figure 1. Athens Concert Hall by Nea Peloponnisos
(Source: http://commons.wikimedia.org/wiki/File:Athens_Concert_Hall_by_Nea_Peloponnisos.jpg)

As first of the European Cities of Culture, Athens benefited from a great number of investments towards creating or rehabilitating cultural venues or iconic buildings in the city, and bringing culture closer to the Greek people. Besides establishing the institution of European Cities (Capitals) of Culture, she had a great contribution to the current image of Athens. She supported the restoration of the Acropolis monuments and organized an international competition for the design of the New Acropolis Museum. Her determination to bring culture to her people gave her the idea to introduce free access to museums and archaeological sites. Her efforts were also directed towards protecting the built heritage of Greece. She supported the completion of Athens Hall of Music (Megaron Mousikis Athinon) (Fig.1) and many others. [10]

According to results the Palmer Study gathered, the first European City of Culture resulted in many positive aspects including broadening the concept of culture from "entertainment" to "education". [11] Most certainly, as an addition to the fact that Athens 1985 opened the series of Cultural activities in Europe, the lasting effects of Melina Mercouri's initiative were clearly reflected onto the city's infrastructure. Based on funds received from the Ministry of National Economy, it was possible to invest in the "construction, renovation and operation of building complexes and exhibitions such as:

- the O.L.P. (Piraeus Port Authority) Exhibition Centre – 3,000 sq.m. Exhibition «Greece and the Sea»
- Old University in Plaka – in cooperation with the University of Athens. Exhibition «Byzantine and Post Byzantine Art»
- Kostis Palamas building – in cooperation with the University of Athens. Exhibition «Athens 1900 – 1985: Architecture and Urban Planning»
- Iliou Mansion. Exhibition «Troy, Excavation and Memorial of Heinrich Schliemann» (Fig.2)
- Renovation of five large halls in the National Archaeological Museum. Exhibition «Democracy and Classical Education»
- Participation in the building and launching of the ship «Cyreneia» in cooperation with the Institute of Nautical Tradition
- Contribution in the building of the trireme, undertaken by the Greek Navy.

Figure 2. Iliou Mansion – Athens Numismatic Museum by Dimboukas
(Source: http://commons.wikimedia.org/wiki/File:Numismatic_Museum_of_Athens_2011.JPG)

In order to further develop cultural infrastructure, the following theatres were built: Petra Theatre in Petroupolis, Mount Hymmettus – now called the Melina Mercouri Theatre, Roman Agora Theatre, Glyfada Floating Theatre, Pallas Theatre / Cinema Hall – new sound system, new stage and general renovation." [12]

The long term effects of the cultural year as well as the appearance of Athens can be regarded as positive due to the large amount of improvements made in order to promote culture, counting both the physical ones such as buildings, cultural venues, as well as the less tangible ones such as the way people experienced the even itself and the new appearance of their city. "Although difficult to prove, it was reported that Athens 1985 was the first cultural experience in Greece where Greeks felt that they were participating in something truly European, and the event was used as a landmark in advancing political and cultural relationships between Greece and its political partners at the time." [13]

3.2 Glasgow –European Capital of Culture in 1990

The city of Glasgow has been considered one of the most successful European Cultural Capital due to the way the event helped in redefining the general image and quality of life using culture as catalyst. Numerous long term effects have been observed in artistic development, image transformation, infrastructural improvements, sustained economic, tourism and community development, and positive impacts, creating an art-based management structure for the city and positive European Cooperation and Networking. [14]

Cultural activities started transforming the city even before the cultural year and lasted well beyond. [15] The Cultural Year had great results in the case of Glasgow. It was an opportunity to transform the city's image. The cultural program was put together to run for the entire calendar year and it had the diversity required to suit all preferences. Participants could choose from music, drama, theatre, and visual arts, but also: architecture, design, engineering, shipbuilding, education, religion and sport.

Over 3,400 public events took place. The success was achieved through the participation of artists from 23 countries. The Cultural event was a great opportunity to launch new artistic works, 60

world premieres in theatre and dance and 40 major works in the fields of performing and visual arts. The Glasgow ECoC totaled 3,979 performances, 656 theatrical productions, and 1,901 exhibitions, but also 157 sporting events.

The event allowed local artists to perform along side international artists, opening borders by using culture as common language. The titled allowed Glasgow to showcase cultural facilities created by the city's Victorian philanthropists. Among them were the Kelvingrove Museum and Art Gallery housing the richest and most visited municipal art collection in the UK outside London; the Museum of Transport (Fig.3) and the Mitchell Library.

Glasgow in 1990 was the first British city to use culture as a tool for urban regeneration. The success of the event - regarding the cultural program, the economy and the urban improvements - has made it one of the most successful European Capital of Culture and also a worthy example of how culture can transform the city. The positive outcome has been an inspiration for many ECoC candidates, and is still being remembered as such.

Glasgow's cultural infrastructure has benefited from large investments before and during the cultural year: £5.8 million was spent on the *McLellan Galleries*, and the *Tramway* (resulted by converting a former tram depot and workshop) was secured as a major performance and visual arts venue. The biggest investment was in the *Glasgow Royal Concert Hall* (it would have been finished regardless of 1990, but the event speeded up the process). Designed by Sir Leslie Martin, it was built to replace St Andrews Hall (burned down in 1962), the investment totaled £29.4 million. [16] Overall, the event encouraged city officials to pay more attention to its public spaces and cultural venues by taking care of the valuable existing assets and also creating new, avant-garde establishments for cultural use.

Figure 3. Museum of Transport entrance by Malost
(Source: http://commons.wikimedia.org/wiki/File:Museum_of_Transport_Glasgow.JPG)
As a plus to the rich cultural life, the general impression of the event was a positive one due to the

fact that during the '90s a significant increase in the number of jobs occurred within the cultural and creative industries, including movie and music production, book publishing and design. The city itself suffered a dramatic change of image - from being perceived as a violent post-industrial city before 1990, to being celebrated as one of the most creative cities of the U.K.

Glasgow 1990 had a great impact on the participation and access to culture of the communities that normally did not benefit from taking part in such activities. One of the most important long-term effects is the development of artistic initiatives within the peripheral areas of the city. Nevertheless, the lack of adequate funding did not make it possible to become permanent. Still, By 1996 when the government was re-organized, once again attention was focused on increasing access to culture and social cohesion by developing the arts. One can argue that this initiative was inspired by the cultural year. Although progress was undeniable, some positive aspects lost themselves through the years due to the following reasons: the lack of a long term strategy and necessary funding, a decrease in financial sponsors and less funding for the public sector. [17]

3.3 Sibiu – European Capital of Culture in 2007

As a new member of the European Union, Romania was invited to host the ECoC event in 2007 together with Luxemburg. Having hosted the event once before in 1995, Luxembourg already had the knowledge and experience to produce a better cultural year than before, but for Romania it was all very new. Sibiu was designated European Cultural Capital for 2007 on may 27th 2004, after the final vote of the Cultural Council of Ministers of The European Union. The theme chosen for Sibiu/ Hermannstadt had as general aim to present the multicultural profile of this history-filled town and to portray it as the "City of Culture – City of Cultures".

Considered by many "the first campaign of the real image" of Romania and the most complex cultural program organized in Romania, the preparations proceeding Sibiu ECoC, cost 50 milion euros. Money conducted towards rehabilitation and restoration (approximately 40 building facades), equipment acquisition (Pavilion tent 2007, 2 stages and seating, as well as a Steinway piano), restoration of churches, orchestration of cultural projects and the restoration of Sibiu Airport. This is the total sum, invested by the Ministry of Culture and Cults and authorities of Sibiu for the Cultural European Capital, as declared for Mediafax by Sergiu Nistor, governmental commissary of Sibiu- European Cultural Capital in 2007 for the program.

The European Cultural Capital was a means through which Sibiu, developed, during the year, 220 projects to which, roughly speaking, one million tourists responded. [18] For the city's economy, the intense preparations made for 2007, meant about the same as preparing Athens for the 2004 Olympic Games, only at a smaller scale. [19] As it was intended, the collaboration between Luxembourg and Sibiu was established. Thus cultural programs of Sibiu were promoted in Luxembourg and vice versa. In addition, the historic bonds that existed in the past between the two cities were accentuated. [20]

The fame surrounding the city-wide event attracted many investors, thus changing the overall image of Sibiu to the better. It's very easy to notice the vibrant atmosphere within Sibiu's historic center (Fig.4) – the area that benefited from most of the attention during preparation and during the Cultural Year.

Figure 4. Sibiu, Big Square (Piaţa Mare)
(Source: own work, 2013)

Overall, the event is considered a success for Sibiu and for Romania. At the moment, many cities of Romania (including Cluj-Napoca) are competing for the honor of hosting the ECoC in 2021. One can argue that the success of 2007 is one of the reasons why other Romanian cities decided to join the competition.

4. Conclusions

The complexity that surrounds the ECoC initiative makes it hard to establish a clear «recipe for success». The aim has always been to plan a successful event, but the result was not the expected one every time, in spite of planning efforts. In some cases culture helped completely change the image of the city or helped in restoring existing valuable and representative objectives, in other cases it didn't produce such lasting effects. In some cases the cultural program was a success on an international level, in others less so. Either way, the ECoC is generally associated with shaping a lasting image and impression on the city that also helps promote the beauty and values of the cultural rich countries of the European Union. A successful event can also mean economic growth: "Cultural development supports economic development thanks to clusters mixing cultural and economic products (example: «fashion and design district»)" [21]

There are many advantages to hosting the ECOC event, each city can gain from its title as long as objectives (and methods for reaching them) are clearly set. The event can have an impact on a social level. Cultural activities "can play a key-role in the building of more sustainable local communities: enhancement of people's self esteem and sense of belonging to the city and development of creativity within the local community, especially among the most deprived. Cultural activities bring information, skills and capabilities that cannot be found in other areas and that are essential for human development." [22]

Opinions regarding the event may vary. Some ideas have arisen stating that de image of the city created for the cultural year does not reflect the truth about the city, but actually a different version

that is more attractive to visitors from other cities/countries (Booth&Boyle, 1993). [23] There is also an idea that the ECoC event is actually erasing individual identity of the participant cities, turning the whole idea into another type of branding (Evans). [23] Indeed, the *brand* is one of the things that make the event interesting because of the positive reactions it gathered over the years. The initiative has earned the interest of many culture lovers until now, and probably continue to do so in the future.

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Musealisation of the Ruins in Vladimirescu - Placemaking in the Outskirts of Arad

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Abstract

The territorial development of Arad City in the 20th century, led to the assimilation and integration as neighbourhoods of some nearby villages (Aradul Nou, Mureşel, Micălaca, Sânnicolaul Mic). Others, like the commune Vladimirescu, are still functioning independently, but their inclusion within the administrative territory of Arad is a foreseeable scenario. Therefore, it is compulsory to take into account these rural areas, when elaborating strategies for the cultural development of the city. Arad will extend its range of cultural destinations and the villages will preserve their identity as part of the tourist itinerary. Vladimirescu distinguishes itself due to the archaeological findings on its territory, including the ruins of a Romanesque basilica, within a 15th century enclosure. The study proposes the integration of Vladimirescu in the cultural tourist itinerary of Arad, by musealisation of this archaeological site and environmental-friendly interventions which are to create a complex and sustainable cultural network and assign value to local traditions. Our proposal continues the initiatives of The Museum Complex of Arad to preserve and promote these monuments. Our objective is to strengthen the connection between Arad and Vladimirescu through valorising the cultural heritage and to emphasize the opportunity represented by architectural and archaeological remains within their context, as resources for cultural tourism in Arad.

Rezumat

Dezvoltarea teritorială a Municipiului Arad în secolul XX a făcut ca unele sate din împrejurimi să fie asimilate şi integrate oraşului. Este vorba despre cartierele Aradul Nou, Mureşel, Micălaca, Sânnicolaul Mic. Comuna Vladimirescu, localizată la periferia Aradului, este, în prezent, o localitate autonomă din punct de vedere administrativ, dar incluziunea în cadrul teritoriului Aradului este un scenariu posibil şi probabil. Prin urmare, în momentul elaborării strategiilor de dezvoltare culturală a oraşului, este necesară includerea acestor zone rurale periferice. În acest mod, în viitor, Aradul îşi va diversifica destinaţiile culturale, iar satele îşi conservă identitatea, ca elemente ale unui posibil circuit turistic cultural. Vladimirescu se distinge prin descoperirile arheologice de pe teritoriul comunei, printre care ruinele unei bazilici romanice cu un zid de incinta, care au aparţinut Prepoziturii Catolice de Orod. Studiul de faţă propune integrarea comunei Vladimirescu în circuitul turistic cultural al Aradului prin muzealizarea incintei ruinelor şi prin intervenţii non-invazive in situ, în vederea iniţierii unei reţele culturale, complexă şi sustenabilă, care să valorifice tradiţia locală. Propunerea noastră continuă iniţiativele Complexului Muzeal Arad, de a conserva şi promova aceste monumente. Obiectivul studiului este consolidarea legăturii istorice dintre Arad şi Vladimirescu prin valorificarea moştenirii culturale. De asemenea, dorim să evidenţiem oportunitatea reprezentată de patrimoniul construit -

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arhitectural şi arheologic, ca resursă pentru turismul cultural în Arad.

Keywords: musealisation, Romanesque basilica, Repository, built heritage, cultural tourism

1. Introduction

According to World Tourism Organisation [1], over the past six decades tourism has developed into one of the largest and fast-growing economic sectors worldwide and the expansion and diversification is expected to continue in the following thirty years. In Romania, studies show that the most visited tourist attractions in 2005 were strongholds (26, 6 %) and archaeological sites (16,1%) [2], while the National Archaeological Repertoire [3] comprises 14 741 researched sites, of which 244 in Arad County. The present study proposes musealisation as an alternative mean of managing discontinuities generated by historical built heritage within the urban tissue and emphasises the quality of old architecture as resource for cultural urban tourism. The authors focused on the western part of the country, namely on Arad County, for several reasons: First of all, it is located in the DKMT cross-border area (Danube, Kris, Mureş and Tisa), which offers great opportunity for urban development and encourages international mobility. Secondly, despite the advantageous geographical position and the vast archaeological and historical built heritage, the western part of Romania, including Arad County, has underdeveloped museum, tourist and cultural activity. [4] Thirdly, the County Council and the Local Administration are taking action for the tourist development of the region and for putting to good use the cultural heritage of Arad. The study is submitted to: the Strategy for Tourist Development for Arad County elaborated in 2011 by CADI - Bucharest and approved by the County Council, the Cultural Tourism Concept for Arad – 2012, and the requirements for earning the title of European Cultural Capital in 2021.

2. Arad – the expansive city

The fords of the old river Maris (presently known as Mureş) encouraged commercial exchange in the area and, consequently, the formation of the urban nucleus of the early medieval Orod – today's Arad and Vladimirescu, formerly named Glogovăţ. As a result, in the Middle-Ages, an episcopate and some monasteries appeared on the riverside. The name of Orod was first mentioned between the years 1080 and 1090. Today, the only remains of the former ecclesiastic centre are the ruins of the Roman Catholic basilica of the Repository of Orod, on the territory of the commune Vladimirescu (Glogovăţ). It indicates the location of *Veterum Orod* (the Old Arad), about 5 km east from the city we know today. (Fig. 1).

Arad/ Orod was first documented in the 14th century. Since then it was mentioned several times in documents as *civitas* and *oppidum* (1329: „"civitas Orod. In 1214/1244 Kovách Roz mentioned the [Hungarian] Royal Encampment [5]. The Comtee of Orod was first mentioned in a document edited in Buda in 1347 by King Louis 1st, in a quotation from an older manuscript from the beginning of the 11th century. Some historians say that Veterum Orod and the fair located on the territory of today's Arad were two distinct settlements with no relevant interconnection. Others claim that in the 16th century the Old Orod was moved on the territory of the present city, namely in south-east, becoming a neighbourhood known as Drăgăşani between 1950-1970 and renamed as „Sarkad" (Unghieţ) in the 19th – 20th centuries. Further archaeological and historical research should come with a resolution to this debate concerning the connection between Arad and Orod.

Figure 1. Arad and Vladimirescu today. [2]

After the Ottoman victory against the Hungarian armies in Mohács (1526), John Zápolya was elected as king and was allowed by Sultan Suleiman the Magnificent to extend his rule over the territory of Arad. In 1541, after Buda was conquered by the Ottomans, Orod became part of the Autonomous Principality of Transylvania. In 1550 the Ottoman armies attempted for the first time to conquer Orod and succeeded in 1552, causing significant damage. The territory of the former Comtee of Orod was temporarily reorganised in three sanjaks. The Sanjak of Arad comprised the town and 113 villages. Its position near the Mureş River, in the vicinity of the Hungarian border, made the area of Orod an important strategic point and encouraged commerce. Therefore, between 1553 and 1555, the Turks built a quadrilateral fortress with bastions in the corners, on the right side of the river, close to the Traian Bridge of today.

In the 17th century, after the treaty of Karlowitz, Arad becomes part of the Austrian Empire, whose border is established along the Mureş River. This event marks the beginning of a flourishing period. Arad became a famous trade fair and its population increased. The establishment of German colonists on the territory of Vladimirescu, on the former premises of the Repository of Orod was an important event. After becoming a Royal Free Town in 1843, Arad expanded, including in its administrative area some nearby villages, as neighbourhoods: Parneava, Şega, Gai and Mureşel. Later, Micalaca, Gradişte, Poltura and Bujac were also included in the urban area of Arad. [4]

Today, due to urban sprawl, Arad continues its territorial and administrative expansion. New residential neighbourhoods have been built in the outskirts, reducing the distances between the city and the rural areas in its vicinity. As a consequence, citizens of Arad acquire houses in these nearby villages, using them as holiday houses.

Figure 2. Historic maps: a) Vladimirescu in the Josephine Survey Maps of the Austrian Empire; b) Plan of Vladimirescu in 1815, including the ruins, near the new Roman Catholic Church and

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[2] Source: https://www.google.ro/maps/@46.1749701,21.5036559,11z?hl=ro

several households.[3]

Such a village is Vladimirescu, located 8 kilometres east from Arad. It is, therefore, a very probable scenario that in the future, Vladimirescu will become an integrated residential neighbourhood of the city of Arad. Moreover, from a historical point of view, this assimilation can be seen as a reunion between Arad and its origins: in the south-eastern part of Vladimirecu, between the building of the new church, the school and several private houses, lie the impressive, yet unknown ruins of the first Repository of Arad, the main medieval ecclesiastic and administrative institution which functioned in the 13th – 16th centuries (Fig. 2 and Fig. 5). In spite of its location and value, the protected area of approximately 120 square meters is unexploited, not even as a tourist attraction, due to several factors: the prohibitive law which offers little alternative, lack of financing and the absence of sustainable urban planning which should mediate the relationship between the village, its inhabitants and the ruinsTherefore, the strategy for rebranding Arad in order to become a cultural tourist destination, must take into account both historical facts and the prospective inclusion of Vladimirescu in its suburban area.

The question is how should the urban tissue relate to such a ruin with historical and archaeological value? How does the historical heritage impact on the local community? Can it be managed in such a way that it becomes useful for the locals and attractive for tourists? How can an urban planner manage such a discontinuity generated by the prohibitive laws, which protect the historical monument?

Our proposal offers a possible solution to these issues: the musealisation of the ruins in Vladimirescu, the recycling of the built heritage and of the public space.
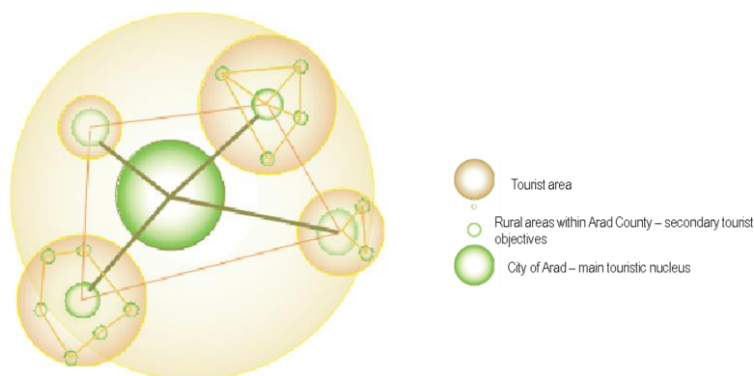
3. Musealisation – placemaking and reuse

Figure 3. Tourist network - strategy.

The term musealisation usually depicts the process of putting an object in a museum, but nowadays it is being applied not only to objects but also related to ensembles and urban contexts. It implies restoration, conversion [6], and a process of change, in connection to tourist use.[7] According to André Desvallées and François Mairesse [8], the act of musealisation changes the museum from being a temple, and makes it part of a process which brings it closer to a laboratory. The purpose of this action is to determine the visitor to explore the objects of interest *in situ* by means of sensory perception, direct experiment and subjective study. It differs essentially from the impersonal

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[3] Source: the archives of the Museum Arad.

contemplation at a conventional exhibition. In addition, the contemporary tendency is the dissolution and the abstraction of the conventional museum space. In what space is concerned, the museum and the monument are overlapping concepts, since the museum function is often used as mean of revitalisation for architectural objects, archaeological sites and historic areas. The last limit is the temporary or permanent musealisation of an urban space [9]. In this respect, Francoise Choay writes that "a historic town is a monument per se", but, at the same time, it is a lively and transforming organism [10], emphasising the recurrence of the theory of Giovannoni in the modern approach to valorisation of the cultural built heritage within the urban/rural tissue. First of all, any piece of historical value must be integrated in a masterplan (*piano reglatore*) which triggers the symbiosis with its present context. Secondly, it is futile to expect a monument to maintain its value and interest by itself, dissociated from the present built surroundings. Therefore, in the case of Vladimirescu, it is an important asset that the ruins of the Repository of Orod are located within the German colony in Vladimirescu and that there are several archaeological sites in the area, all connected to the development of Arad in time and territory. A sustainable approach should raise awareness of the existing cultural network and make it functional (Fig. 3).

After the strong cultural nucleus which is the city of Arad, the ruins of the former Repository in Vladimirescu can be considered the first in the hierarchy of the cultural objectives in the area, due to its initial function and size. The basilica of the Repository was one of the largest 12th century stone buildings of this type on the territory of Romania. Despite the fact that in Europe there are more impressive buildings from the same period (like San Clement Lateran in Rome), on the Romanian territory, ecclesiastic Romanesque stone buildings of comparable dimensions appeared only in the 13th – 14th century. (Fig. 4)
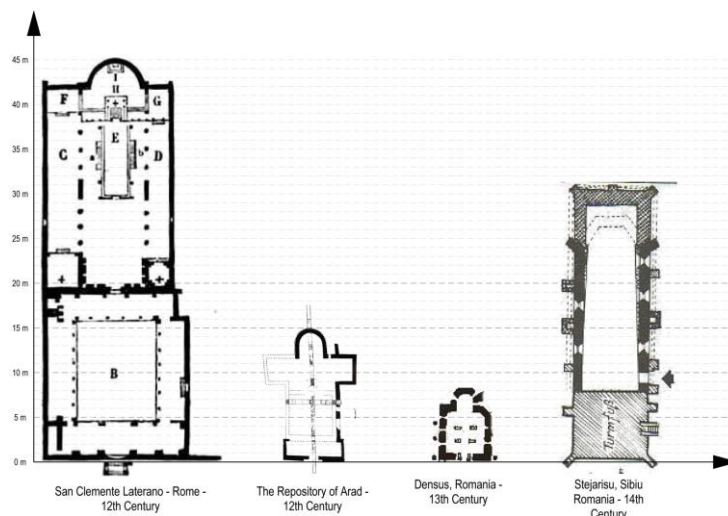

Figure 4. Comparative study – Romanesque Churches.

4. Vladimirescu – past and present

4.1 General overview

The commune Vladimirescu (Fig. 5) was known as Glogovăț until 1947. Its administrative territory comprises four villages: Cicir, Horia, Mândruloc and Vladimirescu - 8 kilometres away from the city of Arad. Vladimirescu is accessible by car, being located near the national road DN 7, by tramway and train, as well as by bicycle. Until the 90's it used to be the first stop of Săgeata Verde (*The Green Arrow*), a train which would link Arad to the tourist itinerary known as The Wine Path in Arad County.

Figure 5. Plan of Vladimirescu and its surroundings. The archaeological site within the village.

Not far from the southern part of the village, it is located the Meadow of the Mureş River – a natural reservation which already attracts tourists by boat and bicycle tours, sightseeing, bird watching and educational activities in partnership with schools. Therefore, integrating Vladimirescu in a tourist itinerary is an already begun and ongoing process. However, the archaeological heritage and the history of Vladimirescu are still unused resources.

Archaeological findings [10] prove the existence of settlements on the territory of the present commune since Chalcolithic and La Tène (Iron Age), during the 2nd and the 3rd century. Other discoveries revealed several medieval settlements and a necropolis, as well as the oldest documented basilica in the region – the first Repository of Arad.

4.2 The Repository of Orod [11]

Its construction started in 1156, on the site of an older church and was finished in 1222. The construction was almost entirely funded by Pope Honorius 3rd and it is the largest known 12th century church in the area. The stone wall which surrounded the premises was built in the 15th century. This institution is of utmost importance for what we know today as the city of Arad.

The Repository was more of an administrative and legislative institution, than an exclusively religious one. It functioned under the rule of the Episcopate of Cenad until 1359, when Pope Boniface 8th gave the direct jurisdiction of the Repository to the bishop of Esztergom in Hungary. Even nowadays, Esztergom is the main catholic ecclesiastic centre in Hungary. The repositors were actually royal chancellors and vice-chancellors.

Arad was the largest county in the Arpadian time and its wealth was impressive at the time since it controlled the borderline and the transports of wood and salt on the Mureş River. However, in the mid 16th century, the church was closed. When the German colonists arrived in 1723, they built a new village even on parts of the former church premises. This event marks the beginning of a slow and intentional demolition of the impressive building which hosted the Repository of Arad. In a document from 1768 the Repository is first mentioned as a ruin. In 1777, the locals started building the new church which still exists today near the archaeological site, for which the old 12th century one was used as source for construction material. Documents mention that in 1800 the vault was not demolished yet.

In 1858, the ruins, still impressive, are given to the local administration. This only accelerated the demolishing process, which determined the intervention of the Authority for Historical Monuments of Budapest. As a consequence, the Episcopate of Cenad buys the ruin and saves what is left until the present day. The first archaeological research began in the 70s.

4.3. Architectural remains – archaeological findings

The Catholic Repository of Orod (Glogovatz/ Vladimirescu) has been intensively researched and documented since the 19th century but conclusions are difficult to draw due to two main causes: Firstly, since the activity of the repository stopped in the 16th century, the building was slowly demolished. Secondly, the layout of the village developed in such a way that it overlaps the precinct and thirdly, the local administration shows little interest in reusing the ruins.

The only historic documents referring to the aspect of the Repository are: two plan sketches by Molnar Pál (1873, published in 1967); a plan of the church without the surrounding fortification by Márki Sandor 1882 (see Fig.6), and a text by Fábián Gábor (1835), mentioning the wall surrounding the premises [12]. These documents do not offer enough information for archaeologists to reconstitute the plan of the former ecclesiastic premises.
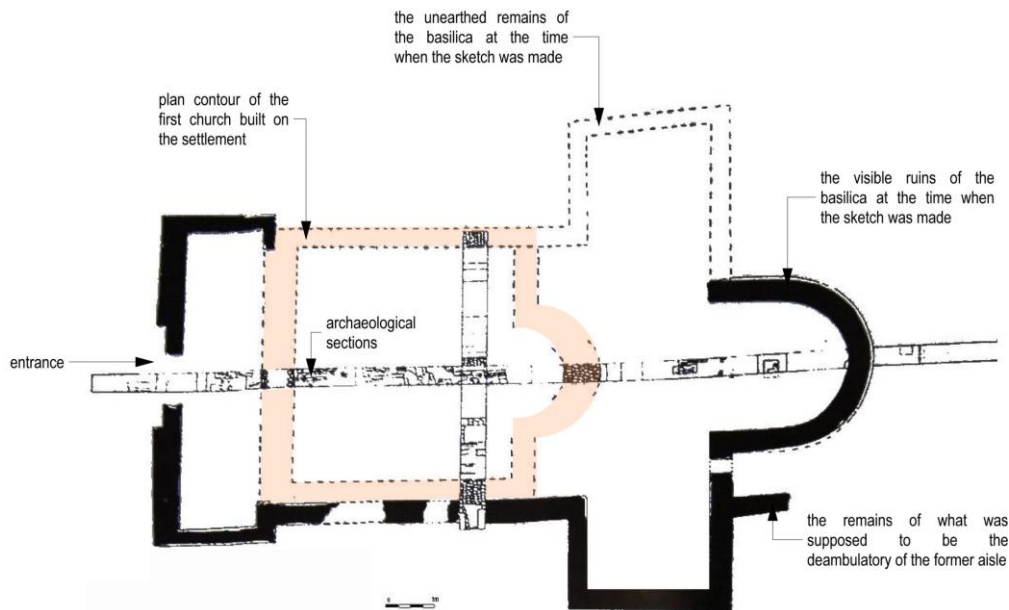

Figure 6. Plan of the Basilica of the Repository of Orod – sketch after Márki Sandor; reconstitution of the early phases of the building by A. A. Rusu and G. P. Hurezan.
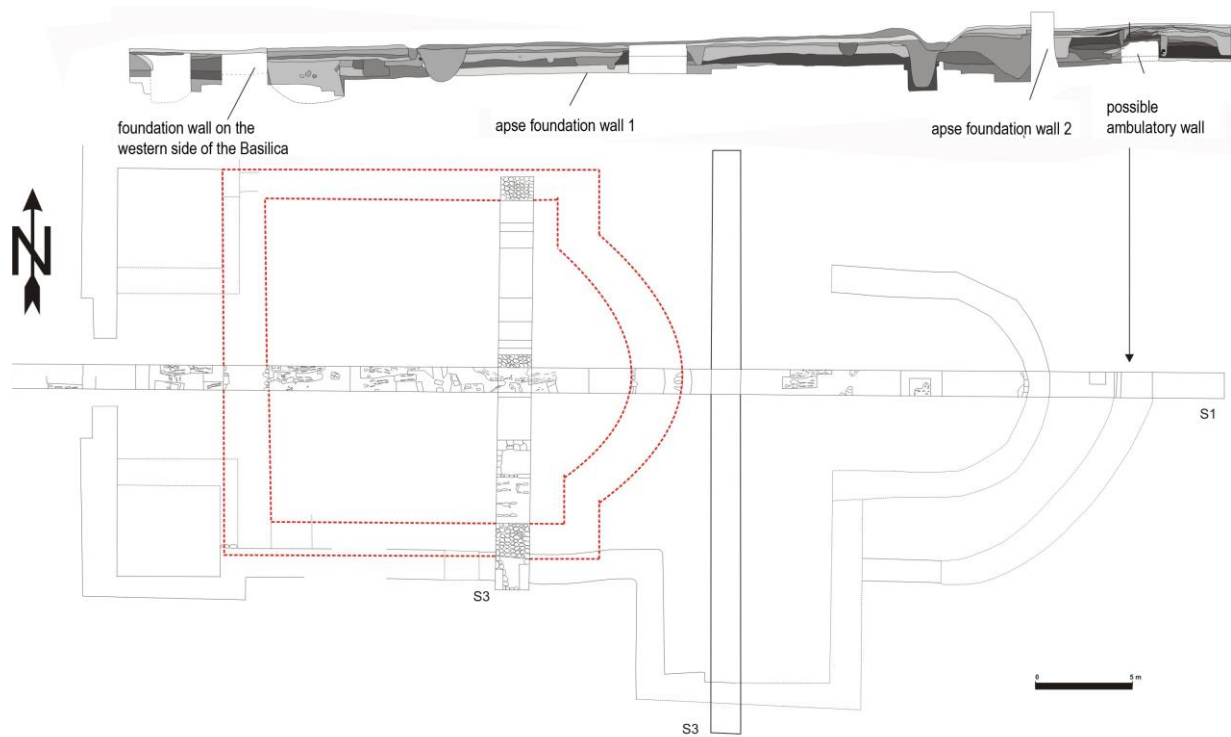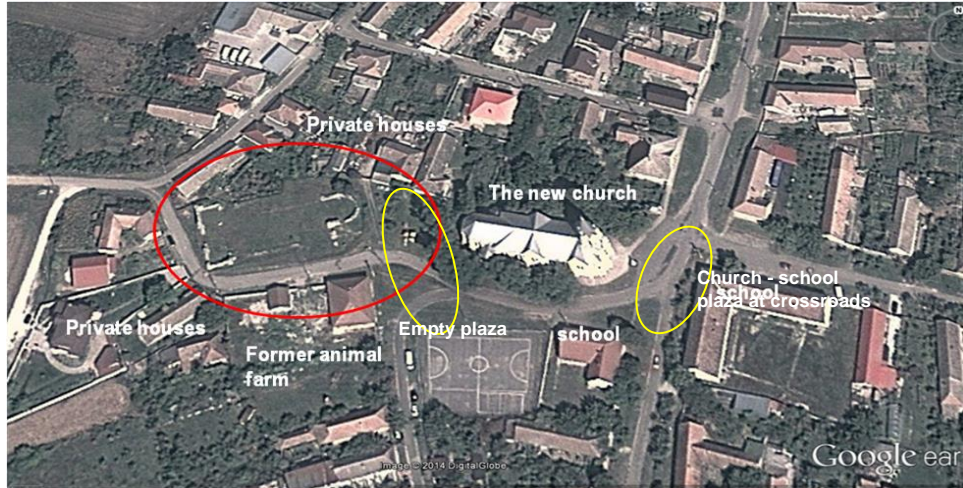
Figure 7. The ruins of the basilica in Vladimirescu – excavation plan 1969 – 1970; 1983 – 1984 and section S1.

E. Dörner was the first archaeologist from Arad to analyse the ruins in Vladimirescu both from a historic perspective and by research on site. [13] His research was continued in 1969 – 1970 and in 1983 – 1984 by M. Barbu, M. Zdroba, G. P. Hurezan (Fig. 7) but they all concentrated on the interior space of the former basilica, deducing the plan of the building and its physical evolution in time. However, there is little information on the ecclesiastic centre existing here [14]. The conclusions drawn so far have been published in *Biserici medievale din judeţul Arad* (autori A. A. Rusu, G. P. Hurezan), who demonstrated that the 12th century Basilica of the Repository of Orod was built over an earlier smaller church. [15] Architect Teodor Octavian Gheorghiu also brings the ruins in discussion within his studies and writings. [16]

Suzana Heitel conducted more recent analysis on the ruins. Her new theory states that the aisle was surrounded by an ambulatory [17]. This contradicts the firm, yet poorly argued conclusion of Benkő Elek that the plan described by the ruins today reflects the shape of the entire original building [18]. The archaeological research in section S1 (Fig. 7) on which Suzana Heitel builds her arguments revealed the groundwork of another wall at a small distance from that of the aisle. Further research is expected to clarify whether this was really the foundation of an ambulatory or those of another surrounding wall. This detail will not modify substantially what is already known about the ruins, but, in our opinion, it should trigger future initiatives in what archaeological research is concerned.
The existence of a surrounding wall around the precinct is a documented fact: it was mentioned in the writings of Fábián Gábor [19] and the reports of those who made the excavations M. Barbu and M. Zdroba) [20], but there are no plans or photographs. More information was gathered in 2012 when civil works for gas and sewerage took place few meters away from the ruin, within the restricted area for monument protection. On this occasion, tombs were revealed 3 meters south-west from the Basilica, as well as metal weapons, jewellery and a ceramic sewerage system which apparently served the repository.

4.4. The Fortified Basilica today within an urbanised village

Figure 8. The ruins of the basilica in Vladimirescu today.

Today, the ruins of the Repository of Orod occupy a wide area in the village, clustered by private houses in north and west, a former animal farm in south and the new Roman-Catholic Church in east. (Fig. 8). Due to its settlement within the village, interaction between the ruins and the local community is inevitable. In fact, once it lost its initial purpose in the mid 16th century, the basilica went through a process of desecration by being slowly demolished. The only ones worshiping the sacred symbol were, in the past, the Episcopal community and the Hungarian Authority for Historical Monuments. Today, the situation is similar. In 2006 archaeologists from the Museum of Arad inspected the site and discovered that people living nearby extended their household on the historical site and built annexes adjacent to the walls of the ruins. Another observation was that the space which was once the interior of the basilica was being used as a pasture for the animals in the former animal farm.

The representatives of the museum took immediate action and, by virtue of the Monument Protection Laws, compelled the people to demolish the parasite buildings, fenced the site and added information panels about the ruins. The lack of responsible appropriation of the monument led to destruction of the panels and to an environment that can only be described as neglected.(Fig. 9)

Figure 9. The fence surrounding the ruins and the information panel in 2006 and 2014.

Faced with prohibition enforced by law, which resulted in a wide unusable area, locals tended to feel inconvenienced by the presence of the ruins, demanding that they should be replaced with a playground. [21] The demolition of the historic monument was, of course, impossible. However, a small playground was placed on east from the archaeological site, but without establishing any relationship with the ruins, the school, or other surrounding buildings. As a result, it is rarely used for its intended purpose, but serves as a canvas for teenage graffiti. An interesting outcome is that among the scribbles, one can also read *"La Cetate"*, which is the local toponym of the archaeological site (Fig.10). In other words, the local community is aware of the historic legitimacy of the ruin and its value is somehow transmitted to younger generations as well. The present study aims to find a way of reconciliation between the ruin and the needs of the local community. We believe that this is the first condition to make the place alive and functional. Tourist attractiveness and inclusion within the cultural tourist itineraries of Arad will follow naturally.

Figure 10. The historic symbol past time and generations.

4.5. Urban-planning overview

The architectural and territory planning analysis [22] revealed a set of assets which define the potentialities of the site as a future tourist destination: a rich and captivating history, the impressive archaeological heritage, the location within the village, as well as the surrounding area (8 km away from Arad, the vicinity of the Mures Meadow), the easy accessibility by roads, railway, tramway and bicycle, the existence of former tourist itineraries in the area (the Wine Path, the Green Arrow) and local awareness to some extent. However, there are a few malfunctions which prevent these assets to be put to good use: on one hand, the restrictions of the law, on the other hand, their own negligence and ignorance. Moreover, there are too many different functions on limited space and without proper urban planning, this resulted into a set of three lifeless and disconnected „plazas" (described from west to east): the historic site, the empty space between private housing, playground, school, church and ruins and the church – school plaza at crossroads. (Fig. 9)
Thus, the challenge for the urban planner, in this case, is to cancel the discontinuity within the public space, make it usable and attractive to locals and visitors.

5. Placemaking

5.1. Approach statement

As a concept, „life between buildings" includes all of the very different activities people engage in when they use common city space: purposeful walks from place to place, promenades, short stops, longer stay, window shopping, conversation and meetings, exercise, dancing, recreation, street trade, children's play, begging and street entertainment". And since „man is man's greatest joy", as an Icelandic poem said [23], bringing activity on and around the site and involving the local

community should create fluxes of people, including the citizens of Arad and other tourists. The question is what kind of activity should be implemented here and how can it stay non-invasive towards the ruins?

Nowadays, the conceptual and physical transformation of the museum [9] offers more flexibility in approach and aims at bringing the exhibited monument closer to daily life. In Arad County, there already are several historic monuments, which attract tourists alone due to a good state of conservation and impressive location. Of these it is worth mentioning the three fortresses in Şoimoş, Şiria and Dezna. Thus, there is little probability that the historic site in Vladimirescu can become a comparable tourist attraction by itself. Being located at the beginning of the existing tourist itinerary of Arad County, near the city, advertising and afferent facilities will make the ruins a possible destination. In order to make it truly attractive and sustainable, the site needs to be brought to life through musealisation. Because of its location within the village and the occurred desecration of the former basilica, this objective is attainable on the condition that the locals get involved and that the ruin becomes a scenic presence, rather than an untouchable exhibit.
The present study is not intended to solve the problem of the ruins in Vladimirescu, but aims to identify some necessary steps that must be taken in order to find the best solution for the integrated preservation of the ruins.

5.2. Proposed strategy

The indispensable condition for a sustainable, integrated proposal for musealisation is a thorough research of the site and of the set of needs and discomforts created by the ruins in their current state to the local community. The present study, cumulated with the existing studies above mentioned, represent the beginning of the investigation. It needs to be completed by further archaeological and sociological research, including interviews, focus-groups, public debates and experimental events. In the meantime, advertising and fundraising is compulsory, as well as lobby to the local and county administration. Also, an expertise needs to confirm the safety of the ruins and specialists are to intervene with a project for consolidation, conservation and partial restoration of the monument. The proposal must be non-invasive to the monument, environmental-friendly and to use local materials and handicrafts. Moreover, the architectural proposal should outline local specificity by revitalisation of local traditions and multiculturalism by valorisation of the German colony that settled here. Important information will be displayed on panels. The site is to be connected with its surroundings with bicycle routes, which will allow visitors to reach other archaeological sites in Vladimirescu, or the Meadow of the Mureş River. (Fig.11)

1- Information panel about the German colony and direction sign indicating the ruins

2 – relocated playground

3 – rent-a-bike

4 – information point related to the archaeological site
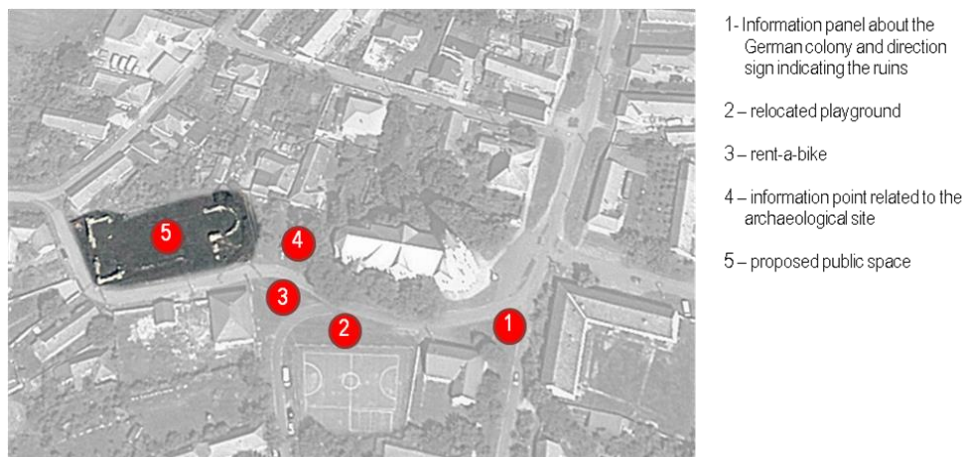
5 – proposed public space

Figure 11. A possible strategy - proposal.

The attractiveness and liveliness of the site will be ensured by the activities happening in the enclosure provided by the ruins. If properly arranged, it can become an urban plaza with places to

rest and discuss and selling points where locals can trade homemade and traditional goods. Furthermore, a temporary and reversible covering structure can provide proper space for outdoor lessons for students or experimental exhibition space. There is a growing community of artist in Arad who value the environment and built heritage and are keen to contribute to the revival of traditional handicraft. The site of Vladimirescu can be an answer to their permanent search for work and exhibition space.

The proposed musealisation of the site in Vladimirescu interprets the former interior space of the basilica. Participants relate closely to the ruin without actually affecting it in a negative way. The proposed process can be seen as a practical, demystified and metaphorical manner for the former basilica to regain its sacred imposing status which was lost along time.

6. Possible scenarios and conclusions

The proposed strategy is expected to result into the integration of the ruins in the daily life of the locals and, simultaneously, in the cultural tourist itinerary of Arad. Musealisation comes as a tool of transformation of a wide restricted, thus unused area within the suburban tissue, into an effervescent public plaza. Several collateral advantages are to follow the implementation of the above strategy: firstly, the resolution of conflicts on the scale of urban-planning; secondly, the increase of the awareness of locals and tourists concerning the built heritage and the past; thirdly, the possibility of creating new jobs and offering new means of income are expected to raise the enthusiasm and pride of the local community towards their historic heritage and its conservation and should assure their involvement in the process of musealisation. In fact, the success of our intentions depends on the contribution of the people in Vladimirescu and their participation in the creation and implementation of the strategy for revitalization and integration of what is left of the former Repository of Orod.

Moreover, the initiative described in the present study continues and consolidates the strategies initiated by the County Council, the administrative authorities of Arad and those of the local administration.

The musealisation of the archaeological site in Vladimirescu is a process that has barely begun. The present study is a complex, multidisciplinary synthetic analysis of the potentialities of the ruins within the village of Vladimirescu in the suburbs of Arad. Our intention is to set the starting point and to offer the necessary means of reviving and integration of the built historical heritage.

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Elements of Continuity in the Urban Structure of Timişoara

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Abstract

All references to the history of urban development of Timisoara emphasize a model of evolution by a succession of urban structures. The medieval city was replaced by that of the Turkish period, which has been radically changed by the reconstruction of the eighteenth century. This type of urban development is usually associated with the discontinuity and is sometimes used to justify certain actions in contemporary urban interventions. If the configuration of the medieval town is more difficult to be detected, the traces of the Turkish period began to be known in detail. Excavations in recent years have provided a wealth of information about the Turkish city on which was overlapped the structure of the eighteenth century, which includes the historic center of the contemporary town. Despite this evident discontinuity of forms in the urban evolution of Timişoara, some elements were kept from a structure to another. Research and analysis of these elements may give a starting point for a more sensitive interpretation of the concept of continuity in the urban historic areas of the city.

Rezumat

Toate referirile la istoria dezvoltării urbane a Timişoarei accentuează modelul de evoluţie prin succesiunea unor structuri urbane. Astfel, oraşul medieval a fost înlocuit de cel al perioadei turceşti, care, la rândul său, a fost radical schimbat prin lucrările de reconstrucţie din secolul al XVIII-lea. Acest tip de dezvoltare urbană este de obicei asociat cu discontinuitatea şi uneori este folosit pentru a justifica anumite acţiuni în intervenţii urbane contemporane. Dacă pentru oraşul medieval este mai dificil să i se afle configuraţia, urmele din perioada turcească au început să fie cunoscute în detaliu. Săpăturile arheologice din ultimii ani au furnizat numeroase informaţii cu privire la oraşul turcesc peste care a fost suprapusă structura celui din secolul al XVIII- lea, care cuprinde centrul istoric al oraşului contemporan. În ciuda discontinuităţii evidente a formelor prin care a trecut structura urbană a Timişoarei, pot fi detectate elemente păstrate de la o structură la alta. Cercetarea şi analiza acestor elemente oferă un punct de plecare pentru un comentariu şi o interpretare mai sensibile a noţiunii de continuitate în spaţiul urban din zonele istorice ale oraşului.

Keywords: urban development, historic centre, discontinuity, urban structure, excavations, persistent elements

1. Urban structures of Timişoara

The long evolution of Timişoara has been interpreted as a sequence of overlapped structures, new

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ones replacing the former. That led to an appreciation of the urban configuration of its historic centre, the Cetate district, only in relation to the modern stage of the last three centuries, when the city received a predetermined plan. One spoke mostly about discontinuity in the urban development of Timişoara and possible traces of material forms of its history were considered lost. Although hard to find, this legacy has left traces in the very last configuration of the city, generating elements of continuity, which can lead to a more nuanced interpretation of the contemporary city. Compared to the still controversial genesis of the city, history of Timisoara has gone through several stages recognized by documents and archaeological research. The Medieval town and the Turkish period town may be recognized as previous urban structures of the modern one received in the 18th century.

1.1 The Medieval town

Located in a strategic point of the Banat Plain, through marshland bordered by the rivers Timiş and Bega, Timişoara has been built in a first urban configuration by King Charles Robert of Anjou who raised a royal palace, setting here a time period, between 1316-1323, the capital of his Kingdom. The castle, was the beginning point for the settlement that was developed in the north. Built by Italian craftsmen, it is believed that the Anjou castle was organized in a rectangular shape with a courtyard and was separated from the town by an arm of water. Rebuilt in the time of Iancu de Hunedoara, the Castle kept its site, with small variations of the wall position. The recent archaeological research descovered the image of its donjon configuration. The medieval town was developed in connection with the nobiliary residence and with a strategic role, especially during the Turkish expansion.

1.2 The Turkish town

The structure of Timişoara changed after 1552, when it became a Turkish province. The town was divided into four districts, getting organized suburbs as slums. Its nucleus remained the castle to the south, as the seat of administrative power and the city to the north, strengthened by palisades. Outside lied the two areas inhabited as suburbs, the Big Palanca and the Small Palanca. Inside the walled town, winding streets delimited plots occupied by important buildings such as mosques, bazaar, Pasha's house, baths. These houses were built of masonry structures, while the homes were made exclusively on wooden structures.

Figure 1. The Turkish plan.

Figure 2. Timişoara, plan of 1752.

1.3 The modern town

The reconstruction of the town throughout the 18th century, after the conquest of 1716, by Eugene of Savoy s troops, imposed a new model of urban shape. The organic urban development of the Turkish period was replaced with a predetermined plan with rectangular street network and great squares lined by the most important buildings. Keeping the same site, the town received a Vauban fortification of brick masonry, to which suburbs develop at the distance imposed by strategic conditions. The built area was almost entirely replaced throughout the century, occupying rectangular plots with brick masonry buildings, most sumptuous in the three important squares of the new town [1]. These squares focused the representative buildings of the civil or military administration and the important churches. From the former town it have been preserved the castle, supporting some changes and the churches in St. George and Liberty Square. In the 19th century and early 20th century the building fund of the town held numerous changes that led to the lifting height of the center in the historic centre. It also changed some architectural features of the built areas, but the urban structure printed in the 18th century remained, still offering a lot of information on its historical evolution. In the succession of urban forms there were preserved elements that have conditioned more or less the configuration of the following urban shape. It can be appreciated on different levels of influence this conditioning and the approach would be beneficial for grounding all kind of works in the historic center of the town.

2. The urban level

From the medieval configuration of the town there was not preserved any material heritage, except the archaeological traces under the Huniade Castle. And yet this first urban form generated a relation between castle and fortified town, transmitting a perimeter of urban development to the town of the Turkish period. In this area, some points as the castle and the churches have had local influence in the shape of the new structure. So, the castle became the residence of the new administrative power and the site of St. George square, with its Great Mosque, kept on the site of the former St George church, remained the most significant religious urban space of the Turkish town.
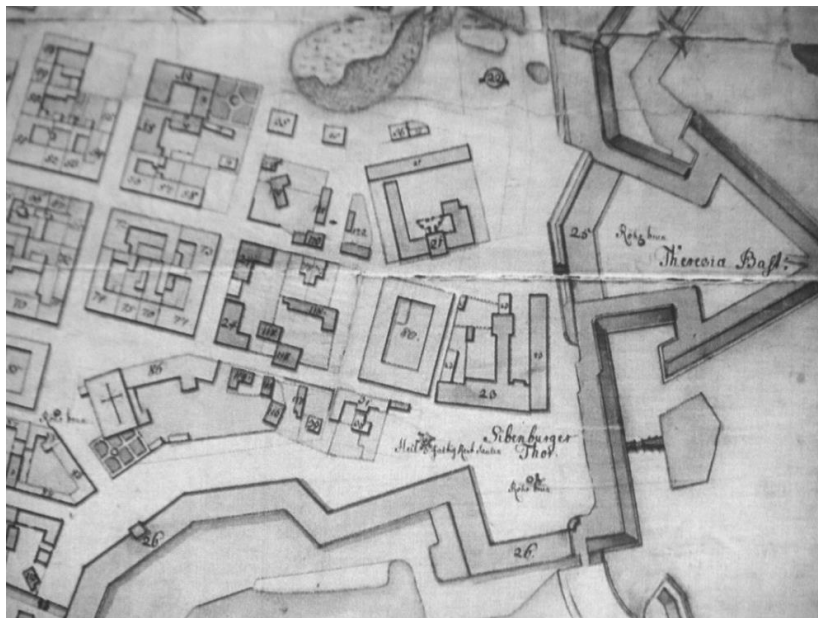
Figure 3. The St. George Square and the barracks of Transylvania (mid. 18th. cent.)

The replacement of the Turkish urban structure to the 18th century one was done gradually throughout the whole century. Even if the design of the town was completely changed, the major urban nuclei of the former town were kept. Libertății Square, the center of the Turkish town, developed around the house of the pasha, or the religious center of the Great Mosque are found in the modern town of the 18th century generating possible interpretations. The triangular shape of the St. George Square, which deviates from the specified rectangular form of the plots, was made in relation to a part of the old medieval church position and later becoming the Great Mosque. The direction of the street Alba Iulia, deviated from the other north-south direction parallel streets, requires a prior conditioning as well as the Transylvania barracks configuration, on the eastern side of the town, built instead of the Turkish palisade. The street Lucian Blaga, focusing on the castle tower, takes a route conditioned by the previous link between two administrative zones of the city. Although urban structures had fundamentally different configurations, such details put into question the element of continuity and its role in the restructuring of the city.

3. The architectural level

Except the Huniade Castle, which preserves and integrates elements of all historical periods of the town, from the Turkish Timisoara stage there was not kept any building. At the architectural level, elements of continuity can be detected only during the last three centuries, even if passing by significant changes and replacements. The fact that this process of replacement continues requires a deep rethinking of the concept of continuity at architectural level. The18th century have built in the manner of the provincial baroque and can still be recognized rules of composition for the parcels and their component buildings From the compact construction with an inner courtyard, developed on two - three levels, with vaulted ground floor and facade rhythmic alternating pilasters and cornices of the windows, the 19th century brings neoclassical elements simplifies forms, then uses all the stylistic trends of the period up to secession architecture. In this overlap stylistic continuity is maintained a formal language that comes out of the classical forms, but gains a wide variety of expression. The fact that the preference of Timișoara in the 19th century turn to neo-renaissance and neo-baroque, can be linked to the architectural heritage of the 18th century, even if society tried to detach from it. On the other hand, this aspect contributes to the formal unit of the historic city centre. Even in case of replacements were kept compositional characteristics. For example, the Discount Bank in Libertății Square, which replaced the Franciscan church of its northwest corner, was designed in the same spirit of a volumetric dominant.

Figure 4. The Franciscan church   Figure 5. The Discount Bank

4. The archaeological level

Archaeological remains in relationship with the urban environment put specific problems and bring value to a historic urban area. In Timisoara, in last time, various works in the historic center brought to light traces of the Turkish town and of the 18th century fortress that was demolished in the early 20th century. Some of these elements can be retrieved and enhanced as a link between the various urban structures of the town. In this context can be taken the issue of continuity in terms of access to information on the city s history, even if reading is on several levels, archaeological, architectural and urban. Part of the remains of the Turkish town, except the traces of mosques and baths from the Libertății Square indicate wooden structures for housing and road routes. Hard to put in value, they can be kept in memory by specific means, possibly through different pavement marking on nowadays streets. Foundations of St. George church, as traces of the Turkish bath in Libertății Square, provide an alternative of reading the history of the city and a new perspective on the interpretation of continuity of urban structure and its material expression on built environment. In the same way can be seen the preservation of the pavement discovered on the south side of Union Square or the attempt of maintain the image of the lock at the former Vienna gates of the fortress.

Figure 6. The Turkish bath

Figure 7. The lock

5. The level of mentality

Certainly the last three centuries have created a certain type of mentality in relation to the built environment of the historic city center and sometimes there is cited the type of urban development by replacing old structures to justify contemporary replacements. It is true that the 19th century brought a number of changes because of destruction during the siege of Timisoara in 1849 and of the rapidly developing in the second half of the century [2]. All this was followed by the radical interventions of the early 20th century, when, after the demolition of the city fortifications were built a number of administrative and report buildings and the historic center, raised its height regime. This resulted in changing the character of the constructions and even of some urban areas. Now, the former Church of St. George was demolished and the square was transformed from a triangular shape to a quadrilateral one. In parallel with the rise of height in the middle of the historic city center, there were changes having an impact on the specificity of its architecture. A series of detail changes was done in order to adapt buildings to new functional requirements. This spirit of innovation characteristic in the 19th century was perpetuated in the 20th century. At the beginning of the 7th decade was demolished the barracks of Transylvania, considered already a historical monument [3]. It was the longest building in the South East of Europe and a witness of the old fortress. If contemporary interventions in the most important historic area of the city take the model

of the replacement of the built using various reasons, they often refer to the specific urban development through the implementation of a new structure after the annihilation of the old one. In this way the replacement deeply has been imprinted in the minds of the city and still proves very harmful.

6. Conclusions

The city is structured and restructured continuously. Even a massive destruction leads to a reconstruction that maintains some of the previous information or refers to it. From this perspective, the problem of continuity should be shifted to the integration, correlation and consistency of formal dialogue. For urban and architectural decisions, that bring a loss of historical substance, the discontinuity of the evolution of urban structures cannot be invoked, because between continuity and discontinuity boundary seems to be very fragile.

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SECTION 2

Architecture in the City

Cultural landscapes, living with heritage, contexts, construction & technology

Mutations in the ephemeral architecture

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Abstract

European architecture is generally a static architecture, buildings are constructed to be used for a long period of time. A longer lifetime usually makes the difference between a valuable architecture and an inferior quality. The twentieth century brings changes to the definition of architecture; the ephemeral buildings becomes valuable and the temporary architecture becomes more important. This change is due to technological evolution and the fact that the global movement of population becomes a universal constant. The workplace is no longer a fixed space, the buildings are no longer be placed in a certain way for a certain use, and the fixed spaces become flexible. The irony of ephemeral architecture is that sometimes it lasts longer than it was originally planned. The causes of these mutations are related to the contemporary lifestyle: the need of constant change, the need of testing a space before building something that lasts, etc. Also, the people are different; the gender, the age or the income are no longer factors of belonging to a particular group. Change is really the only constant. In the history of architecture we can find many examples that demonstrate the various causes of ephemeral perennial mutations. The best known example is the Eiffel Tower. Although it was designed to stay on the site 20 years, it has quickly become an attraction and a symbol of Paris and thus forcing the road to everlasting. Along with the Eiffel Tower in this category we can remember and discuss other projects that have remained famous in the history of architecture as Barcelona Pavilion by Mies van der Rohe (1929) or Pavilion of Portugal (Alvaro Siza, Souto de Moura) from exhibition Hanover (2000), Church of paper (Shigeru Ban) in Kobe (1995), Venice Biennale pavilions, etc. Thus we can analyze the influences of which determines the actual lifetime of a building without considering the expected life and community reaction to be addressed. This paper identifies the elements that cause these mutations based on the analysis of case studies.

Rezumat

Arhitectura europeana este in general o arhitectura statica, cladirile fiind construite pentru o utlizare indelungata. O durata de viata mai lunga face deobicei diferenta intre o arhitectura valoroasa si una calitate inferioara. Secolul XX aduce schimbari majore directiei perene a arhitecturii deoarece apar puternic din urma abordarile temporare. Aceasta schimbare se datorează evoluţiei tehnologice, dar şi faptului că mişcarea globală a populaţiei devine o constantă universală. Locul de munca nu mai este fix, cladirile nu mai trebuie asezate intr-un anumit mod pentru o anumita utilizare, iar spatiile fixe devin flexibile. Ironia arhitecturii efemere, cu o durata limitata de timp, este ca uneori ea rezista mai mult decat este prevazut initial. Cauzele acestor

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mutatii tin de factori diversi generati de modul de viata contemporan. Nevoie se schimba in continuu, oamenii sunt diferiti, iar genul, varsta sau venitul nu mai sunt factori de apartenenta la un anumit grup. Schimbarea este de fapt singura constanta. In istoria arhitecturii putem gasi numeroase exemple care sa demonstreze diversele cause ale mutatiilor efemer-peren. Între exemple amintim Turnul Eiffel, Pavilionul Barcelona a lui Mies van der Rohe (1929) sau Pavilionul Portugaliei (Alvaro Siza, Souto de Moura) de la Expoziţia de la Hanovra (2000), Biserica de hârtie (Shigeru Ban) de la Kobe (1995), Pavilioanele Bienalei de la Veneţia, etc. Putem astfel analiza atât influenţele care determină timpul de viaţă a unei construcţii independent de timpul proiectat cât şi reacţia comunităţii careia i se adresează. Lucrarea de fata identifica elementele care determina aparitia acestor mutatii bazandu-se pe analiza studiilor de caz

Keywords: ephemeral, perennial, temporary.

1. Introduction

One of the important elements under discussion when talking about the life of a building is the reference system. By definition the architecture is temporary[10], and the lifespan is rarely predefined. Throughout history, the buildings were designed for eternity and permanence was a sine qua non requirement. We consider that this concept has been theorized by Vitruvius when he introduces the concept of firmitas (stability), along with other virtues of architecture: venustas and utilitas. Firmitas refers not only to the stability of a structure, the concept can be extended to a building's ability to withstand natural or artificial external aggression regardless of the age of the building.

Permanence and temporality are two complementary notions which are in a relationship of influence and the scale movement between the two depends on the reference system and the perception, interpretation and experience of the observer.[10] Further we will take reference of future discussions classification Jacques Gubler. The temporal categories defined by him – ephemeral, temporary, durable, monumental - can be considered milestones for a general classification of the architecture in terms of lifespan.

Sometimes the time between planned and actual time duration major differences occur. Some buildings disappear more quickly than would be want at the design, others resist more than the time designed. With these examples we can study more closely the relationship between temporary and permanent, how they influence, make, and the elements that lead to the transformation of a temporary project into a permanent one and vice versa. The causes of these mutations differ from one instance to another, for various reasons: social, economic, political, etc.

European architecture is generally a static architecture, buildings being built for a long uses. A longer lifespan usually makes the difference between a valuable architectural and a lower quality. The last 200 years bring major changes to due to changing lifestyle architecture. This is due to the technological evolution, but also because the global movement of people is becoming an universal fact. The workplace is not fixed, not buildings must be designed in a certain way for a certain use, and fixed spaces are flexible.

The first milestone that marks this trend is the Industrial Revolution of the late eighteenth century, during which the workplace and home are separated. They become distinct areas and the geographical area in which the individual performs its activities by daily increases. The twentieth century brings with it the emergence of suburbs and the distinction between dwelling employment, transportation and recreation.

Ironically, ephemeral architecture, with a limited duration of time, sometimes it lasts longer than is expected. The causes of these mutations are related to various factors generated by contemporary lifestyle. The needs change constantly, people are different, and gender, age or income are not factors belonging to a particular group. Change is the only constant fact.

The examples presented below eliminates extreme forms of temporality or permanence, discussing mutations appeared in constructions with a lifetime ranging from several weeks to several decades.

In the history of architecture we can find many examples that demonstrate the various causes of ephemeral-perennial mutations. Among the examples we mention the Eiffel Tower, Barcelona Pavilion by Mies van der Rohe (1929) or Pavilion of Portugal (Alvaro Siza, Souto de Moura) on the Exhibition in Hannover (2000), Church of paper (Shigeru Ban) in Kobe (1995), etc. We can therefore analyze the influences that determine the lifetime of a building without taking into account the time projected and community reaction whom it is addressed

2. The Eiffel Tower

Tower designed for the Universal Exhibition of 1889 has a turbulent history and is often subject to conflicting discussions on storage, dismantling or even its destruction. The first controversy arose after the presentation of the project It was severely criticized by a large group of French intellectuals led by Charles Garnier. They published a petition in "Le Temps" in February 14, 1887[11, pg 174] where they qualified project "useless and monstrous", "barbaric" and a humiliation for the monuments of Paris.

The authorization for the tower was originally for 20 years, after this time it would become the property of the municipality and be removed. Due to its height and usefulness in terms of communication it will be kept and used increasingly intense. Also, Gustave Eiffel will transform the flat he had at the top level into a space of air resistance experiments on falling bodies and meteorological observations.

The next critical moment in the history of the tower is the time of withdrawal of the German army from Paris in August 1944, Hitler ordered the destruction of the city, including the tower[4], but the General who received the order decide not to comply, so on June 25, the German flag waving in top of the tower will be replaced with the French flag, a sign of regaining Paris.

At 80 years from the opening, the tower is wanted to popularize Canadian Universal Exhibition in Montreal from 1967 There are testimonies[1] that speak of negotiations between the mayor of Montreal and French President Charles de Gaulle to dismantle and move the tower for a specified period of time in Montreal. Negotiations are stuck with the company that manages the tower refusal; they feared that the municipality will not allow rebuilding on the old site structure.

On the 125th anniversary of the inauguration of the Eiffel Tower is a powerful symbol both locally and internationally. It turned from a project 20 years in a lasting project, a recognizable image. First, keeping the tower is due to the economic interest, and facilitation of communications. Also had the success that it had in the exhibition of 1889 and 1900 turns to the public opinion in a resistance movement against its removal. For the popular culture the tower becomes a symbol. Today, we can say that is the symbol of Paris, a landmark recognized around the globe. Paris without the Eiffel Tower would not be the same.

Although initially the Eiffel Tower had extended the lifespan for economic reasons, today it is a very important symbolic element. We can say with certainty that it is a living structure with many qualities. If it presented only an economic significance, then perhaps the interest would become

lower with the emergence of higher buildings or adequate structures for communications.

3. Barcelona Pavilion by Mies van der Rohe (1929)

Same as Eiffel Tower, the pavilion designed by Mies van der Rohe for the Universal Exhibition of 1928 has a tumultuous history and has turned from a temporary pavilion into an architectural manifesto of the twentieth century that influenced the work of many generations of architects. The pavilion was designed to accommodate the official reception presided over by King Alfonso XIII of Spain along with the German officials[14].

The building has a strong symbolic component, it sought to express the image of the New Germany, eager to distance itself from the imperialist period[3, pg 271]. The project seeks to restore the politics of the Weimar Republic which based its philosophy on contemporary values"openness, freedom, modernity and globalization". From the structural point of view, the project is very ambitious. With a frame that resembles a domino game, a very thin roof that seems to float over the entire structure, the image suggested only from horizontal and vertical lines is a clear, following the current time. Thus the German pavilion is a model of contemporary architecture, the faithful transposition of the doctrine of the new German state.

Along with closing of the exhibition, the pavilion is dismantled, apparently it served the purpose and its mission was completed. However, its success exceeded time limits for which it was designed and comeback into attention after 30 years. In 1954, one of the spanish architects who participated in the construction of the pavilion, Oriol Bohigas, start the approaches that led to the reconstruction of the pavilion in 1984[8, pg 77].

In this case, the temporal mutation is easily affected by the fact that the pavilion has been removed, but the reconstruction is accurate. In fact, in the 80s two pavilions are built from the original pavilion. On the one hand we have to take into account the reconstruction of pavilion at the Universal Exhibition of 1928, on the original site. Due to the existence of the original plans but also that the initial foundations were never cleaned, the replica has a high degree of authenticity.

On the other hand, the pavilion presented by the OMA at the 1986 Milan Triennale brings into focus the Barcelona Pavilion. The architects created a manifesto, a challenge to a discussion of the question of authenticity and pastiche [5, pg 125] in a moment when the site of the Barcelona Pavilion replica was currently in progress. So they gather fragments of the original pavilion, which they expose in a way as close to the original, but in a curve plane instead of a rectangular because of space provided by the organizers of the exhibition.

The gesture has a double significance. Besides bringing into question modern architecture that at the time was considered to be lifeless[15], they collect many fragments of the original pavilion during which they discovered the road that the elements of pavilion had after its demolition. In SMLXL, we find the story of this pavilion, how it remained in Spain after the exhibition and was exploited by extremist political groups and eventually repatriated [9, pg 49-55] once the Spanish Civil War was over. After reaching Berlin, the components are stored in containers, due to the political and economic low interest and to the situation in the country and general disgust towards modernism. Valuable materials are reused on different sites in the German capital. Only after the liberation all containers are opened and the pavilion turns into a gas station in the locker room for the 1952 Olympics in Helsinki, after which it is abandoned again.

In this case, the desire to preserve a valuable building occur primarily in the cultural environment as recognition of the artistical value and of the importance of the architectural phenomenon. The

emphasis is on the representative value of the pavilion, considered one of the most relevant buildings of modernism[13, pg 122][12, pg. 327].

4. Berlin City Palace

In contrast, we can find many examples of perennial architecture that disappeared after a much shorter time than that for which they were designed. The causes are many: sometimes occurred wars, natural disasters or design errors. It is clear that architecture is in constant transformation and the regeneration need imposed by society is growing rapidly. Perhaps the best example of this is the Royal Palace in Berlin, built in the eighteenth century.

The mere name of "palace" entitles (ordinary human imagination) to last for centuries. Contrary to appearances, it will be demolished after the Second World War. The official reason will find motivation in the state of disrepair of the building as a result of bombing during the war and also following the street fighting that followed the war.

Originally, the palace was the residence of Prussian kings and German emperors. Its construction began in the fifteenth century and was completed in the eighteenth century. The final image of the baroque palace belongs German architect Andreas Schluter. He had, on the final planimetry, 1200 rooms divided by two courtyards. In the nineteenth century, the eastern facade receives a dome, more than 100 years since Frederick I of Prussia command. After the fall of the German Empire in 1918, the palace was converted into a museum.

End of the Second World War finds it in the area controlled by the Soviet Union, into an advanced state of decay, due to the two bombs that hit him in february 1945 and also the fires that precedes. However, the structure is not irreversibly damaged, with the possibility of rehabilitation, at the expense of substantial costs. The new leaders of East Berlin, part of the German Democratic Republic will do everything possible to demonstrate the non-viability of the building and the need for its demolition.

The demolition will stir wrangle, even in the ruling political camp. But the desire to remove architectural history of the city and creating a new image in the spirit of the new socialist order imposed by Stalin's directions will be stronger than any reason. The massive stone palace will be dynamited in 1950, and the debris will be taken to the outskirts of Berlin where there are today as a miserable exhibition of marble and architectural elements.

Walter Ulbricht, Secretary of the United Socialist Party (East German communist party) said after the demolition that the site of the former palace is the center of the East German Republic downtown and that it will become a "field demonstration where people's will to fight and rebuild can find expression. "This palace was considered by socialists with a special symbolic place, a place where people found their national essence. For them, the destruction was equivalent to erasing the past by removing one element of collective memory.

After the diplomatic recognition of East Germany, is decided to design a building to house the East German parliament. The site chosen will be the former palace, so that the appearance of the Parliament building to mark the symbolic triumph of communism over the kingdom. However, despite the propagandistic intentions, the project attempts to integrate a true cultural center modeled on the Centre Pompidou in Paris.

If the the Berlin City Palace resited from 1451 until 1950 (almost 500 years), the Palace of the Republic will stand much less: from 1976 to 2002, when authorities shall, upon request of the

population, rebuild old baroque palace. This example demonstrates that the society is present in contemporary urban life and urban policy vulnerability invites us to abandon demiurgic dimension of the architect, to establish processes and to reintegrate a space into the contemporary time. Not only architects and planners imagine spaces, the process is reversible, the user can become a planner who has the power to transform the "spaces of representation" in "representations of space".

5. Conclusions

Temporary architecture was used in the last century as a means of representing the utopian ideas of architects and planners. It is the mechanism by which it can achieve dreams that no one would be willing to finance into the perennial system[2, pg 6]. Ironically, in some cases, temporary buildings last much longer than the lifetime proposed. In addition the system is reversible: buildings designed to resist forever are destroyed because they no longer meet contemporary needs.

The examples presented above try to show that the changes of the lifetime of a building are different. In some cases we can identify economical influences, sometimes political or social. It is interesting that the society, can influence more and more the city image. The decision-making power is not longer just in the hands of specialists. Sometimes the people have a different vision from the specialist: sometimes it's collective memory, sometimes the spaces with a strong identity of its own.

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The Situation of the Architectural Fund in the Early XX Century in Transylvania

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(Accepted 15 December 2014)

Abstract

The study presents the building fund at the beginning of the XX century, in the city of Oradea in Transylvania, reported on the main issues that have influenced the development of constructions: demographic, economic and industrial evolution. Highlighting the economic level industial transylvanian cities, in early XX century, enables the understanding of the pace of development of the built heritage. Industrial development of cities attracted the rural population, which led to population growth in urban areas, at a faster pace than building development took place, leading to the phenomenon of urban overcrowding. The industrial-economic development of one zone justify the choice of building materials, structural design and evolution of the urban space in the early twentieth century. Knowing the financial statements of the city and the economic and industrial context of the area in the early XX century, offers insight into the dynamics of community psycho-social development and how urban space evolved. The dual character of the town is divided between heritage protection as a condition of continuity of the historical evolution of the city and the mark of modern society as a change of standards that causes discontinuity in the urban space. Knowing the evolution of the urban fabric validated by statistics and indicating the economic value of the built fund, solutions for preserving the historical heritage can be proposed.

Rezumat

Studiul de faţă prezintă situaţia fondului construit la începutul secolului XX, din oraşul Oradea şi din Transilvania, raportat la principalele aspecte care au influenţat dezvoltarea construcţiilor: evoluţia demografică, economică şi industrială. Evidenţierea nivelului economico-industial al oraşelor din Transilvania, la inceputul secolului XX, permite înţelegerea ritmului de dezvoltare a fondului construit al oraşelor. Dezvoltarea industrială a oraşelor atrage populaţia din zonele rurale, ceea ce conduce la creşterea populaţiei din zona urbană într-un rimt mai alert decât are loc dezvoltarea construcţiilor, respectiv la fenomenul supraaglomerării zonelor urbane. Cadrul economico-industrial al zonei justifica alegerea materialelor de constructie, conceptia structurala si modul de dezvoltare a spaţiului urban, de la începutul secolului XX. Caracterul dual al oraşului este împărţit între protejarea patrimoniului ca o condiţie a continuităţii evoluţiei istorice a oraşului şi amprenta societăţii moderne ca o schimbare a standardelor ce provoacă discontinuitate în spaţiului urban. Cunoscând cauzele segregării pânzei urbane, se pot propune soluţii de revitalizare, refuncţionalizare şi reintegrare a moştenirii istorice, în circuitul economico-social al comunităţii locale.

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1. Introduction

The industrial revolution of the late XIX century and the strong development and expansion of industries has driven a strong market economy and created the communities socio-cultural climate. XIXth century architectural manifestations occur in parallel with the development of industry, technology, innovation in building materials, the use of industrial products (precast) and new construction techniques.

Evolution of the built form of cities in Transylvania, which is valued in terms of volumetric, architectural and structural concept or the construction materials used, are due directly to the development of the construction industry and is influenced by a number of factors:

- Population evolution - increasing demand for dwellings;
- Socio-economic level - the development of local economy and commercial banks;
- Cultural and political climate - multiethnic cultural influences and administrative policy;
- Architectural trends: secession, eclectic, engineers' architecture etc;
- Development of construction industry and construction materials;
- Local availability of construction materials;
- The legislative framework in the field of construction;

Major changes recognizable in the architecture form, material and structure are determined by events in the development of society from the late XVIII century:
- The emergence of new materials and technologies of construction: use of reinforced concrete and metal structural elements created structural opportunities, substantiating the emergence of modern architecture;
- The rapid increase in number of the urban population caused new types of buildings with specific functions and needs of the population: factories, railway stations, food halls, administrative buildings, hospitals, schools, real estate report, etc.
- Evolution of spiritual aspirations from empiric belief to scientific knowledge causes new theoretical foundations.

The use of new materials such as reinforced concrete and metal structural elements, created new opportunities for structural design: coverage of larger spaces, natural lighting, lighter construction, faster execution and installation, fire resistance etc. The experience gained in the implementation of urban and industrial buildings will be applied in civil engineering through the use of: steel truss beams to cover the large openings, metal structures or reinforced concrete frames, use of large areas of glass for natural lighting etc.

Initially, the use of new construction materials: steel and concrete is hidden under the finishes or eclectic or classical style decoration, but it is manifested in architectural engineering particularly visible in the industrial, agricultural and engineering built fund: industrial buildings, silos, bridges etc. Residential architecture, mainly social-cultural constructions, is dominated by two main trends: organic or geometric secession and eclectic motifs. The concept of "total work of art" in secession architecture, followes the construction and decorative design details so that structural elements must combine into a whole. The main structural elements of metal and glass are used as part of the interior and exterior decorations.

2. The economocal-industrial built fund of Transylvania, in the late XIX century

In Transylvania, the industrial revolution took place in the second half of the XIX century, thanks to the modernizing reforms that supported the development of the industries: mining, metallurgy, transport and construction machinery. The state encouraged the development of small and medium enterprises by providing tax and customs facilities.

The effect of the Industrial Revolution reflected onto the Transylvanian society, in development of the social division of labor, the emergence of new industries, regional centers of production and industrial cities. According to the "Act XXI of 1886" along with other cities in the Austro-Hungarian Empire were established municipality rank for the main cities in Transylvania: Arad, Cluj, Oradea, Satu-Mare, Targu Mures and Timisoara. At the time, except teh city of Oradea, other cities were " royal free ". This meant that they were juridical and administrative independent from the Hungarian government.

The numeric population growth of cities has seen a doubling between 1823-1870 and then a linear increase to 20÷30% every decade. After 1880, with the development of the industrialization process, the introduction of agricultural and improving health (due to public health law in Hungary in 1876) Transylvanian population is growing in the entire principality. In light industrial progress and urban development of cities, there is a migration of people from rural to urban areas.

Table 1: Numeric evolution of the population in Transylvania, between 1814-1910.[2:215-216]

Orase	1814	1823	1870	1880	1890	1910
Arad	-	13 221	32 725	35 556	43 682	63 061
Timisoara	9500	11 170	32 223	33 694	43 439	72 750
Satu-Mare	-	11 656	18 353	19 708	21 218	35 214
Oradea	4 700	15 727	28 727	31 324	40 750	64 169
Cluj-Napoca	-	-	28 867	32 831	37 184	60 984

The official census records shows that the majority population of the cities was of Hungarian origin, the Romanians were a official percentage of 2.8 ÷ 16.3% and from the structure of population by Orthodox and Greek-Catholic confessions, appear a truer percentage around 20%. Ethnic population structure allows us to get an idea about the financial strength and investment of the ethnicities. For example, in the city Oradea, before the years 1848-1849, investments in construction were made in majority by the Romanian population. After 1848, the Jewish population held the financial power, and built much of the present constructions in the center of the city, followed by Hungarian population. Major investments in real estate from the Romanian population were made after World War.

In parallel, appeared and developed the Hungarian banking institutions, and at the late XIX century the Romanian banking institutions, which are all grouped in the center of town. Through the issued bank loans, they will have a strong positive influence on the development of the industry and the economy, ensuring the financial support for: the construction of railways, infrastructure works, civil and industrial constructions.

Judging by the number of remaining capital assessed in crowns, at the end of year 1900, it can be seen an overview of the investment capacity of each city for the next year. It is noted that the order of the cities: Arad, Oradea, Timişoara, Cluj-Napoca, Satu-Mare and Târgu-Mureş, is coinciding with the industrial and economic development of cities.

Table 2: The situation of the savings left in banks, at the end of 1900.[2:233]

Orase 1900	Nr. Banci	Capital ramas la sf. an
Timisoara	**16**	26 970 000 cor.
Oradea	15	28 378 000 cor.
Arad	9	**38 668 000 cor.**
Cluj-Napoca	14	22 372 000 cor.
Satu-Mare	7	7 701 000 cor.
Targu-Mures	4	6 486 000 cor.

Construction of railways favored social and economic relationships between cities, helping to increase the circulation of goods and people. In the year 1868, the Hungarian government began the construction of several rail routes in Transylvania:

- 1870 Oradea, Cluj-Napoca;
- 1871 Alba Iulia, Târgu Mureş;
- 1872 Teiuş - Copşa Mică - Mediaş - Sighişoara;
- 1872 Sibiu - Braşov;
- 1873 Cluj-Napoca - Războieni;

Facilitating the transport of construction materials has led to the development of the construction industry by:

- Reducing the cost of products 4-5 times and implicitly the price of delivery;
- Faster and safer transport of goods, 12-20 times faster than animal traction;
- Development of communications and transfer of informations.

Using steam engine and later petroleum fuel machines used in construction shortened the execution time and provided new constructive opportunities. Also, technological progress lead to the development of building material factories: brick, tile, cement, metal products, insulation materials, fuels, etc., which provided the raw material needed to develop the building fund.

In the construction sector, the largest share of industries have capitalized local raw materials: construction, extraction and processing of iron and wood. Workforce employed in these areas varies according to the locally available natural resources.

Table 3: Distribution of workforce employed in the industry of constructions, in the year 1900, in Transylvania.[3:506]

County, city or municipality	Total personnel	Iron and other metals	Rock, Ceramic, Glass	Wood	Constructions
Arad	17 754	1 920	779	**2 455**	1 760
Bihor	15 072	1 855	899	1 198	**1 993**
Cluj	10 743	897	922	1 158	**1 484**
Satu-Mare	10 770	1 266	472	**1 522**	1 338
Timiş	**20 286**	**2 470**	579	1 579	2 349
Reşiţa	17 190	**6 043**	1 016	1 160	1 427

Table 4: Distribution of workforce employed in the industry of constructions, in the year 1910, in Transylvania.[3:506]

County, city or municipality	Total personnel	Iron and other metals	Rock, Ceramic, Glass	Wood	Constructions
Arad	20 474	1 996	948	**2 577**	1858
Bihor	22 730	2 313	1 271	2 394	**2 948**
Cluj	15 643	1 259	1 000	**2 627**	1 645
Satu-Mare	13 914	1 410	716	1 598	**2 076**
Timiș	**26 207**	2 615	702	1 881	**3 420**
Caraș-Severin	22 947	**7 068**	1 357	2 189	2 006

Judging by the number of workforce employed in the industry, in the field of constructions, it can be established the industrial potential of the city. The cities of Transylvania, which can be considered industrial centers in the following order: Timiș, Arad, Resița, Bihor, Satu-Mare, Cluj. West Transylvania has the highest industrial development, which is emphasized by the development of banking institutions and the remaining capital at the end of the year 1901.

In industrial cities, the construction industries recorded a spectacular increase in the number of actual industry personnel employed, by up to 100%. Between the years 1900-1910, the cities wich before had experienced significant development of the industries as Timiș and Satu-Mare, are oriented towards real estate development, developing the constructions as the first industry. The main industrial centers maintain the upward trend of development of the construction industry, along with metallurgy, ceramics, stone and wood, while small towns show a significant development of the small industry.

3.   The situation of the built civil fund in Transylvania, in the late XIX century

The economic development of Transylvania expressed in a new type of building and civil engineering in urban and rural areas. In the late XIX century in the urbanization occurs in the main cities by: stone or asphalt paving of streets, introducing underground drainage, introducing filtered water, installing oil, gas and in the end electric lighting and phone adoption. Strong urbanization aimed especially central areas of cities, while suburbs and small towns kept their semi-rural appearance.

Financial strength of the invested capital was owned by the big industrialists, banks and municipalities. They, through bank loans or financial resources gained from economic and industrial activity, respectively hall budget revenues, were the main investors in the construction field. Municipalities, in association with private investors, are assigned important building cities: city halls, theaters, hospitals, schools, bridges and infrastructure. In addition to industrial buildings, both private investors and municipalities constructed inns and hotels.

In 1910, the situation of civil building fund across Transylvania, based on the type of materials used was as follows:

Table 5: The situation of dwellings by the type of the materials used in construction, in the years 1900 and 1910, in Transylvania.[3:206]

Type of construction	1900		1910		Evolution	
	Number	Percentage	Number	Percentage	Number	Percentage
Rock or brick	161 729	16.8%	197 817	18.9%	+36 088	+2.1%
Clay or adobe with rock or brick foundation	27 673	2.9%	74 154	7.1%	+46 481	+4.2%
Clay or adobe	201 298	20.9%	182 138	17.4%	-19 160	-3.5%
Wood or other materials	572 845	59.4%	590 850	56.6%	-18 005	-2.8%
TOTAL	**963 545**	**100%**	**1 044 959**	**100%**	**-**	**-**
Type of construction	1900		1910		Evolutia	
	Number	Percentage	Number	Percentage	Number	Percentage
Tile, tin or slate roof	209 517	21.7%	361 247	34.6%	+151 730	+12.9%
Shingles or wood boards roof	355 267	36.9%	354 218	33.9%	-1 049	-3.0%
Rush or straw roof	398 761	41.4%	329 464	31.5%	-69 297	-9.9%
TOTAL	**963 545**	**100%**	**1 044 959**	**100%**	**-**	**-**

Looking at the numerical evolution of houses, it appears that the number of houses made of adobe (unburnt brick) without foundation or founded on wooden beams decreased in favour of houses with stone masonry foundation or burnt brick. A lower increase in the number of houses made of stone masonry or burnt brick in favour of unburnt brick constructions proves the limited financial possibilities of the population, especially in rural areas.

A decreased number of construction made by wood or other materials, is highlighted by the increased risk of fire that these buildings present. In the major cities, urban regulation prohibits the use of wood for constructions, after numerous fires have affected the buildings. For this reason, there is an ample replacement of thatched, straw or shingles roofs with durable ceramic tile, slate or tin and prohibit the use of wood to the constructions of chimney. Measures were taken to dismantle the annexes and unsanitary housing. Urban landscape planning saw to embellish the city by building shops and buildings made of brick to match that exterior of central areas.

In making important buildings like: town halls, theaters, hospitals, inns, hotels etc. the best architects were hired following a competition. The projects were evaluated in terms of aesthetics and especially financial costs.

By Decision no. 9781/1829 ordering all constructions and repairs to public buildings to be made only with the consent of the Government, based only on the issued building permit. Also this act regulated the activities in town made by craftsmen, merchants and city officials, the state was forcing mayors to support manufactures and merchants who wanted to settle in cities and whose activities contribute to the development of the economy.

Since the city Oradea was ranked second after the number of population, banking institutions and investment potential, it is consider that the situation of Oradea is the average development level of the main cities of Transylvania, in the year 1900. Reported to the evolution of the built fund and the number of inhabitants of Oradea city, between the years 1850-1890 was as follows: [3:200]
   - 1850 - the city had: *2 120 houses for 18 904 residents*;

- 1890 – the number of houses has doubled: *4 399 houses for 40 750 residents* +1 923 buildings with economical founction + 143 factories + 15 churches + 25 schools + 4 school-churches + 8 hospitals + 8 barracks + 26 buildings with divers functions;
- 1900 – the number of houses decreased: *3619 houses for 46 266 residents;*
- 1910 - the city had : *5 365 houses for 64 169 residents;*

Table 6: The situation of the buildings in the city Oradea, in the XIX century, by type of load bearing structure.[4:217]

Year	Structure rock/brick	Structure wood	Roof shingles/wood	Roof thached/straw	Roof tin/ceramic tile	Foundation rock/brick
1850	2 120		-	-	-	-
1853	2 460		-	-	-	-
1890	2 696	1 445	3 687	867	2 211	-
1900*	3 323	296	1 993	362	1 264	-
1910	3 254	2 111	2 026		3 339	1 404

Although the number of buildings was growing steady, in the year 1900 the number of dwelings (apartment buildings) decreases from 4399 (in 1890) to 3619 (in 1900) because of the demolitions of unsanitary housing in order to construct of new buildings, inns and public buildings.
Most buildings had one level and foundation made of wood (beams or mini piles), but between the years 1900-1910, started to appear brick or stone foundations even for buildings made of unburnt brick or earth.

Since most buildings in cities, especially the annexes were made of wood and there were no basic regulations on fire prevention, this kind of disasters on cities deviated often causing significant damage both in the center and the suburbs. Ever since 1830, Cluj Administration prohibits the use of wood in construction of new buildings within the city (especially shingle roofs, thatches or straw). In the city of Oradea wood was still in use for constructions, especially for annexes, but starting with the year 1910, the number of houses covered with tiles, tiles or sheet triples, a sign that there was a fire prevention campaign initiated by the mayor. Given that the number of buildings has had a spectacular growth, it is assumed that the owners had to change the roofs made of shingles or straw (which represented the main source of fire) with fire resistant roofing made of tin or ceramic tile.

The development of the built fund in the city Sibiu was done gradually, a more important evolution was registered in the suburbs. In the year 1841 there were in total of 1976 houses, and until the year 1900, just in the center of the city there were 1572 houses. In the mid VIII century, between the walls of the city fortress (center) it existed about 60 houses. Construction of wooden houses was banned within the city since 1830 because of the increased risk of fire. [5:32]

According to the "Historical Monuments List of Romania" prepared under the National Heritage Institute, the number of historical monuments built in the late XIX, early XX century distributed in Transylvanian counties, except wood constructions and rural construction, is: Arad 74 monuments, Bihor 56 monuments, Brasov 111 monuments, Cluj 135 monuments, Mureş 200 monuments, Satu-Mare 57 monuments.

4. The confort in hystoric buildings in Transylvania, in the late XIX century

In terms of living space based on the population number, cities lacked sufficient housing in the period 1848-1849 and the First World War. Overcrowding was a constant tendency in the neighborhoods on the outskirts of cities. According to the census from the year 1901, in some

houses were declared 60÷100 people in the situation where most houses had one level and one room which function of both bedroom and kitchen. A percentage of 20÷24% of the population lived in overcrowded housing. In the year 1907, according to the census, there were 11 780 housing (apartments) with a total of 18 772 rooms. [4:217]

Table 7: The distribution of apartment by the number of rooms, in the year 1907, in Oradea.[3:200]

Number of rooms	Number of apartments
1 room	7 993 apartments
2 rooms	2 140 apartments
3 rooms	847 apartments
4 rooms	420 apartments
≥5 rooms	380 apartments

Table 8: The distribution of number of buildings by the number of floors, in the year 1910, in Oradea.[3:200]

Number of floors	Number of buildings
1 floor	5 095 buildings
1 floor	217 buildings
2 floors	45 buildings
3 floors	6 buildings
4 floors	2 buildings

In 1910, in the city Oradea they were 5 365 buildings, of which 5 062 private buildings and 303 inns and public buildings. The vast majority of the 5 095 building with one level, had one, maximum two rooms. These were private buildings, constructed by working class, done economically and with cheap materials (burnt or unburnt brick, wood, clay, with wooden floors, eath for insulation of ceilings) by the financial strength of the owners.

In residential spaces, inhabiting characteristics showed a gradual evolution with the development of society, on all four dimensions: comfort, hygiene and health, safety and aggression towards the outside environment. Adapting historical structures to modern society's needs involves a series of functional and spatial interventions of conversion, which may affect structural performance. Causes of building degradations are due to the conversion process, and concerns mainly change in function and improvement of the interior comfort, where in the early XX century, cities had insufficient built fund based on the population number of the urban area. A percentage of 20÷24% of the population lived in overcrowded housing.

Overcrowding phenomenon in Oradea is highlighted in the year 1910 when in 5365 houses there were 14 776 dwelling (apartments) with a total of 23 179 rooms, of which 1 267 bathrooms.[3:200] Of the total number of houses, 201 houses had rooms with special function for bedroom. On average, there were 1.62 room/apartment and most homes have one room which functioned as bedroom and kitchen. From a functional perspective, the vast majority of the 5095 buildings with one level, had of one, maximum two rooms.
The rehabilitation of a heritage building's interior space, in terms of comfort, hygiene and health that allowed more substantial changes to historical functional requirements. Obsolescence of historic structures is revealed following the report of architectural expertise on functional space. The proposed solutions to modernize interior comfort can have consequences on the stability of the whole structure, especially when it is necessary to make holes in masonry or breaking horizontal and vertical slits for installation. In buildings with multiple levels, good initial organization of the interior space reduces the risk of structural degradation due to improved interior comfort.

Architecture of buildings with one level was plain, with strong accents of eclectic or Art Nouveau influences, especially Hungarian and Viennese secession. Structurally, the buildings were made on foundations of wood (beams and micropiles) or foundation of brick or stone masonry. The suprastructure was made of burnt or unburnt brick, wood, clay, wood floors insulated with earth. The roof had to be made compulsorily of ceramic tile or tiles, rarely sheets of tin.

Buildings with one, two, three or four floors were reduced in number (total 270 buildings) and the owners were large and small industrialists or municipalities. In constructing these structures were used performant techniques and modern materials: concrete, steel, glass. The buildings were made by famous architects based on architectural and engineering plans. The architectural style is divided generally into: for public institution eclectic style and for private buildings, hotels or inns and secession style with traditional Hungarian motifs.

Infrastructure was made of concrete foundations or brick or stone masonry. Elevations are made of thick masonry walls with brick, with arches and vaulted ceilings on metal profiles. For the masonry brick suprastructure appears reinforced or embedded self-supporting bars concrete. Some important buildings that were built around the year 1900, have reinforced concrete frames, reinforced inclined bars or self-supporting bars/beams (metal profiles I). Wood floors are replaced with concrete floors reinforced with Monier system (a matrix of reinforcement bars resting on self-supporting reinforcing steel profiles) or Hennebique system (independent reinforcement bars). Roofs are made of ceramic tile, slate and/or partial or total surface covered with galvanized tin for architectural effect. The roof's frameworks are made in eclectic style but appear engineer's structures made of wood joined together with bolts or riveted metal structures for the buildings with large openings.

5.   The continuity of historic built fund

Stylistic and architectural richness of historical centers of cities has grown in parallel with minimalist architecture of industrial space. Development and modernization of factories and related spaces required, may be considered to represent a continuity in the evolution of urban space industry, even if the volume and architectural form had register some changes.

Industrial architecture had always been guided by rationalism and functionality as basic principles in design. Following the development of the city on two main areas: residential and social-cultural buildings and industrial space it can be seen similarities with human duality. Form and architectural expression, at least so far, represents the male duality of industrial space, determined by geometric shapes, linearity, metal surfaces, amorphous inspired compositions and cool or contrasting tones. In marked volumetric contrast organic shapes, architectural biomorfe or anthropomorphic motifs and techniques inspired by folk art and crafts, bring a warm space constructed, representing the female duality.

The contrasting note of the urban space in Transylvanian cities, industrial centers, was a feature present since the beginning of the modern era. Directions of development of modern city retains the same line, even if the architectural style and form of the living space recorded a discontinuity, it was always positioned in contrast to the industrial area.

The development program of Transylvanian towns is seeking restoration of the historical urban fabric continuity by recreating the social-cultural nucleus in historic centers. Connections over time to achieve continuity of the historical material in the modern world can only be achieved with community participation. Based on models offered by other 'creative' cities like Iași, Belgrade, Leipzig, Genoa etc. integration of historical buildings in the day-to-day circuit can be achieved by

revitalizing creative industries, developed in the early XX century and translated to the needs of modern society: arts, crafts, traditions, games, movies, design etc. Integrating historic buildings into tourist circuits orients the economic and cultural development of cities to support cultural tourism.
A study on "Vitality cultural events in Romania 2010" that took into account cultural infrastructure, community participation in cultural activities and creative economy, in Transylvanian cities reveals that the order is: Cluj-Napoca, Sibiu, Sfântu Gheorghe, Timișoara, Alba-Iulia, Bistrița, Târgu Mureș, Oradea etc. Big cities with intense economic dynamics such as Cluj-Napoca, Timișoara, Oradea and Sibiu are the main growth poles in Transylvanian creative economy based on the production, circulation and exploitation of cultural products. Thus the link or the missing link between history and development of the built heritage towards modern architecture will always be represented by the community and the local culture. Awareness of historical heritage values is a continuity of culture and personality of a community. Invaluable traditions transposes in architecture and multicultural character of the Transylvanian cities are the factors that contributed to the form and presentation of the actual historic urban centers.

The current challenge, that began in the early XX century, regarding the urban space architecture was in terms of developing forms and volumes in tune with new trends, keeping the character and considering the socio-cultural personality of the local community.

Evolution of architectural and structural form must be made from the material to the spiritual oriented ideal of human development: creativity, art and culture. The urban regeneration of heritage buildings can be included in the socio-economic circuit of the communities, which gives them vitality, visibility and continuity. A building can be considered "alive" as long as it is used and is part of the community.

Currently the clear evolution of society is to restore human personality and individuality in the community center, the return to folk art, craft, arts etc. In this sense, hosting museums, shops, art galleries and cultural events in heritage buildings come to reinforce the importance of culture in society as a whole and as individual human development in particular. The benefits will be for the society as well as for the built heritage fund, in order to ensure the continuity of urban space.

6. Conclusion

Knowing the economic and industial level of the cities in Transylvania, in the late XIX century allowes an understanding the pace of the development of the built fund. Justification of choice of the structural system materials: wood, burned/unburned brick or stone simple/confined masonry, steel or reinforced concrete structures, was carried out on financial criteria and affordability of production/extraction of local, zonal or import construction materials. Determination of financial statements of the investors and the economic framework of the industrial field, allowes the understanding of the most frequent types of load bearing structures and the quality of materials used in construction history.

Industrial development of cities attracted the rural population, which lead to population growth in urban areas that occured in a faster rhythm than development building fund. This lead to the phenomenon of urban overcrowding, which is why after the year 1890 municipalities in partnership with private investors begin to build rent buildings.

Buildings constructed in the early XX century, declared heritage buildings are public buildings (hospitals, town halls, theaters, churches, etc.) and private buildings (rent buildings, hotels, inns, etc.) with multiple levels that present complex structural systems and mansonry walls with reinforced concrete elements: concrete cores, columns, beams, reinforced concrete floors; or

metallic elements: metalic laminated profiles. Knowledge of structural systems commonly used in the late XIX century, facilitates investigations on the causes of degradation and proposing optimal rehabilitation solutions for regeneration of the urban space.

Involving local communities in the awareness of the economic value of the historic built heritage can create the bridge over time and represents a step in the evolution of modern city. The expanding city brings challenges adressed to architects and planners, a situation characterized by continuity throughout the evolution of the society. As a necessity of a constant trend of development and expansion of the city, in the built enviroment of the early XX century transposed with the characteristics of the socio-economic climate of a modern society, preservation of historic heritage is a delicate matter.

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Philosophical and Conceptual Influences
Regarding the Conversion of Industrial Heritage

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Abstract

The conversion of industrial sites is a mirror of the past, which is reflected in the present and looks to the future, it creates spaces that are tailored to the new needs and standards of the society. This regeneration must be carried out through a functional integration that retrieves the identity of the site. The memory of the place must be preserved and celebrated. Through this process of memory, historical and cultural values are highlighted. Spaces that act as places of memories create what we call industrial heritage and this industrial heritage can be saved and recovered. Abandoned places are pieces of history, they are pieces of a bygone period and they house stories and memories that are worth telling. Through architectural conversion, the abandoned space will reborn, it is aesthetically and functionally reevaluated and it is transformed into a contemporary space. The important question is how can we achieve the revitalization of an abandoned space? Which is the criteria list to take into consideration, when thinking about conversion? Concepts like "genius loci", "tabula rasa" and "deconstruction" have preoccupied experts over the years. The main purpose of this paper is to investigate what these concepts represent and how they operate regarding architectural conversions. Therefore, this paper is based on literature reviews and it presents case studies that illustrate the above statements.

Rezumat

Conversia siturilor industriale reprezintă o oglindă a trecutului, ce se reflectă în prezent şi priveşte spre viitor, ea creează noi spaţii, ce sunt adaptate nevoilor şi standardelor actuale. Această regenerare trebuie să aibă loc printr-o integrare funcţională, care să recupereze identitatea locului. Memoria locului trebuie păstrată şi celebrată. Prin acest proces de memorie, valorile istorice şi culturale sunt puse în valoare. Spaţiile care se constituie ca locuri de amintiri creează ceea ce noi numim patrimoniu industrial, iar acest patrimoniu industrial poate fi salvat şi valorificat. Locurile abandonate sunt fragmente de istorie, ele sunt bucăţi dintr-o epocă trecută, care adăpostesc poveşti şi amintiri ce merită spuse. Prin conversia arhitecturală spaţiul renaşte, acesta este reevaluat estetic şi funcţional şi este transformat într-un spaţiu contemporan. O întrebarea importantă este cum se realizează revitalizarea unui spaţiu abandonat? Care sunt criteriile după care ar trebui realizată conversia? Concepte precum "genius loci", "tabula rasa" şi"deconstrucţie" au preocupat specialiştii de-a lungul timpului. Scopul principal al acestei lucrări

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este să cerceteze ce reprezintă aceste concepte şi cum operează acestea în cazul unei conversii arhitecturale. Aşadar, această lucrare se bazează pe studiul literaturii de specialitate şi prezintă studii de caz, care sprijină afirmaţiile făcute.

Keywords: memory, genius loci, tabula rasa, conversion, deconstruction

1. Introduction

Industrial sites are mirrors of bygone times, they contain pieces of memory, and they have great historical and cultural value. These ruins represent a numb built fund, waiting in vain to reborn. They are silent holders of the past and because of this we have to ask: How can we achieve the revitalization of an abandoned industrial site? How can we recreate and perpetuate the identity and character of a forgotten space? Which is the criteria list to take into consideration, when thinking about conversion?

The existing buildings and even the future ones are evaluated through dimensions and materials, but rarely in terms of their approach as complex systems with a particular significance. Even if industrial heritage is an important dowry, a testimony to a bygone era, there are different approaches concerning the remainings of industrial sites, regarding their historical, cultural or social value and therefore their destiny. Further on we will analyze three different approaches concerning the abandoned industrial sites and how each of them affects our society.

2. Phenomenology

Being a philosophical concept, phenomenology found its way into many domains, including architecture. According to the Merriam Webster Dictionary, phenomenology is defined as "a philosophical movement that describes the formal structure of the objects of awareness and of awareness itself in abstraction from any claims concerning existence" [1]

According to the theorist David Seamon, phenomenology is an interpretative study of the human experience, a phenomena exploration and description of phenomena, which "refers to things or experiences as human beings experience them. Any object, event, situation or experience that a person can see, hear, touch, smell, taste, feel, intuit, know, understand, or live through is a legitimate topic for phenomenological investigation." [2] Thus, we can speak about a phenomenology of light of home, of architecture, of relationship, of friendship, of change etc. [2] We may state that this philosophical approach acknowledges and celebrates important features of life.

A detailed analysis of this concept integrated in architecture can be found in the book *Genius Loci: Towards a phenomenology of architecture,* where Christian Norberg-Schulz argues that our life is filled with lots of concrete "phenomena" such as people, animals, forests, water, sun, stars, feelings or emotions. All these are interconnected in complex ways, sometimes contradictory, and often inclusive, like the forest that has trees or the cities which are made up of houses or a landscape that has a lot of tangible or intangible elements. Thus, a "phenomenon" is, in fact, an "environment" for other phenomena. We can say that a suitable term for "environment" is "place" and the place is a defining element to our existence, as long as we need a spatial reference for everything we do or is about to happen to us. [3, p.6] So, this is why there is an innermost relationship between the place

and the humans that live in it. This kind of bond is difficult to broke, because it manifests in the subtle dimensions of people's lives.

Also, Schulz argues that a place is a qualitative "total" phenomenon, which cannot be reduced to its properties, "such as spatial relationships, without losing its concrete nature out of sight" [3, p.8]. Different actions require different environments in order to perform in a satisfactory manner and so, Schulz argues that cities and houses are actually made out of lots of custom places. In architecture, "taking place" has often a quantitative meaning, a functional one, related to spatial distribution and size. One way to mitigate this approach is phenomenology, which "was conceived as a 'return to things', as opposed to abstractions and mental constructions." [3, p.8]. This 'return to things' is a return to the origins, to the essence of things.

When discussing a place we need to consider its structure, to make the distinction between a natural environment and a man-made one, more exactly we are speaking about the difference between a "landscape" and a "settlement" and we must take into consideration the dimensions that define a "horizontal- vertical", "inside-outside" place.[3, p. 10] We must not forget the fact that each place has what Christian Norberg-Schulz calls a "character" which is, the general atmosphere that is the most comprehensive feature of any place.[3, p.11] This character "changes with the seasons, the course of the day and the weather, factors which above all determine different conditions of *light*." [3, p.14] So, we can say that the approach of architecture from a phenomenological perspective represents the establishment of a dialogue between architecture and its surroundings.

It is also important to say that in accordance to the phenomenological acceptations home is more than a shelter, it is endowed with symbols, it becomes an "axis mundi".

In Schulz's vision, man intervenes in nature and creates new places, wanting to make nature more accessible and for that reason he wants to represent nature as he perceives it, to complete it with whatever is missing and to conceptualize it. Doing all this things, man manages to create his own "imago mundi" or his own "microcosmos" which reflects his world. [3, p. 17]

2.1. Genius loci

The character of a place mentioned by Christian Norberg-Schulz, the "genius loci", is a concept of the ancient world. In the Roman mythology, "genius loci" was the protective spirit of a place and was often represented by a snake. In today's society, "'genius loci' usually refers to a location's distinctive atmosphere, or a 'spirit of place'. The concept of 'genius loci' has been discussed in modern architecture, but still is much underestimated." [4, p.2] Nowadays, the term "genius loci" has lost its mythology essence and even its name, today we are speaking more of the "character" of the place than of the "spirit" of the place. Its essence is the same because even for the modern man it is important to know the place he is in, and particularly, in which way he identifies himself with this place, namely how to befriend that place. [3, p.21]

Andrea Vogler and Arturo Vittori state that modern architecture approaches a construction through a scientific filter, taking into account more mathematical calculations and convenient locations, than creating an identity for the place; therefore, today's communities are mostly deprived of that unique and indisputable atmosphere, and the old places, which still have it, cannot be reproduced "since their making was a complex cultural process."[4, p.8]

Because of the fact that industrial heritage buildings represent footprints of the past, they are a part of our identity and are impregnated with memories and stories, with historical and cultural

meanings, "genius loci" can become the right approach in saving and reviving them. The reactivation of abandoned industrial sites can rescue important values of the society and can influence not only the specific site, but also the community and the surrounding areas.

We are going to present case studies based on the "genius loci" approach in order to illustrate how abandoned industrial buildings can regain meaning through celebrating their true and specific character.

2.1.1. Case studies

A successful example of conversion is **Hamburger Bahnhof** from Berlin, a former railway station that was converted into a contemporary art museum. This museum is one of the most important exhibition spaces in Berlin and is dedicated exclusively to contemporary art from 1950 to the present. [5]

Figure 1. Exhibition area.

Figure 2. Exhibition area.

The Hamburger Bahnhof was built at the beginning of the 19th century as one of Berlin's major railway station, but by 1906 it became too small so it was converted into a museum of transport and construction. [6] The exterior kept its original aspect and the impressive neoclassical building with two towers flanking the façade attracts many visitors.

Figure 3. Exterior view.
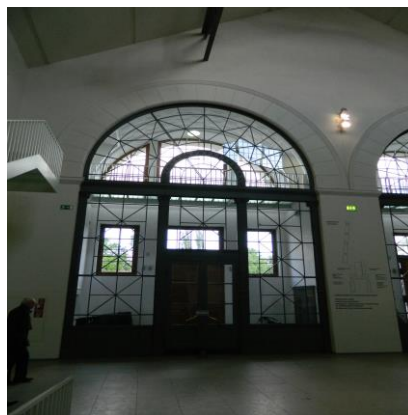
Figure 4. Entrance.
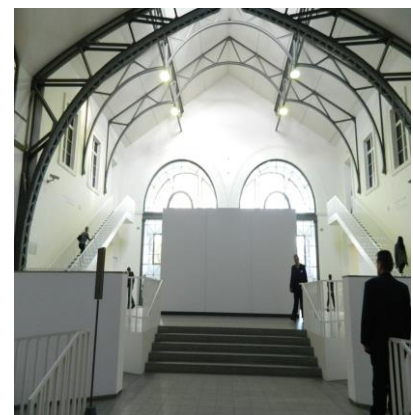
Figure 5. Interior view.

In 2004, the museum was supplemented by an additional 6000 square meters of exhibition space. [7] This space provides both an ideal setting for contemporary art and stimulating surroundings for an interesting variety of events; it has a great concept for a multi-functional usage of the new museum. The conversion was carried out with respect for the memory of the place, and the original purpose of this building remains evident, being illustrated by the original elements and the visible structure. The glass roof designed for steam engines as well as the slightly raised areas that once were the platforms [8, p.273] are signs of respect for the identity and history of the place.

Figure 6. Central hall - the *original* structure was kept

Figure 7. In *memory* of the past.

This building, once abandoned, has brought back to life and it regenerated the whole area through the process of conversion, but what is very important is that it kept its historical and cultural value, it kept and emphasized its original elements and structure adapting it to the new needs. For example, the board with the name of the station and the graffiti panels are elements that were preserved and enhanced.
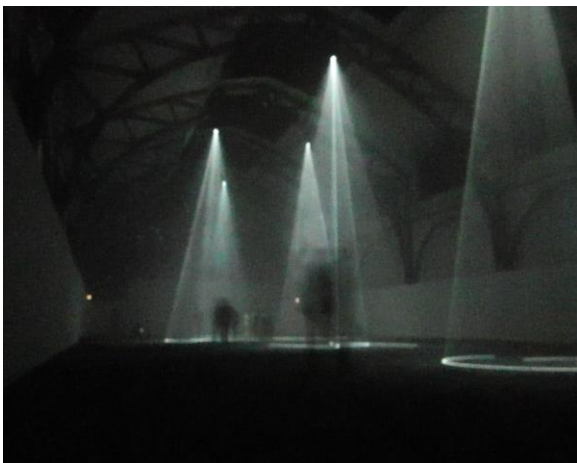
Figure 8. Temporary exhibition.

Figure 9. Original signs were kept.

One of the most recent and emblematic project of rehabilitation and conversion of an historical building within the local area is the conversion of the **Furniture Factory "Libertatea"**.

Representing an important pillar of the industrial heritage in Cluj, the investors have paid a special attention to the insulation stage. Because the purpose was to preserve the brick façade, the insulation was applied on the inside. [9] An ecological, 100% organic mineral material with a solid structure was used. [9] The architectural image has been created by using the latest high quality technology.

This building is interesting because it has found its way back into the city's commercial life. Its exterior shell kept its original architectural imagine, and it is important to notice that there is a great balance between old and new elements, the modern insertions show respect for the memory evoked by this place. The dialog established between old and new is not suppressed, but evoked and cherished.

Figure 10. Exterior view.

Figure 11. Liberty Technology Park.

In order to keep the memory of the activities undertaken in the past, parts of the old slab will be reused and transformed into furniture, as a remainder of the old factory. Also, as a sign of respect for the history of the building, some of the structural elements such as brick walls and arcs were reconditioned and kept in plain sight.
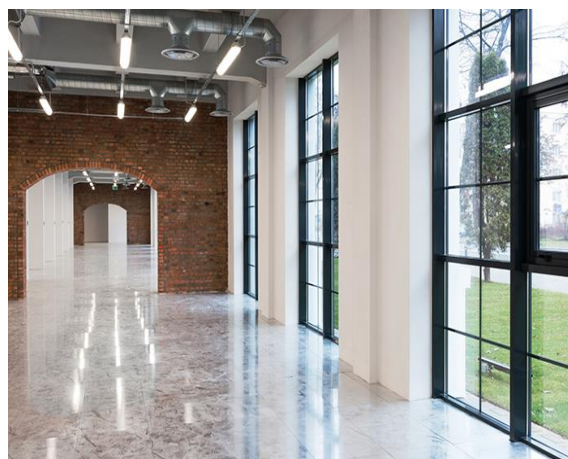
Figure 12. Former „Libertatea" Factory, today Liberty Technology Park, interior.

It may or may not be economical to recover and reuse, but beyond that, it is certainly more sustainable to recycle and it's a sign of respect for the history, culture and memory of the past society. The recovery of these undeniable values through reinvention gave birth to famous examples worldwide. We may talk about a concept inspired from the present moment, anchored in present time, but showing respect to the past and it also presents the perspective of the future in terms of sustainability, society and resources. Through architectural conversion, the abandoned space will reborn, it is aesthetically and functionally reevaluated and it is transformed into a contemporary space. In contrast to the concept of genius loci is the concept tabula rasa.

2.2. Tabula rasa

Some of the industrial sites can be argued as important symbols for the community, but some of them, because of many different reasons (its cultural or esthetical value, the meaning it carries out to the community, etc), can become dangerous, neutral or simply impropriate. In that sense, we can speak of denying everything and creating new premises.
So, opposed to "genius loci", the modern approach of the XX century "tabula rasa", supported by Le Corbusier, involves an attitude of denial of everything that is old, of whatever already exists, in order to make room for what is new and original. This concept draws aside the existing fund, either physical or conceptual, and allows the creation of a new, fresh architectural fund, which does not intend in any way to revitalize the existent, but which requires the destruction of what already exists in order to allow a new beginning, a new framework, a new city. Sometimes this concept can reach different sides of the society, not just the physical one. [10, p.233]

Lately this concept was fairly blamed especially since the focus on heritage preservation and restoration began. Catherine Dee brings more arguments against the application of this concept into landscape architecture, proving that it has more negative effects than positive ones and some of these aspects can easily be extrapolated to the architecture of a building. Catherine Dee states that "recycling and conservation of materials, structures and vegetation is desirable for sustainability reasons", but through implementing the "tabula rasa" concept the site's characteristics more exactly the "genius loci" would not be preserved. [11, p.15]

There is no problem applying the "tabula rasa" concept on industrial sites that are not symbols, that have no historical, cultural and aesthetical value and that are damaged, inappropriate, outdated or even neutral, but when we speak about industrial architectural hertitage, we should not deny our past.

So, we can say that, by applying the "tabula rasa", concept industrial heritage becomes just an erased memory whose traces perish smoothly, but surely. Instead of being cherished, it is forgotten, new premises are created, while the old ones are ignored and even deleted.

The lack of well-defined, consistent strategies, that could petrify the status of the architectural industrial fund and the careless attitude of the competent authorities endanger its existence and allow the adoption of the "tabula rasa" concept. Somethimes the decision to preserve and capitalize or even glorify the memory of a bygone era seems a random or even nonexistent one. Authorities often promote non-values, and create false cues, adopting the concept of "tabula rasa" at the expense of "genius loci".

While we can, of course, argue that sometimes the concept of "tabula rasa" can be right in time and place, meaning when there are no important values to preserve, there are many cases, at the present moment, when this concept has done wrong by the society, erasing an architectural jewel of the

past. Thus, the case studies presented in this paper underline the way the "tabula rasa" can endanger important values of the society.

2.2.1. Case studies

Among the industrial buildings from Cluj that didn't survive and that was not protected by authorities is the **Someşul Knitting Factory**.

The building has a long history, starting with the 17th century, when it accommodated the city's tobacco factory, and before that a military garrison. The memory of that place was completely destroyed, there is no trace of the old building, as the "tabula rasa" concept was applied.

Its location was considered a great opportunity, so the investors fought for its demolition. And they have succeeded this, since the construction of a new office building, started in 2008 on the spot of the old factory.
Through demolition memories and cultural history were erased and what is worse is the fact that the social identity of the place was damaged beyond repair.

Figure 13. Old Knitting Someşul Factory.   Figure. 14. The Office Building

A similar fate had the Old Mill on the Canal, also called the **Red Mill**. Even if the constructor stated that he will keep the old façade, the original brick façade was demolished. This is another bad example that illustrates the lack of involvement, the carelessness and ignorance and the way individual interests prevail over the interests of the society. Rush profit prevails and the spirit of the industrial giants is forgotten.

Figure 15. The old Red Mill, Cluj-Napoca.

Figure. 16. New office building,
str. Buftea, Cluj-Napoca.

Another important approach concerning industrial heritage is the interpretation in terms of deconstruction.

It is always challenging to make decisions concerning the right approach when it comes to the conversion of architectural industrial buildings or sites. While the two alternatives presented above can seem extreme, the deconstruction theory may represent a middle solution.

3. The deconstruction theory - from phenomenology to deconstruction

In search for new concepts for architectural conversion, architects turned to an alternative, meaning the deconstruction theory, because, after all, maybe we can preserve, annul and recreate at the same time. Although a philosophical concept, it gives the architects a way out of choosing between two opposite alternatives, so a further investigation is taken into account.

The twentieth century introduces the concept of "deconstruction" via the controversial philosopher Jacques Derrida who, although, clearly avoided to define this notion, regarded deconstruction as a challenge of the transcendental by the empirical doctrine [12, p. 32], which involves more the confrontation of contradictions then their elimination. [12, p. 67]

Interpreting the words of Jacques Derrida, John D. Caputo states in the work *A conversation with Jacques Derrida* that the meaning and mission of deconstruction is to put things into question, to break limits, to show that everything that exists: texts, institutions, traditions, societies, beliefs and practices of any kind do not have defined meanings nor determinable missions, that everything that exists represents more than the mission wants it to be or more than the limits that exist in that time.[13, p.31]. In an attempt to define deconstruction, John D. Caputo defines it as "the relentless pursuit of the impossible, which means, of things whose possibility is sustained by their impossibility, of things which, instead of being wiped out by their impossibility, are actually nourished and fed by it." [13, p.32]

Lorena Armulescu also tries to explain this concept stating that, deconstruction is not *destruction,* but rather *dismantling* [14, p.45] and that as far as metaphysics is based on a structure of presence and deconstruction on a structure of trace, all concepts of metaphysics cannot be treated only beneath removal (*sous rapture*) [14, p.40]. This trace serves as the basic concept for this theory, and the mark is the original mark only in the case in which the original mark does not exist, but precisely because the presence (existence) of such origin is not possible, it is like absent. [14, p. 117]

The concept of deconstruction has found its way into architecture. Jacque Derrida took from Platon's dialog "Timaios", which is a dialog that examines the issue of the physical world, of the human being and of the relationships established between them, the term "khôra" and analysed it in a characteristic way. Khôra is supposed to mean: a place occupied by somebody, a country, a marked space, rank, position, territory or region. But in fact, khôra will always be engaged, invested, as a general place as well as when it differs of everything that takes place in it. [15, p.55]. Derrida dedicated a detailed analysis to this concept which is related to the deconstruction theory that he supported. He juxtaposes the opposites and creates a bridge between them. Derrida argues that khôra seems to be neither this nor that, but sometimes it seems to be both this and that. [15, p.20]

Deconstruction seems to be about exploiting tensions and contradiction and also restoring oppositions. We can also say that deconstruction is trying to obtain a reversal of the traditional oppositions and also an overall displacement of the system.

While "genius loci" and "tabula rasa" are two opposite limits of the preservation spectrum, deconstruction finds a way to merge them. It gives the architects the opportunity to take what is good from each and combine them in a complex way. Deconstruction allows old and new to work together. They stress each other, highlighting in a complementary way what each has to offer and they subtly support each other.

To explain better the way this concept works, we will present an important case study that is representative for deconstruction.

3.1. Parc de la Villette

The deconstruction theory materialized itself in an extraordinary project designed by architect Bernard Tschumi, a project created to design the **Parc de la Villette** in Paris. In 1979, a comprehensive plan was designed to convert and develop an area of 55 hectares of wasted industrial land, taking into account three main objectives: creating an architectural complex dedicated to music, building a science and technology museum and launching a cultural park opened to all. In 1982, a competition was launched for the architectural design of the park and from the 460 competing teams the winning project belonged to a French born Swiss, who managed to create a bridge between past and future, Paris and it suburbs, urban and rural areas, art and science, body and soul [16]. The park encapsulates bigger and smaller buildings, such as: a science and industrial technology museum, the music academy and a city of music, a concert hall, Zenith, a large hall, an attribute brought to the park's past. The last one, the jewel of the park's architectural heritage was built in 1867 and was converted into a room designed for various activities in 1985. [16]

Figure 17. Arrangement of Parc de la Villette.

Figure 18. Parc de la Villette.

Parc de la Villette benefits of many spaces called „prairies", by the local people, which are used by them for picnics and various outdoor games. This extensive areas offer spectacular and varied views of the Canal de l'Ourq, which crosses the park.
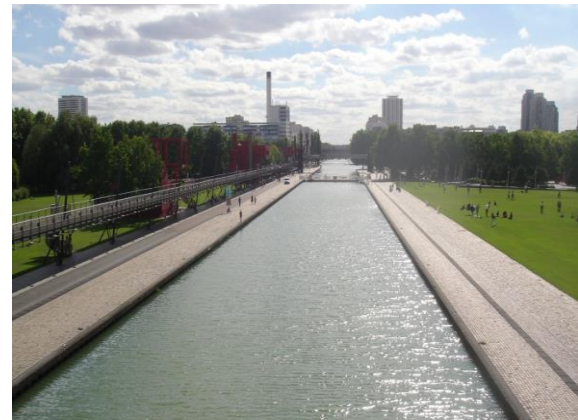

Figure 19& 20. The Canal de l'Ourq, which crosses the Parc de la Villette, Paris.

Tschumi's opinion for the Parc de la Villette is based on three systems that he used. First there is the points system: the follies, 26 points, all designed with a cube shape of 10,8m arranged according to a regular grid 120m x 120m, each unique in form and function. These, in their contemporary way, give a rhythm to the park and form one of its peculiarities. Then there is the principle of the lines: the paths and alleys, the focal point of the perpendicular with the serpentine, which creates two main axis within the park. Lastly, we can discuss about the principles of areas: the prairies, which offer a lot of gardens and playgrounds [16].

Figure. 21. Arrangement of Parc de la Villette. Play area for children.

In *Chora L Works,* Bernard Tschumi states that, with this project, a new urban strategy is imposed, a new type of park, being both a cultural and an urban work. The construction of these gardens as a series of shots and sequences meant the participation of several architects, designers, artists, writers who contributed to the urban culture by making the design of each garden. The combination of various disciplines and the overcoming of limits was the key concept of the park. If for the first stage of the gardens there were artists, designers, writers and musicians involved, for the second stage, Tschumi turned to Jacques Derrida. Derrida, during the first meeting, asked Tschumi why would architects be interested in his ideas, given the fact that, deconstruction means anti-form, anti-hierarchy, anti-structure. He received an unexpected answer. Tschumi said that, this was exactly the reason why. As a conclusion, Tschumi argues that, "there is never a cause-and-effect relationship between one field and another, between theory and architecture, only a constant, indispensable and sometimes a conflictive exchange between them."[17, p.125]

This project was able to express in an extraordinary way, the concept of "deconstruction" combining extremes and opposites in a very ingenious way and also to create an architecture which is varied, in continues production and in constant change. Furthermore this caused them to jointly create a new, original and innovative space and also, to constitute a notable example of an industrial conversion.

Taking into account this daring example of applying the deconstruction in architecture, it is clear that this concept opens a new door toward a new understanding of how old and new can be combined and not necessarily canceled. This example illustrates a different image, a new world that is not defined by conventional architectural connections, it is a new concept that tries to prove that it is possible to construct a complex architectural organisation without the traditional rules.

4. Conclusions

The existing industrial heritage is a rich and varied one, representing a significant part of history and stands as a testimony to our evolution as a society. Although it is often left in decay, so that we can speak about visual and physical pollution, the industrial heritage may constitute an important renewable source. The abandoned industrial sites can support different concepts like the ones mentioned above, "genius loci", "tabula rasa" or "deconstruction" , with the related advantages and disadvantages, but sometimes when applying the "tabula rasa" concept, a priceless value is being

lost from a historical, cultural and social point of view. Sometimes this is a more suitable option for an economic approach, but it might create gaps at a social and psychological level, ignoring the memory and identity of the place and that of its inhabitants. Also, preservation, conservation and the reuse of the industrial heritage would have a greater impact on the society which can thus certify its past and history. Thereby, the purpose of the paper is to present how the industrial heritage sites should be subject to architectural transformation that would rather apply the concept of "genius loci" or "deconstruction" instead of the "tabula rasa" concept, because history must never be forgotten. While "genius loci" places special emphasis on history, on the character and specificity of a place, and "deconstruction" is based on a structure of traces, on a new, complex system that tries to recreate from an unconventional point of view, "tabula rasa" contradicts everything that is linked to the past, it overrules the original identity of a place and - this means that we are giving up willingly a part of us, the part that states who we are.

Obviously abandoned industrial sites are associated with the process of "de-industrialisation", that can be seen as the reverse of economic growth and also with industrialisation, they evoke nostalgia, and they are related to social structures and relationships that are very important.

We can state that the transformation of an industrial site should be the answer to important questions like: what, why and how can we save and recreate the valuable industrial buildings? By answering these questions we can choose the right approach, the one that is the most appropriate for each site or building.

Through a converting process, an abandoned industrial building can regain functionality while hosting new industrial and economic activities as well as revitalizing an area of the city from an economic and social point of view. Not to be neglected is the fact that, these buildings are testimonies of a past, more or less pleasant, which defines us as a society and which cannot be ignored. Although this conversion process can raise some issues, however, the benefits behind it may be higher than the losses, even more as we speak about an inestimable historic value. Through such a process, the past coexists with the present, the old blends with the new and consequently, a new building is born which might take part in the writing of a new page in history.

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Figure 10. Liberty Technology Park. Source : http://designist.ro/arhitectura-design-interior/cel-mai-important-proiect-de-reabilitare-a-unei-cladiri-istorice-la-cluj-fabrica-libertatea/. Author: Dacian Groza

Figure 11. Liberty Technology Park. Source : http://designist.ro/arhitectura-design-interior/cel-mai-important-proiect-de-reabilitare-a-unei-cladiri-istorice-la-cluj-fabrica-libertatea/. Author: Dacian Groza

Figure 12. Former „Libertatea" Factory, today Liberty Technology Park, interior. Source : http://designist.ro/arhitectura-design-interior/cel-mai-important-proiect-de-reabilitare-a-unei-cladiri-istorice-la-cluj-fabrica-libertatea/. Author: Dacian Groza

Figure 13. Old Knitting Someşul Factory. Source: http://greenstone.bjc.ro/greenstone/cgi-bin/library.cgi?e=d-01000-00---off-0clujulin--00-1----0-10-0---0---0direct-10---4-------0-1l--11-zh-50---20-about---00-3-1-00-0-0-11-1-0gbk-00&a=d&c=clujulin&cl=CL1.9&d=J456

Figure 14. The Office. Source: personal archive, mai 2014.

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Figure 21. Arrangement of Parc de la Villette. Play area for children. Source: Personal archive.

Suturing the Modernist Scission?
The New Urbanism as "Altermodern" Urbanism

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(Accepted: 15 December 2014)

Abstract

The modernist urbanism originating from the beginning of the XX-th century represented without any doubt the most radical rupture with the traditional urbanism ever recorded in history, the latter being almost punctually negated. The postmodernism of the 80's and 90's reinforced with theories steaming of the 60's tried to recover the lost history, making appeal to pre-modern urban models. Although nowadays declared defunct, its legitimate offspring still survives on American territory, not only subsisting, but also knowing a true Golden Age: we are talking about the New Urbanism movement, seen by many architecture critics as the most important architectural and urbanistic movement on American soil since modernism. This thesis tries to analyse the relation between the modernist paradigm and the new urbanist, the latter officially and programmatic contesting the first. Modernism is seen by the new urbanists as a syncope to be bridged in order to restore a natural continuity. New Urbanism is the avatar of postmodernity, a fact known and demonstrated, but the scope of the present thesis is to prove the anchoring of the North American movement in altermodernity, the beginning era that (unofficially) follows postmodernity. The temporal relation is made by permanently looking to the issue of continuity.

Rezumat

Urbanismul modernist al începutului de secol XX a reprezentat fără doar şi poate cea mai radicală ruptură cu urbanismul tradiţional înregistrată în istorie, cel din urmă fiind negat aproape punct cu punct. Postmodernismul anilor 80 şi 90 cu infrastructură teoretică încă din anii 60 a încercat recuperarea istoriei, făcând recurs la modele urbane premoderne. Deşi declarat defunct, totuşi urmaşul său legitim supravieţuieşte pe pământ american, dar nu numai că subzistă, ci, mai mult cunoaşte o adevărată vârstă de aur: este vorba despre mişcarea New Urbanism, *socotită de către mulţi critici de arhitectură drept cea mai importantă mişcare arhitecturală şi urbanistică pe tărâm american de după modernism. Lucrarea de faţă vine să analizeze raportul dintre paradigma modernistă şi cea „nou urbanistă", ultima contestând-o în mod oficial şi programatic pe cea dintâi. Modernismul este văzut de noii urbanişti ca o sincopă ce trebuie acoperită pentru a reinstaura o continuitate naturală. New Urbanism este avatarul postmodernităţii, fapt ştiut şi demonstrat, însă miza lucrării de faţă este demonstrarea ancorării mişcării nord-americane în altermodernitate (Bourriaud), eră incipientă care succede (inoficial) postmodernitatea. Raportarea temporală este făcută în permanent privind problematica continuităţii.*

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Keywords: New Urbanism, modernism, postmodernism, altermodern, ecological urbanism.

1. Introduction

New Urbanism is the North-American movement fundamented on a chart and congress which both bespeak of the necessity of building ecological communities as the driving vectorial composing force of sustainable development: "The Congress for the New Urbanism views disinvestment in central cities, the spread of placeless sprawl, increasing separation by race and income, environmental deterioration, loss of agricultural lands and wilderness, and the erosion of society's built heritage as one interrelated community - building challenge."[1] Building a sense of place and preserving the local history are two resulting guidelines [2]. The quite dogmatic discourse advocates continuity prevailing over contrast, harmony prevailing over dissonance, thus apparently eluding contradiction.

As initially intended, New Urbanism was defined as opposing to modernism and set its goal as the necessity of bridging the gap created in the course of history and restore a now desired continuity. The rediscovery of traditional urbanism after decades of *tabula rasa* thinking and doing represented something to be seen as new at the beginning of the 80's, through the blossoming of architectural postmodernism, when the movement's history began. The intrinsic paradox of its name and credo comes to point at less observed fact: New Urbanism is quite antithetical, (as its name designating a retrospective movement, but newly in its approach), criticizing the modernist ethos, but sometimes embracing it, consciously or not (appropriating the modernist rhetoric and implementing methods, as seen in part 3, New Urbanism = modern). Shortly put, New Urbanism is dialectical, both modern and premodern.

Judging by its enterprise of trying to revive premodern city models and urban forms, New Urbanism bears the stamp of postmodernism. Termed by Spiro Kostof "a postmodern baroque"[3], the roots of the 80's architectural postmodernism of New Urbanism are only from a superficial glimpse very evident, renowned postmodern architects as Leon Krier and Aldo Rossi being among the main forefathers: Krier as active theoretician apostle of the doctrine, Rossi as patriarchal honorific figure. This fact does not need to be proved. Still, according to Hirt [4] referring to Charles Jencks' understanding of postmodernism as summing up premodern and modern elements, New Urbanism seems to fit into this categorization well, encompassing diverging tendencies that qualify it as postmodern. Since postmodernity (not total synonymous with postmodernism, but here used equivalent terms) has been declared deceased, but - metaphorically speaking - hasn't been buried yet, there are some named successors like hypermodernity (Lipovetsky), supermodernity (Auge) or altermodernity (Bourriaud). This paper, using a dialectical structure that can be superposed to Jencks' equation as illustrated in Fig. 1, tries to prove the "unstable grounding" of New Urbanism in the path that leads from postmodernism to "altermodernism". The orientation to pluralism and multiplicity seems quite imperative nowadays, and New Urbanism upgrades its

$$\text{Thesis + Antithesis = Synthesis}$$
$$\wedge \qquad \wedge \qquad \wedge$$
$$\vee \qquad \vee \qquad \vee$$
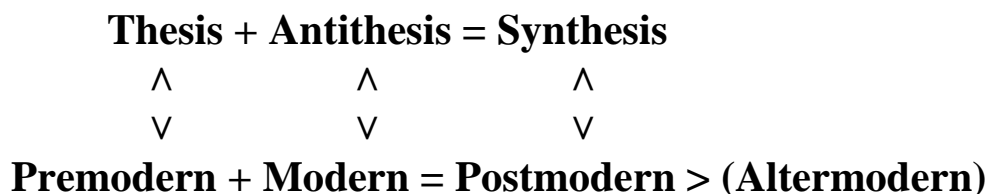$$\text{Premodern + Modern = Postmodern > (Altermodern)}$$

Figure 1. Diagram presenting the dialectial triad of relations (Source: the author)

doctrine to fit the ecological and sustainable ethos. So, the thesis is the common perception of New

Urbanism as premodern, presenting the main historic urban models, followed by the antithesis declaring New Urbanism a neomodernist movement, illustrated through a comparison between modernist icon city of Brasilia and new urbanist town of Celebration, Florida. Although postmodern thought dissolved classical dialectics and annihilated opposites, the synthesis will point to the postmodern/altermodern character of New Urbanism, seen as resultant of different driving forces, presenting a case study consisting of two new urbanist developments (designed by the representatives of the two schools of the movement divided east vs. west, Andres Duany & Elizabeth Plater Zyberk one side, Peter Calthorpe and Ass. on the other) situated in the city of Markham, Canada.

An important and quite philosophical question concerning continuity to be asked while reading this paper is weather a return *to* means or can be translated as a return *of*.

2. Thesis: New Urbanism = pre-modern

The genealogical tree of architectural postmodernism's now orphan bastard called New Urbanism is quite known and almost complete. It crowns a noble pedigree, consisting mainly of two different predecessors: The Garden City Movement and The City Beautiful Movement [5]. Both these movements bespeak of the two main concerns of New Urbanism pointed by McCann [6]: social engineering (from Garden City) and accomplishing an aesthetic ideal (from City Beautiful). This is the main outcry for New Urbanism: (beautiful) form means social (collective) good and vice versa.
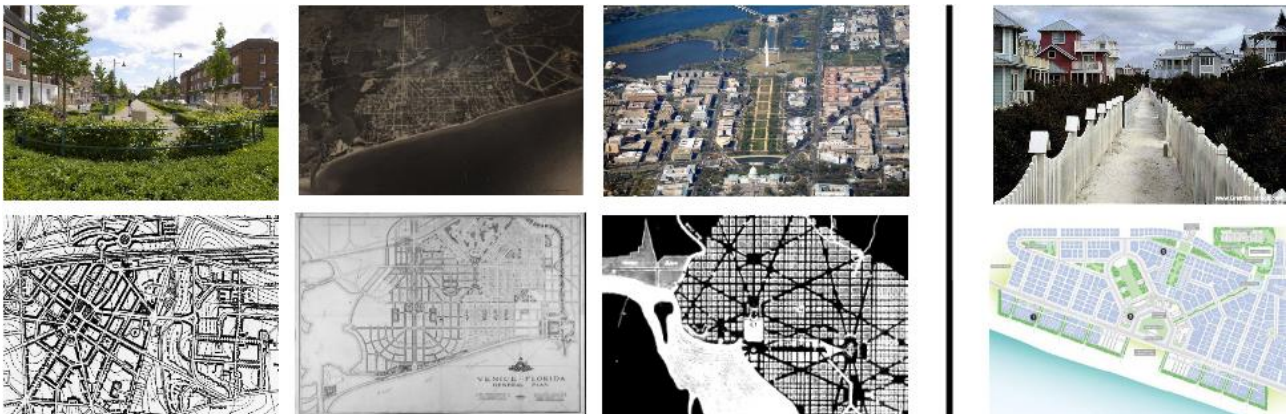

Figure 2. Letchworth (Garden City – Raymond Unwin), Venice (Garden Suburb – John Nolen), Washington (City Beautiful - L'Enfant) versus Seaside, Florida (New Urbanism - DPZ)
(Source: Andres Duany, Elizabeth Plater Zyberk, Robert Alminana *The New Civic Art. Elements of Town Planning*)

Examples of pre-modern descent are shown in Fig. 2, enumerating here the Garden City of Letchworth designed by sir Raymond Unwin (also on American soil the Garden suburb represented by John Nolen's Venice [7]) and the city of Washington built after the initial sketches of L'Enfant by Mac Millan in the City Beautiful style. All three examples are illustrated in relation to the first town designed in the new urbanist manner: Seaside, Florida, planners Duany & Plater-Zyberk. There are more notable influences, of more singular persons, like Camillo Sitte, Patrick Geddes and Lewis Mumford, but other movements like the Chicago School of Sociology and Regional Planning Association of America. Though coming in the rebelling 60's, Jane Jacobs' re-articulation of traditions reinforces the theoretical infrastructure in her seminal book "The Death and Life of Great American Cities".

What New Urbanism has inherited as a unifying symbol from all these more or less related tendencies and rooted in universal history is the idea of neighbourhood, materialized in Clarence Perry's Neighbourhood Unit. Coined as the famous diagram in urban planning history, the Neighbourhood Unit has been upgraded by the new urbanists (Duany & Plater Zyberk mainly) – and called Traditional Neighbourhood Development (T.N.D.) now - making it like a puzzle piece, as seen in Fig. 3, to be placed anywhere, at anytime. Despite the clear resemblances (externalizing the traffic, closed urban blocks and many and varied pedestrian paths), to make the city more livable, the original diagram has been de-centered a little by the "young turks" of contemporary American urbanism, through introducing a grid, and placing communitarian catalyst spaces (like the park or school) at the periphery, to aggregate more social content even from outside the unit.
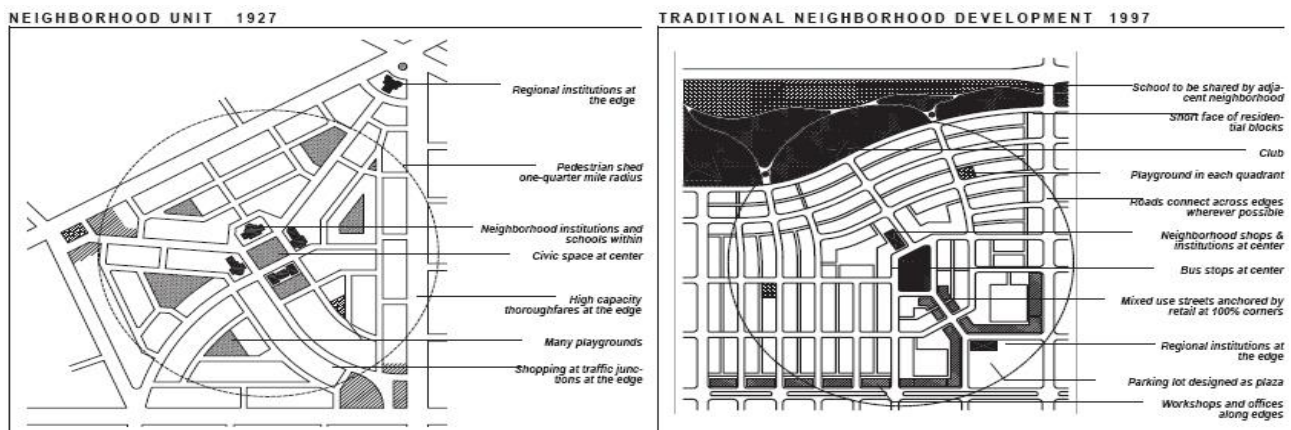
Figura 3. The Neighborhood Unit (Clarence Perry) and The Traditional Neighbourhood Development (Duany & Plater Zyberk) (Source: Andres Duany & Elizabeth Plater Zyberk: *The Lexicon of New Urbanism*)

Talking about de-centering, a less well known fact is that the deconstruction of the Unit gave rise to New Urbanism's counterfighter: the suburban sprawl. What happens here is another scission in continuity, from the monolithic character of the unity to the dispersed model of the typical suburbia. The only development designed while having the complete meaning of the Unit in mind was the Radburn arrangement planned by Clarence Stein and Henry Wright, as in Fig 4. in 1929. The first sample was the best sample, never again the quality of a built community could be achieved in America [8], what came afterwards that was to be known as sprawl (Earle Draper) just exploded after the war.
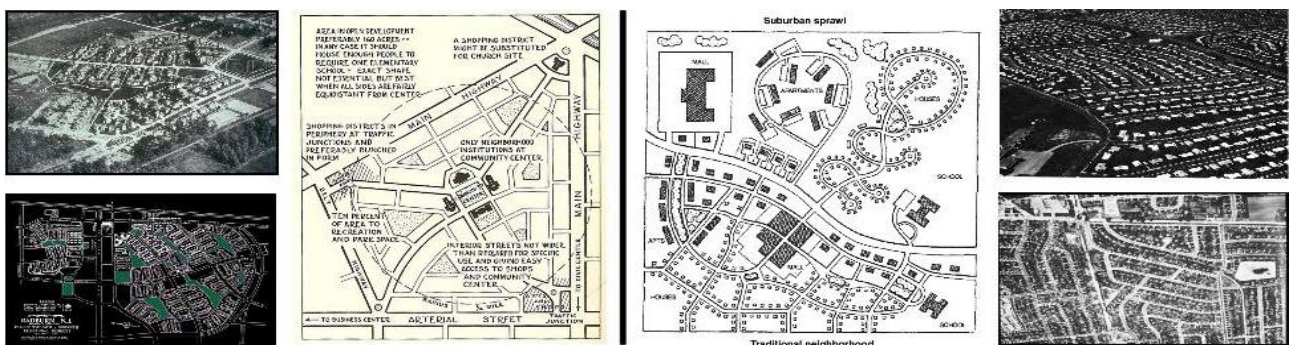

Figure 4. The Radburn arrangement versus the Levittown sprawl, two oposed urban models (Source: Andres Duany, Elizabeth Plater Zyberk, Robert Alminana: *The New Civic Art. Elements of Town Planning*)

The mass produced house of the suburb which will henceforth be known as Levittown will pretty much define the American Landscape, but still there are protectors of sprawl [9], declaring it legitimate, as a symbol of American democracy. Moreover, there are sprawl preservationists proclaiming, like every conservationist, that it is also historic[10]. This raises the question of continuity, not, as Semes declares, to confound "history" with "historical"[11].

Another key diagram which is more original, but comparable to the Traditional Neighbourhood Unit developed from the Garden Suburb model by west coast new urbanist star Peter Calthorpe is the Transit Oriented Develpment (T.O.D.). This scheme is developed in relation to transit (light rail, heavy rail or bus) and it places accent on diversity of uses, spaces in a walkable environment, having a more urban character than the T.N.D.

As the T.N.D., the T.O.D. Also can be altered and deconstructed, easy generating sprawl if not correctly implemented, as in Fig. 5. Suburban sprawl is an urban phenomenon countered by the new urbanists which, on a historical timeline, connects modernity with postmodernity, being also, as the metropolis, generated by the machine, even if not directly.
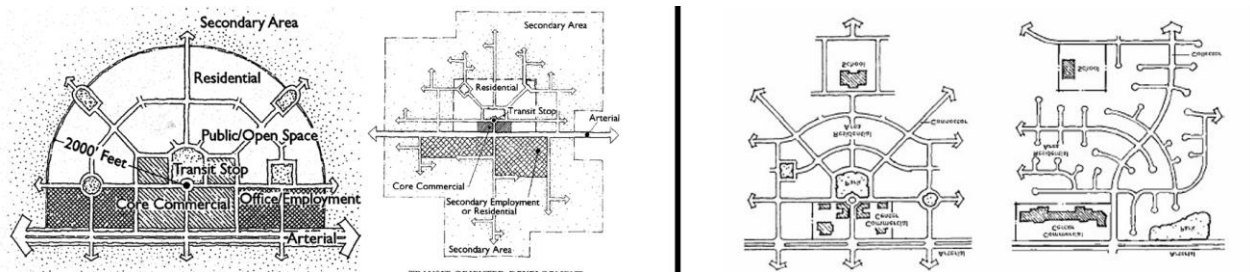

Figure 5. Transit Oriented Development versus the altering of it
(Source: Peter Calthorpe, *The Next American Metropolis. Ecology, Community and the American Dream*)

Because modernism began - among other negations - with the programmatic deconstruction of the traditional block (urban quarter) and the boolean-logic like inversion of the traditional urban tissue, block that stands for the archetype of both defining diagrams. It is now the place to get to the antithesis of this short dialectic, asking the question if the new urbanists are maybe disguised as neo-modernists.

3. Antithesis: New Urbanism = modern

Stated by its main representatives, New Urbanism blames modernism for all urban ills, mainly for enslaving the city to the car, for zoning that causes alienation and isolation, for de-structuring and altering the humanistic historical urban tissue. Despite the official position, there are many similarities to be found between modernism and New Urbanism [12]. As modernism once did, New Urbanism is also mandated by a chart and a congress. Both modernism and New Urbanism were/are contestants of the reigning established urban paradigm. Talking about paradigm, ideology, both movements can be termed as dogmatic, deterministic, ideological, normative. Starting from this point, modernism and New Urbanism materialize their beliefs through strong regulatory codes of building, modernist fashion like, being both top down rules imposing methodologies. Moreover, much quite like modernism, the New Urbanist credo is driven by a social belief, coming close to the issue of social engineering, much „beloved" by the modernists, even if now the marketing slogan is "diversity" [13] disguised under the mask of order to be imposed on urban form. So, for both of the

ideologies, urban form and social behaviour are strongly related and reciprocally determining. Along with social utopianism, as the other main feature of New Urbanism, is the one that resides in the aesthetic ideal [14], but this means also sometimes borrowing from modernism, the pure white boxes placed in a traditional urban tissue are also to be found, mainly in Canada. The west coast wing of New Urbanism, led by Peter Calthorpe, criticizes the small town nostalgia of the movement's earlier developments and advocates for a more modern, metropolitan ecological approach [15] (to be more explored in part 5, the synthesis).

For illustration, one my considered a forced comparison between two icons: the city of Brasilia of (Oscar Niemeyer, Lucio Costa, Roberto Burle Marx) and the town of Celebration (masterplanned by the postmodernist icon Robert A.M. Stern) as in Fig. 6. Judging by the image of both cities, one might notice some strong differences. Although both "built utopias", one is futuristic/anticipative/future confident (Brasilia), the other one (Celebration) is retrospective/nostalgic and somehow deniable, in the spirit of the 90's. Reason seems to have generated Brasilia, feeling Celebration, shortly put the science (modernism's positivism) versus the narrative (the Disney character of the new urbanist development). The human scale is absent in monumental Brasilia, on the contrary, almost diagrammatic generative in Celebration. The distinction between open and closed form can also be drawn, between cartesianism on one side and landscape-ism on the other.
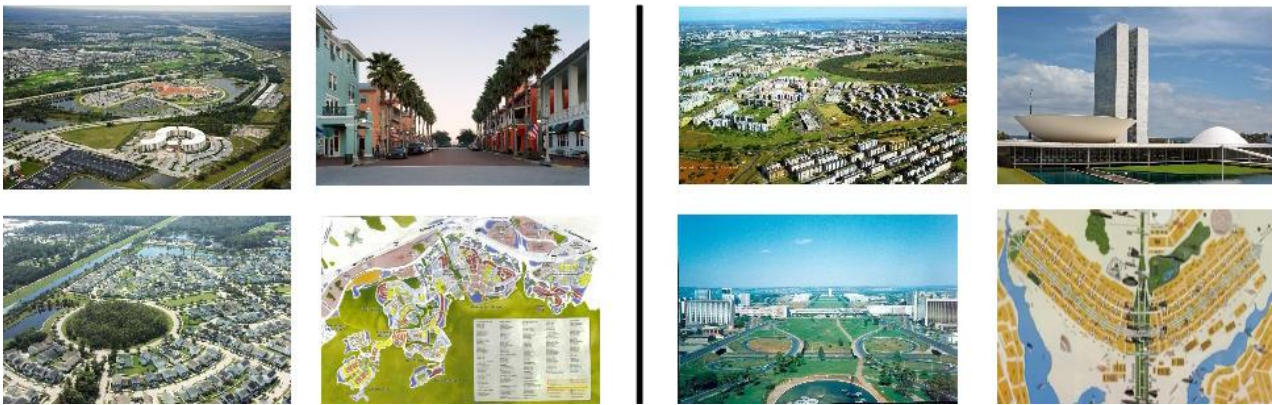

Figure 6. Comparative illustration of Celebration (Florida) and Brasilia
(Source: Peter Katz, *The New Urbanism. Toward an Architecture of Community*)
(Source: Hatje Gerd: *Encyclopedia of Modern Architecture*)

Moving to the section of similarities, many have been already stated, worth to notice that both are cities built from scratch, *ex nihilo*, without taking account of any historical context. Despite that, both Brasilia and Celebration are iconic cities with a symbolic touch, they are statements for society(Brasilia) versus community(Celebration). (the plan of Brasilia, like Corbusier's Chandigarh, resembles the bird as a metaphor for the plane/machine, while that of Celebration resembles the organic habitus of rural life).

As it has been illustrated for the thesis + antithesis parts, New Urbanism features both premodern and modern planning manners. As stated, the result of this theoretical equation makes New Urbanism suitable for the postmodern tag attachment, according to Charles Jencks [16], tag which will be analyzed in the following synthesis part.

4. Synthesis: New Urbanism = eco-postmodern > altermodern

In his 2011 sequel to "The Language of Postmodern Architecture"[17], Jencks distinguishes

between two new urbanisms, which, in his view, are opposing. One fits the description of the American New Urbanism, since he invokes the figure of Leon Krier, the other one points to the Generic City of Rem Koolhaas, as the other distinct direction. Douglas Kelbaugh[18] terms Koolhaas' city prototype materialized in the Dubai Waterfront Project as Post Urbanism which, in his view, is heterotopic [19], sensational and post-structuralist. On the contrary, the New Urbanism is utopian, idealist, reformist and structuralist. Of course there are sharp critiques for each of the two models formulated by the other side. For Koolhaas, New Urbanism is nostalgic, anachronistic, unable to deal with the metropolitan hyperreality. Conversely, the Generic City militates for what a classical new urbanist with historical sociological features will outspokenly contest: sprawl, placelessness, sameness, repetition.

Still, Jencks [20] is the one who emphasizes some resemblances between the two antagonistic directions. The both city models are governed by fast changing rules, mostly economic and now informational control. Postmodern key terms like otherness, excentric, poli, multi, pluri, hetero are tags that fit for both urbanisms, defined also by hybridisation, collage and contextualism.

Another common element for both urbanisms is the imperative quest for sustainability more or less loudly outspoken. For the New Urbanism there is an ecological upgrade of the two main diagrams enumerated in part 2 (Thesis) as illustrated in Fig. 7 for the T.N.D. (by Douglass Farr) and Fig. 8 for the T.O.D. (by Peter Calthorpe).
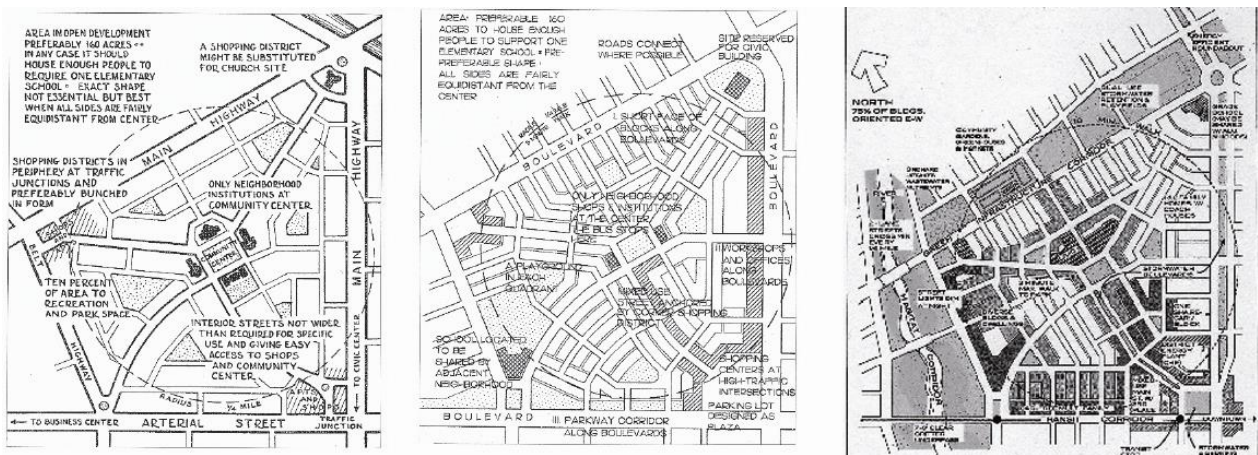

Figure 7. The Traditional Neighbourhood Development: from Neighbourhood Unit to eco -T.N.D.
(Source: Douglas Farr, *Sustainable Urbanism. Urban Design with Nature*)
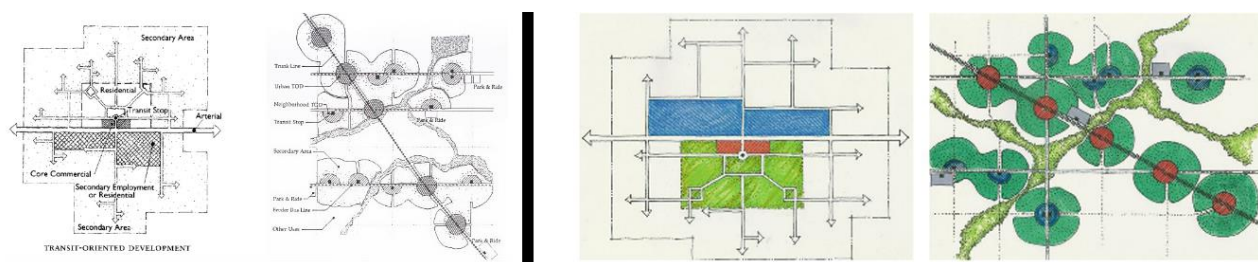

Figure 8. Transit Oriented Development (T.O.D.) and eco – T.O.D.
(Source: Peter Calthorpe, *The Next American Metropolis. Ecology, Community and the American Dream*)

Although not entirely visible, the main idea of this part is that there is no longer a clear separation between a retrospective side of New Urbanism and the prospective view of Post-urbanism. New Urbanism is upgrading, becoming New New Urbanism, triggering New Smart Growth, courting the

Smart City model. This determinate action will be illustrated in the case of the town on Markham, Ontario (Canada), featuring two interventions from the office of Duany & Plater-Zyberk (for the T.N.D.) and the office of Peter Calthorpe (for the T.O.D.).

The town of Markham (more precisely a suburb of Toronto, as in Fig. 9) became through rapid growth in the last years what nowadays is called a "ethnoburb"[21], a suburb where migrant communities have become the majority. The need for more housing is very high since IBM has placed there its main headquarters, thus guessing the emergence of the rich ethnic colour palette. Nevertheless, New Urbanism has been embraced as an official policy for the town development. Andres Duany and his associates were called to rebuild the centre, demanding the "fairly pure application of the neighbourhood concept"[22]. The New Urbanist recipe is applied as such: diversified street grid, neo-traditional architecture, high density, mixed use, walkability and transit, public space, clear demarcation of centre and edge, etc. There is also a downtown metropolitan district with high rise buildings, linking it to the Langstaff development designed by Peter Calthorpe, to be presented also.

Duany & Plater-Zyberk also pre-designed the Cornell "community", which was later adapted by the Development Design Group. Once again, functions as retail, residential, commercial and leisure are intertwined. Easy access and pedestrian-friendly streets in a multi-type street grid, and main civic buildings in walking distance, main street, the "old" commmunity centre as complementary to a cyberpark, careful but scattered disposed parks and plazas, and architecture as "timeless way of building"(Christopher Alexander).
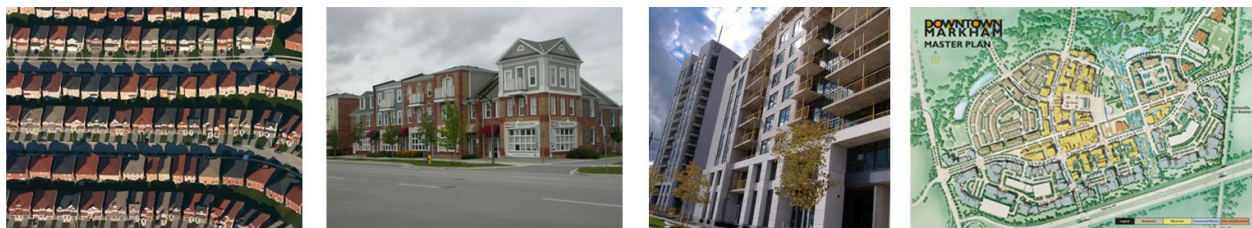

Figure 9. Markham detailed: sprawl, New Urbanism developments (low and rise), plan
(Source: Katherine Perrott, *Markham trends*)

The traditionally designed part of Markham points to the fact that diversity (as a postmodern stamp and a key term in social ecology) could be achieved, or at least stimulated by using different housing types in a postmodern fashion coupled with policy, of course. Still, depending on what is understood by diversity, according to Grant & Perrot [23]:

"At the urban scale, Markham has an impressive mix of uses, housing types and densities, and considerable ethnic diversity. At the neighbourhood scale, though, its physical mix is less diverse than planners hope to see and its social homogeneity is transforming from one pattern to another. Planning policies and regulations that call for mixed housing types, mixed uses and mixed densities are not sufficient to generate a full range of social diversity. They may contribute to place vitality and economic health, but the Markham case suggests that it is less clear that they can guarantee social equity or sustainability."

Of course, as it has been said earlier, Markham presents some diversity of the ethnic texture, but shows little price housing affordability, making the diversity ideal, much like the "sameness" of the original community – to be remembered here the diverse community, the paradoxical paradigm of the Chicago School – for the moment, intangible. And of course, there are unasked questions: should the houses stand for the *genius loci*? Should thy represent the IBM nerd lifestyle? But, in its loud reaction to standardisation (although there are typologies, and this is not a paradox) makes

Markham quite altermodern, an epitome of hybridisation, creolization (emerging from the ethnic pattern), but also when thinking of the complete network of people engaged in the design process.

Intending to prove that New Urbanism is not only feasible in the suburbs, leaving the inner city aside, Peter Calthorpe's Langstaff Gateway in Markham is a premiere for New Urbanism as in Fig. 10. It is situated on a semi-industrial area waiting to house 47 000 people. That makes the development literally go upwards, centred on high-rise (up to 50 storeys), evoking the contested (by the classical new urbanists, not by Calthorpe) urban metropolis. There is some resemblance of Calthorpe's approach to what has been called Vancouverism, a modernist light version of smart growth. Still, what totally contradicts Koolhaas' Generic City when compared with Calthorpe's model is the attitude towards the personal automobile: a *sine-qua-non* (even for urban aesthetics) actor of the contemporary urbanscape for Koolhaas, a ruthless de(con)structor of the true lost urbanity for Calthorpe. But the urban district designed by Calthorpe is built around his eco-T.O.D. scheme. According to Calthorpe, two thirds of the residents of Landstaff won't be needing cars, there will be Segway devices and four person driven electrical cars with dedicated paths, subways, etc...Density is pushed to the limit, five times more than the average contained in the other parts.

Figure 10. Plan and axonometry of Langstaff Gateway district (Source: *www.calthorpe.com*)

Beside other known new urbanist rules like those implemented in the Cornell Community of Duany Plater-Zyberk, mix of uses, fine-grained street grid, community services there is a practically impossible desideratum: a contribute to a resident to employee ratio of 1:1, meaning all work in proximity[24].

The morphology of the development is sustained by a backbone of parks and public spaces, with little enclosures attached to this spine, a quite classical disposal. This landscape-ism design will animate the streets as maybe Jane Jacobs would have imagined.

Generally, as any new urbanist ideological driven artefact, the city of Markham, according to Calthorpe[25], needs to emulate the Garden City model, creating an urban food belt and clearly distinguishing between the city and its natural landscape, avoiding sprawl. High-tech sustainability devices like cogeneration will be used, along with biological anaerobic digesters. The green metaphor is taken quite literally.

5. Conclusions

Surely for qualifying as a complete Phd Thesis, the investigations of New Urbansim's roots still present some interest, especially when analysed related to post-modernism, such an ambiguous "ism". This text only sketches the path towards the next era, be it super/hyper/altermodernity (the latter preferred here). The question of historical continuity being interrupted violently by modernism and returning to bygone tradition is quite problematic, with no short answer. The

metaphoric bridge to be established with the lost history is actually a drawbridge, but modernism must be taken into consideration as well, not only because it is itself now history, but because, as shown, New Urbanism has borrowed its *modus operandi* exactly from its declared enemy. The icon of altermodernity is the hybrid, more adequate a cybrid if we take into account the digital space. The Post-(hyper-super-alter)-ism fits this paradigm perfectly, presenting diverging and contradictory tendencies, fragments, disjoints, incongruities, and, even the new urbanist credo resists yet the digital space all-encompassing, it is *de jure* and *de facto* (no contradiction) a heterotopia [26] defined by heterology [27].

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Image Importing in Architecture and Telesis

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Abstract

The paper proposes a route to and from foreign sources of background images propagation and abuse cases in a period overcrowded image of media and styles perpetuation specific foreign context. About recontextualization. About TELESIC component(V.Papanek), imported architecture in times of globalization and its impact on urban space particularly regional/national/local. Continuity and discontinuity of urban / rural architecture effect that "sells". Japanese architecture, Mediterranean westernized feng-shui, the image of a foreign architecture in the Western Europe context, the local context. We live in the culture of the copy: from CDs, copies leading to an excess of information and hence denial of information. This picture surplus leads to a minimum to understand and so we have a world image as a sham. Japanese garden space simulator in the Carpathians, Tuscan architecture in Transylvanian villages. In architecture, privileging the image leads to a weaker form of perceiving and understanding the appropriation of space. Excessive representation through drawings, photos, renderings us towards a distancing from the lived world , the sensations that gives them a psychological level space, all these forms of representation is transformed into a " enemy of the imagination " (H. Lefebvre)[1]. About the oversensitivity of the architect (industrial ruins) or aestheticized discourse where brutalism proves that aesthetics is a way of distorting reality. The image must be reported permanent architecture two aspects: the visual image, which we show in front , and the mental image , is an image based and built on visual image , which brings us the codes used by the architect and imagination to build a new sense of content . The study of semiotics develops two attributes of an architectural concept. A building can be read first as signifier or as the signified. A first contemplation of the image related to the quality of our architectural signifier basic term of semiotics, as it relates to artistic ability to extend the mental visual image and convert it into signified.

Rezumat

Articolul îşi propune un traseu înspre şi dinspre sursele propagării imagini străine de context şi cauzele abuzului de imagine într-o perioadă supraaglomerată de mijloacele media şi perpetuarea stilurilor specifice în context străin. Despre recontextualizare. Despre componenta telesica (V.Papanek), importul de arhitectură în contextul globalizării şi impactul asupra spaţiului urban particular/regional/naţional/local. Continuitatea şi discontinuitatea urbană/rurală ca efect al arhitecturii care "se vinde". Arhitectura japoneză, mediteraneană, feng-shui occidentalizat, imaginea unei arhitecturi străine în context occidental, în context autohton. Trăim în cultura

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copiei: de la cd-uri, copii xerox care duc la un exces de informaţie de unde rezultă negarea informaţiei. Acest surplus de imagine duce la un minim de înţeles şi astfel avem parte de o lume a imaginii pe post de simulacru. Simulăm grădini japoneze în spaţiul carpatic, arhitectură toscană satele transilvănene, etc. În arhitectură, privilegierea imaginii duce la o formă mai slabă de percepere şi înţelegere, de apropriere a spaţiului. Reprezentarea excesivă prin schiţe, imagini, randări ne poartă către o distanţare faţă de lumea trăită, a senzaţiilor pe care le dă un spaţiu la nivel psihic, toate aceste modalităţi de reprezentare se transformă într-un "inamic al imaginaţiei" (H. Lefebvre)[1]. Despre suprasensibilizarea arhitectului (ruinele industriale) sau discursul estetizant în cazul brutalismului, dovedeşte că estetizarea este o cale de distorsionare a realităţii. Imaginea arhitecturii trebuie raportată permanent la două aspecte: imaginea vizuală, ceea ce ni arată în faţa ochilor, şi imaginea mentală, adică o imagine constrtuită pe baza imaginii vizuale care ne poartă cu ajutorul codurilor folosite de arhitect şi imaginaţiei la edificarea unui nou sens, a unui conţinut. Studiul semioticii dezvoltă două atribute ale unui concept de arhitectură. O clădire poate fi citită prim prisma rolului de semnificant sau semnificat. O primă contemplare a imaginii arhitecturale ne raportează la calitatea de semnificant, termen de bază al semioticii, calitate care se referă la capacitatea artistică de a prelungi în mental imaginea vizuală şi a o transforma în semnificat.

Keywords: telesis, content, image importing, media, copies, signified/signifier, oversensitivity, aestheticized discourse.

1. Introduction

This paper is about the way we use appropriate or inappropriate things, facts, stories, habits or ways of life. More specific, if it's about architecture as our primary object of study, we will try to analyze how people (and here we mean people as ordinary people not specialists in architecture or aestethics, architects or artists) *see*, *like* and based on these two processes of *seeing* and *liking* they *import* foreign types of architecture in totally strange and inappropriate regional, cultural or traditional areas of interest.

If we speak about *seeing*-we will immediately speak about *image* –the object or the goal of the seeing process. If we speak about liking - we will automatically speak about *"taste"* or more precisely, about *aestethics*. If we speak about importing, we follow the path that goes on studying local, regional, traditional materials or construction techniques in architecture, we speak about *recontextualization* or a *sort of jacking*.

If we choose any local construction technique on an non-specific site, in a non-specific region, or non-specific times, we can still build and live in a new building, functional, architectural with great proportions, good composition, solid, responding maybe to the well-known "firmitas, utilitas, venustas"[2] principles, just that the new building "reacts" strangely maybe to the nonspecific natural environment, cultural or traditional environment.

But ordinary people don't really see or feel these things; either we speak about a Japanese traditional house built in United States of America, a Tuscany house built on the hills of Transylvania, or a Chinese restaurant in Italy. In order to explain this phenomenon V. Papanek tries to name this ***Telesis.***[3]

2. Telesis

The article proposes a route to and from foreign sources of background images propagation and abuse cases in a period overcrowded image of media and styles perpetuation specific foreign context. About *recontextualization*. About *TELESIC component* (V.Papanek), imported architecture in times of globalization and its impact on urban space particularly regional/national/local.Continuity and discontinuity of urban/rural architecture effect that "sells".Japanese architecture, Mediterranean westernized feng-shui, the image of a foreign architecture in the Western Europe context, the local context.

We live in the *culture of the copy*: from CDs, copies leading to an excess of information and hence denial of information. This picture surplus leads to a minimum to understand and so we have a world image as a sham.Japanese garden space simulator in the Carpathians, Tuscan architecture in Transylvanian villages.

In architecture, privileging the image leads to a weaker form of perceiving and understanding the appropriation of space. Excessive representation through drawings, photos, renderings us towards a distancing from the lived world, the sensations that gives them a psychological level space, all these forms of representation is transformed into a " enemy of the imagination " (H. Lefebvre) . About the oversensitivity of the architect (industrial ruins) or aestheticized discourse where brutalism proves that aesthetics is a way of distorting reality.

The image must be reported permanent architecture two aspects: the visual image, which we show in front, and the mental image, is an image based and built on visual image, which brings us the codes used by the architect and imagination to build a new sense of content. The study of semiotics develops two attributes of an architectural concept. A building can be read first as signifier or as the signified. A first contemplation of the image related to the quality of our architectural *signifier* basic term of semiotics, as it relates to artistic ability to extend the mental visual image and convert it into *signified[4]*.

But what happens when we try to bring home foreign architecture for the simple reason that we like e specific style or we think it represents us, either we speak about a Japanese traditional house built in United States of America, a Tuscany house built on the hills of Transylvania, or a Chinese restaurant in Italy?

What happens when we try to bring to life Renaissance Villas or ancient Roman baths in contemporary architecture?

What happens when we rebuild from dust an ancient monument with contemporary materials?

And how do we get there, what are the reasons that bring an architect to this practice?

These are the few Questions we will try not to answer in this paper, but at least to analyze the route we fall into when creating such architecture.

Figure 1. Chinatown, San Francisco
http://raisingrockstar.com/2010/12/29/san-francisco-through-the-eyes-of-a-rockstar-part-6-
%E2%80%93-chinatown/

Victor Papanek, American designer, speaks about "The deliberate purposeful utilization of the processes of nature and society to obtain particular goals "(American College Dictionary, 1961). To explain this fact, we should know the telesic component or content of design must follow some clarity rules:
-It must reflect the times that have given rise to it
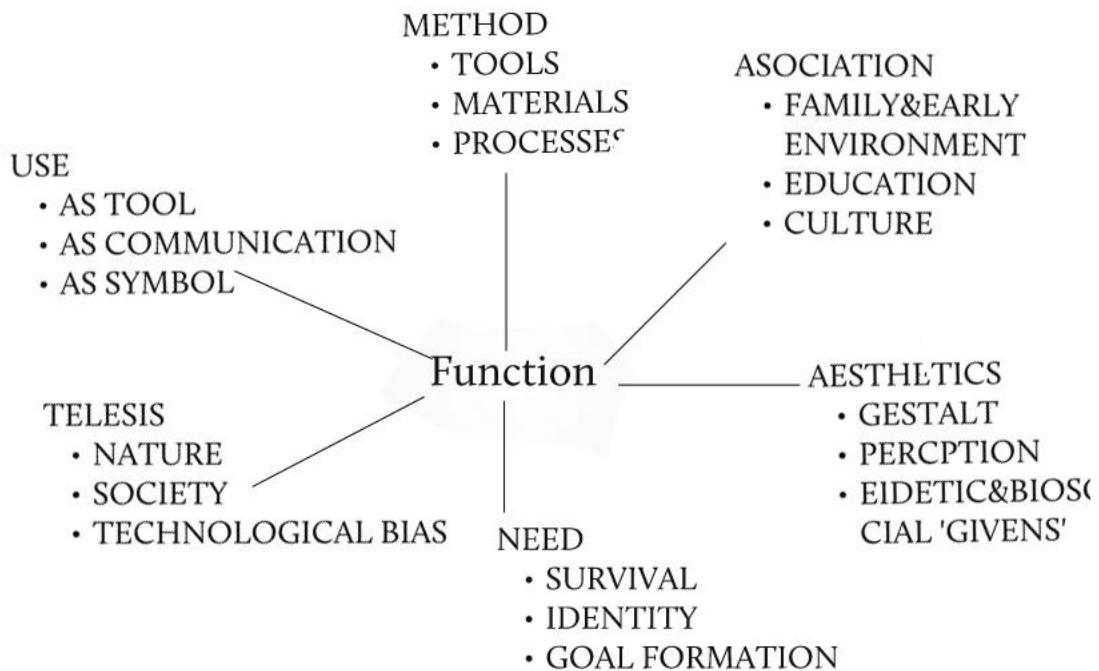-It must reflect the conditions that have given ride to it

Figure 2.Six evaluative criteria of design after V. Papanek

3. Architectural image

To talk about image and representation in the context of contemporary architecture and to frame research as the subject of a paper that seeks to analyze the viability of old or current methodologies and design and aesthetic born contemporary architecture is necessary, according to the architect, as prime actor of this process, addressing a flexible positions, namely pivoting all the senses the term image can follow. The ancient image architectural representation is strictly related to religion, monuments dedicated to the gods developing psychical ecstasy when seeing monumentality, meaning deity designed on Earth. Styles can be interpreted as when interpreting the representation of the deity on earth, playing through the eyes of the artist, the architect, his vision of the world. After Huisman[5], art, and more specific architecture that is probably the most important branch of the arts, if we dare to make this statement based on the role to include other arts (and not just physically), art begins and ends with the sacred. We could speculate this speech act of creation that brings this facet as a picture of the deity, whether the creation process occurs polytheistic or monotheistic context in Asia, Europe, Latin America or Africa under guide of religious philosophies, buildings leave their mark.

The formation of each individual, subjective thinking and personal interpretation involved a lot of factors, like some sediments gained throughout life, but especially cultural progress: the level of culture, religion, nationality, tradition, the culture we belong to, or more specifically, personal interpretation can be associated with so-called barriers described by Victor Papanek in his book " Design for the Real World: Human Ecology and Social Change ". The author makes here a description of course referring to the field of industrial design, a description of the barriers imposed by the society we live in, on the designer's creativity, barriers that constrain the actor who achieved an artistic act. These barriers perceptual, emotional, associational, cultural, professional, intellectual or environmental might be equally well folded especially in art and architecture, in the architectural design process, and over the architectural image.

Figure 3. Private house in Certeze village, jud. Maramures, Romania
https://www.flickr.com/photos/70071512@N00/3736106661

Neil Leach contemporary theories focus here on the concept of image positively or negatively affecting the architecture. Theories of image assault on life, intense concern for reporting the image concept strictly related to the sense of sight becomes the new reality**.**

At the beginning of his speech Neil Leach [6] talks about the proliferation of image, or so-called "ecstasy of communication" (J. Baudrillard) due to the media, the press, which exerts a picture assault on life. We live in culture copied from CDs, copies leading to an excess of information hence the denial of information. This fact of image overloading leads to a minimum of understanding, and so we have a world image as a simulation. Jean Baudrillard said, "When everything is aesthetically, art itself disappears." Art is largely appreciated by the apparent shape and it stimulates the visual overload leading to indifference or that sort of jacking [4].

Everything is aesthetic in today's world, art becomes a confusion of non-art, and standards disappear in appreciation of art. In this world dominated by aesthetics and politics lead to show and sex results in commercials or pornography. There is going on a political aestheticization, artwork cannot be separated from the social, cultural where from it gets its strength, and if this happens the artistic result remains to be judged just as an object (if this is art).

In architecture, privileging the image leads to a weaker form of perceiving and understanding the appropriation of space. Excessive representation through drawings, photos, renderings takes us to a distancing from the world lived, from sensations that give space a psychological level , all these forms of representation are transformed into an "enemy of the imagination" (H. LeFebvre). About oversensitivity of the architect (it comes usually when we speak about industrial ruins) or aestheticized discourse regarding brutalism, prove that aesthetics is a way of distorting reality.

Aestheticization policies are found in fascism and transform ideology "in a show intoxicant" (W. Benjamin) and ethical concerns become aesthetic. Zeppelinfield is clear evidence of the transformation of political actions in shows. In these situations, political acts of power are associated with the complicity of the architect. We speak here about the possibility, or underlying condition, we could say, of architecture to create spaces that have the ability to invite us to find some ways to use space. Other concepts such as indifference or city intoxication make possible the transformation of reality into myth.
Aestheticization (sleeping senses) recontextualization invades your senses, indicating a form of anesthesia which is in relation to Anesthetization, which appears here as the awakening of the senses.
Robert Venturi said give away ethical values and the contents of the architecture in favor of form. In architecture, the removal of the elements of context leads to emptying the semantic content or refilling it with new semantic content, re-investing artwork with other content.

When we speak about seduction in Baudrillard's term of *image* is supposed that this extracts meaning, the content of architectural discourse and decreases the truth." The speech that carries sense in non-seductive"(Baudrillard).

Production dominates seduction by the meaning of these concepts. Production gets in sight, reveals, while seduction takes you away, gradually envelops. Las Vegas seduction, this city's form of seduction it is forced to the lower level of libido, to instinct, and subject to production in which case we are already making pornography, obscenity. Mechanization of this seduction is present in gambling, taking advantage of the player's anesthesia as result of the many commercials.

4. Recontextualization

About recontextualization in methods of design and aesthetics in architecture that operate on the present examples reveal a series of attitudes. The extension of the concept of decontextualization that involves removing semantic content, removing content from a performance and its prey leaving chuck, image not account for social and cultural context and calls only formal component, the visual that can be enjoyed in the architecture of most users. Recontextualization entails believe, investing in another sense, with connotations of architectural forms.

Of the panoply of Western churches be converted family home or in restaurants, changes function itself to accommodate another space in architecture, we believe such is a recontextualization. If the primary purpose of a gothic church to say is that the Lord's house, or place of worship, then it turns through recontextualization, pressured by the environment, give a society where religion has a weight of credibility of increasingly low the context for this company. Meaning of the architectural object becomes confusing when a form recognizable as typical formal expression of a certain space, the space of worship, now meet the family dedicated spaces as homes or transitional spaces like a restaurant or hotel.

Figure 4. "Nobori" Japanese Restaurant in Cluj Napoca, Romania
http://www.partytude.ro/

Jean Nouvel, Jean Baudrillard in their discussions asks themselves "what serves an architecture that is not in agreement with the use of his time?" Here are the examples of conversions churches say, still serves the physical architecture, the role of shelter, but does it serves the same purpose, those religious connotations that should own a Gothic monument silhouette?. When the meaning is changed remains only delight for the eye with an aesthetic enshrined here, but in the mental architecture we find no sanctity in the first place. Desecration of the fact that the so-called holy places modern man rethink as context, turning a ritual space usage with certain constrains, and get a sleeping space , dining, or toilet can cause alienation, due to the new seduction.

This occurs due to a mutation produced by eccentricity, snobbery or a desire to experiment new sensations, or purely economic reasons to use a space that no longer finds utility purposes. Could be

the result of oversensitivity of the architect or client by returning a manifested romance passion for ruins, or the superiority of the past in the face of this, causes the conversion transforms and distorts the reality of such a converted church.

5. Analog concept for *Recontextualization*

Jean Baudrillard talks about *jacking* - defined here *(Singular objects of architecture)* as an architectural act, a mutation of a space designed for a specific function (industrial, religious, etc.) and spontaneous transforming such a space by using a receiver (unexpectedly we might say) to another destination (operation). Example Seita factory in Marseille proves such a diversion, where an industrial platform specific warehouse spaces for artistic events attract people from certain bill, artists. Without a schedule or announcement of a formal conversion, this space attracts, the place has a certain poetry looking to be discovered and in our, case it is discovered and appropriated.

We can say that this diversion if architecture could be synonymous to *recontextualization* but if it occurs unscheduled award of this new sense of architectural space can have positive effects. These effects are due only to the user, the architect has no positive role (very rarely) in the reinvestment of a space with another connotation, and contrary change effects may be negative in most cases.

We can almost find the same detournement process but translated to another level when clients "import" architecture, it takes place a strange act, bringing home from vacation, usually from another country, an image that had a powerful impact for the person, something of the way of life specific to another culture, that the person insists on "building "it in his totally different style of living, but he thinks it represents his personality.

6. Conclusions

In the actual context of contemporary art and architecture, born and dominated by aggressive political aestheticization, whose mobile is the image, we are dealing with an excess of image-based architecture, a waiver of the symbolical values, ethics and content in favor of form. Ingenuity, style and mannerism are not much attributes of genius, it's hard to be unique in a world where the Internet is full of "art" and with the major help of the media this kind of "Art" becomes extremely spread, copied, abused through and by the visual expression.

We need strong politics rooted in the consciousness of the individual and not just in the consciousness of the architect, realized and not imposed, a sort of literacy of deepening values and a new kind of awareness of local / regional / national / traditional / historical, architectural specificity for not letting open space to the mirage of foreign architecture in foreign place, foreign time or foreign ethical values.

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Concept vs. Context in the Urban Environment

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Abstract

On the subject of urban environment expansion the densification of the built mass is becoming one of the main problems of the everyday life in the large cities of the world. Though natural the phenomenon is closely studied for optimal management as is one of its main components - the inadequacy of the new architectural objects built in existing urban sites. The following article aims to study the relationship that should exist between the new architecture projects and the existing environment in order to avoid urban discontinuities. Starting from the notion of context – the sum of physical, social, economic, cultural and political factors that define the urban environment and context – the main argument used in order to achieve the desired goal in the process of architectural design, we will offer our own image of the dependency between the architectural object and its environment. As an approach to the theme we will analyze a series of examples trying to determine the optimal parameters that the architectural design process should have in order to avoid a discontinuity. After reviewing the data we have found that the new objects should have a respectful approach toward the environment, the attempt of astounding being the main generator of discontinuities.

Rezumat

*In plina expansiune a mediului urban, densificarea masei construite devine una dintre problemele apasatoare ale activitatilor desfasurate in cadrul marilor aglomerari. Fenomenul este totusi unul firesc si intens studiat in vederea unei controlarii sale optime insa adevarata problema o reprezinta lipsa de adaptare si relatioare a noilor obiecte de arhitectura la mediul construit in cadrul carora sunt amplasate. Lucrarea de fata isi propune sa studieze raportul care trebuie sa existe intre noile interventii arhitecturale si mediul inconjurator existent pentru a evita generarea de discontinuitati in cadrul spatiului urban. Pornind de la notiunile de **context** – cumulul de factori fizici, sociali, economici, culturali si politici care definesc mediul urban si **concept** – argumentul principal folosit pentru a atinge scopul dorit in cadrul procesului de design architectural, vom oferi o viziune proprie asupra interdependentei dintre obiectul de arhitectura si spatiul in care acesta este introdus. Pentru a aborda problematica propusa vom analiza o serie de exemple consacrate in incercarea de a determina parametrii optimi pe care procesul de design architectural al noului obiect trebuie sa ii intruneasca in vederea evitarii unei discontinuitati. Cercetarea exemplelor a dezvaluit ca noile obiecte de arhitectura trebuie sa*

pastreze un raport de aliniere fata de mediul inconjurator incercarile de epatare fiind generatoare de discontinuitati.

Keywords : context, concept, urban environment, discontinuity.

1. Introduction

A city can be defined as a complex human settlement variable in size that cand hold administrative, production, commercial, political or cultural functions. The idea of a city surfaced in the early ages of human history when the nomadic hunter-gatherer population settled in fixed places in large communities and lived by agricultural production. The development of farming and the increased output of food per unit of land generated city-like activities and gave birth to the human urban civilization.

Influenced by climate, natural resources and sometimes natural disasters, human settlements grew in shape, dimension and function from the first small farming units to craftsmanship and trade points, defense and communication facilities or religious grounds and all the way to present cultural economic and administrative metropolis. Along this path cities went through a lot of required transformations such as water supplies and storage, basic sanitation or fire protection but also through esthetic, functional or social transformations like gardens and leisure spaces, religious and cultural districts and other. All these changes led to the current form of our cities, a complex and dynamic environment created for the higher purpose of individual and collective evolution.

The city as we see it today is a mix of elements in a continuous change that can be divided into communication ways, utilities and equipment generally known as infrastructure, architectural fund of different shapes sizes and functions or buildings and the space remaining between the previous two.

The overlaying oh the three elements mentioned before results in the notion of "urban space", a physical framework meant to support the development of a modern society made of unique individuals. Perceived in physical form as buildings, communication ways, empty areas and the relationships between them, the urban space is also characterized by the visual image it shows the pedestrian, the sense of the place that allows him to correctly appreciate its qualities or flaws. These components, although different in substance – one physical and the other emotional, form the character of the urban space giving it identity, unicity and specificity.

The two components were richly documented in the scientific literature by heavy names of the fiels such as Spiro Kostoff who tried to give a recipe of nine sufficient but not mandatory points of how to organize a city or Kevin Lynch that implemented new methods of investigating the urban space, both their results leading unsurprisingly to the tight relationship of the two and mostly to the fragility of the relationship between them.

2. Theory

In the background of the development of urban settlements, not only by expanding their physical limits but also by the growth of the built mass within their boundaries, the subject is of increasing importance as the formal dynamic of the urban form has accelerated dramatically in the last few decades because of the growth of the infrastructure, the perenniality of the building materials, the economic and functional criteria found in the urban environment. All these causes led to major visual changes that generated a different character of the city in the eyes of its inhabitants.

Different from conventional architecture that starts as a two-dimensional drawing and evolves to a three-dimensional shape, the urban space shows more complexity as it is determined by a fourth dimension that is time. This is to say that urban space not only has to settle an agreement between the old and the actual but also has to be predictive about future needs and transformations. This is a difficult position for professionals in the urban design field because this leads to the everlasting controversy between the architecture loyal to the context it resides and the revolutionary trend of inserting a new concept and setting a new trend.

3. Context in architecture

In Mohr Firrdhaus's vision "context is the sum of external elements that influence an architecture object. These elements can be physical – buildings, roads, landforms, climate or non-physical – political, cultural or economic environment, and they can greatly influence the final shape of the architecture object by promoting the continuity between the building and the local circumstances"[1]

A very important aspect of context is its duality, because while its physical elements are very well determined in space and time, its non-physical elements are in constant change. The economic context of a building is in close relationship with the economic situation of the country or area it is built in. The economic difficulties of the last few years generated not only clearer architectural solutions but also a new way of thinking among all the practitioners in the construction field, cheaper modular of prefabricated elements becoming more and more present within new projects. Politics also has a great role in determining the physical context because sustainability became the main word in the local administration's speech in many countries that intend to diminish their dependency of foreign materials and labor force. Local culture is also a defining element of architectural context because it is the generator if identity, specificity and uniqueness, imposing a great degree of adaptability on new developments.

4. Concept in architecture

According to A. Korichi concept is "the essential mean used in reaching goals in a project" or "a way of thinking that meets, combines or integrates multiple ideas, notions, thoughts or observations in order to form a coherent whole"[2].

In addition to that, the author writes that "the success of a concept is evaluated by the degree of clarity its multiple elements have in the purpose of forming a coherent whole, but also by the capacity of advocacy and argumentation it author has"[2].

Further, Korichi mentions that "concepts can be abstract – completely independent in time and space or specific – tributary to a certain time and place. At the same time, concepts can be universal – accepted by the majority or relative – applicable only to certain sectors, fields or specialties" [2].

Referring to concept in the field of architecture, the author defines concept as "a specific manner through which theme elements, physical, social, political or economic context, aspirations and author creativity combine"[2]. On the same subject the author considers that "stating a concept is not an activity meant for all creative professionals, the communication and explanation of a concept based on multiple ideas and also the process of prioritizing ideas and notions within a concept being a general problem in the field" [2].

In the end Korichi proposes a categorization of concepts based on their basic characteristics: "analogical concepts that come from referencing the architectural object with other objects (the most common form of concept), metaphorical concepts that also refer to other objects for comparison but this time in an abstract manner, reinterpreting the relationship. The third category – the essential concepts is the result of abridgement of a project while program concept strictly refers to the theme and function of an architecture object. The last category is the <<ideal concept>> that compares to the universal values of the world and that most of the times is connected to a symbolic aspect"[2].

5. Examples

Danish Maritime Museum, Helsingor, Denmark, Bjarke Ingels Group

Placed in a privileged environment, between Kronborg Castle, one of the most famous buildings in Denmark, part of the UNESCO World Heritage, and Helsingor docs, the museum is closely related to a concrete dry dock that was used for repairing commercial vessels anchored in the bay.

The museum's design was originally subject of an international competition won by the brilliant approach of the architects from BIG that instead of generating a new volume in the flat landscape disturbed only by the castle's towers went underground with the extension, surrounding the concrete dock and thus transforming it into an interior courtyard, a source of light and fresh air for the exhibit areas, coffeshops, workshops and conference halls. The only noticeable part of the build is the catwalks that cross the dock at the upper pedestrian alley level. All these minimal interventions, through their dynamic and transitional character form a link between the castle's courtyard and alleys and the dock's historical maritime heritage.

Relating to the previous theoretical notions, the project complies perfectly to the physical and non-physical context, the analogical concept being exactly that of a subtle insertion in the existing environment.
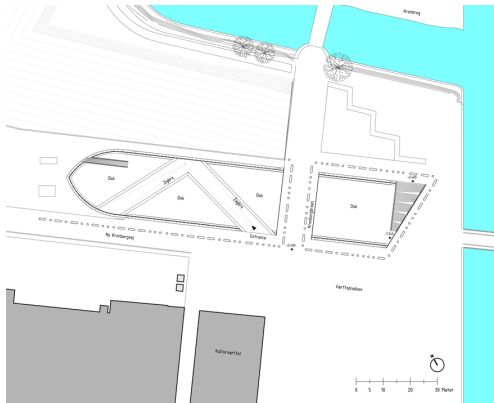

Fig. 1 DMM Plan
(photos: www.dezeen.com)

Fig. 2 DMM Exterior view

Basque Health Department, Bilbao, Spain Coll-Barreu Arquitectos

Built in the very heart of the old town, between historic buildings, some going back to the 17th century, at the crossing of two of the narrow streets found in the area.

Due to very strict planning regulations the building assumed the dimensions and simple shape of the surrounding buildings, aiming for a contextual approach. Continuing contextual spirit the architects then applied a fractal glass facade over the initial building considering that the inclined glass pieces would reflect the adjacent buildings while still preserving, through transparency, the initial image of the area.

Although very efficient regarding the energy loss or fire regulations, the building missed its purpose of maintaining the historic character of the block, the proportions, the rhythm and the whole dimensions of the building being the ones of the glass shell and not the ones of the clean building behind it. Besides this, the strong metallic reflexions of the glass amplify the chromatic attribute of the area and distort the image of the neighbor buildings.

Based on a metaphoric concept expressed through the fractal design of the glass facade that surrounds the clean, respectful volume of the building, the project refuses the aesthetic submission to the area's historic character, producing a focus point and a distorted image of its environment.

Fig. 3 BHD Exterior view
(photo www.archdaily.com - Aleix Bague)

Fig. 4 BHD Exterior night view

Bilbao Guggenheim Museum, Bilbao, Spain, Frank Gehry

Built on the Nevrion River side, the architectural masterpiece draws its fluid form from the rivers water. More than that, evoking the past of the Spanish port the museum is shaped like a vessel, covered in titanium sheets that resemble the flakes of a fish. The shiny metallic sheating, beyond the fluid shape is describes or the scales-like array plays an important part in the design of the building as it pays tribute to the industrial character of the area and generates an iconic image within the city. The cultural gain is not the only form of revenue the museum brought to the community: named "The Bilbao Effect", Gehry's impressive and sculptural creation managed to revigorate the fragile economics of the city by drawing four million visitors, five hundred million euro in profit and one hundred million euro in tax in the first three years from its opening.

Also based on a metaphorical concept, the building answers aesthetically and volumetrically to the physical element of water but also to the non-physical element that is the cultural heritage of the place. The building is considered a success because it advocates the urban continuity by correctly answering to all the context-related constraints.

Fig. 5 BGM Aerial view (photo: Flickr User Iker Merodio)

Royal Ontario Museum Extension, Toronto, Canada, Daniel Libeskind

The extension of the museum proposes a dramatic expression of straight lines, sharp edges and sloped planes combined over the old museum building. The sculptural glass and metal composition will consist of five inclined prismatic volumes that will each house a theme gallery.

The aggressive and spatial excessive architecture, the confusing angles and staggering rhythm create a powerful controversy because the overlaying of such a structure on top of the historic North American conventional and orthogonal road scheme poses a serious threat to the continuous historical images. The scale of the building is another concern because it clearly disadvantages the old building and also the surrounding buildings, all much smaller but much more elaborate in terms of details than the compact new extension.

Based on an ideal concept, Libeskind's building is completely opposite to the physical context it resides generating major discontinuity in the adjacent urban space.

Fig. 6 ROM Main facade (photo: www.daniel-libeskind.com)

6. Conclusion

After comparing the results of the analysis to the theoretical concepts stated at the beginning of the presentation, we can conclude that contemporary architecture is continuing the modern architecture trend of creating unique and expressive objects that is, unfortunately, not always a positive way.

Manifesto architecture is constantly trying to overpass its predecessors through volumetric innovations and often exaggerated aesthetics, responding irresponsibly not just to its physical context but mostly to its non-physical one – the social context.

Endorsing Dessend Hillman, we can say that "architecture must always start from its main duty, that to serve the people by giving them an extraordinary and inspirational experience not just through presence or volume but also by being part o a larger whole" [3], a continuous environment who's transitions unveil gradually offering a pleasant rather than a tormenting sensation.

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The New Urban Pandemic: I.B.S. or the Irritable Bilbao Syndrome

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Abstract

This article focuses on the developments of new eccentric constructions in the entire world as a reaction to the success of a cultural impressing building, designed by a signature architect, or a 'starchitect'. We examine the cultural buildings regarded as monuments, tourist attractions, investment deals or identity statements and the misconception that surrounds them. The goal of this paper is to inform about the delusion that one building alone, without a multi-tiered urban, cultural and social approach, will attract new incomes sufficient to revitalize a city, by revealing an unsuccessful pattern in most cases.

Rezumat

Acest articol se concentrează asupra dezvoltării de noi construcţii excentrice în întreaga lume, ca reacţie la succesul unei clădiri culturale impresionante, proiectate de către un arhitect faimos, un 'starhitect'. Vom examina clădirile culturale, văzute ca monumente, atracţii turistice, oferte de investiţii sau declaraţii ale identităţii şi teoria eronată care le înconjoară. Scopul acestei lucrări este de a informa cu privire la concepţia greşită că o clădire, singură, fără o abordare pe mai multe paliere, din punct de vedere urban, cultural şi social, va atrage venituri noi, suficiente pentru a revitaliza un oraş, dezvăluind un şablon fără succes, în cele mai multe cazuri.

1. Introduction

The second half of the 20th century represented an indulgence of architectural fantasies. One of the illusions was the idea that art morally expands you. In that sense people sought social improvement through art, as in Adolf Loos's the Poor Little Rich Man who realized that there are people who do not possess as many things as he does, "but their worries are utterly wiped by a great magician: Art!" [1: 302-308]. This translated into a burst of cultural buildings. Throughout the entire world, cities started raising cultural monuments.

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As we go further along the ages, closer to our days, the cultural buildings are now transformed into the city's most iconic buildings, striving to convert their cradle into a national, and why not an international, destination. The 21st century only increased the lust to build unusual architectural forms, animated by the idea that a metropolis could be recovered from oblivion by a single iconic, aspiring to be miraculous, building. "The underlying aim is to give globally competitive cities special attractiveness by means of spectacular architecture – thus securing for them an advantage in comparison to other places in the cut-throat competition for money from investors and tourists." [2] These are drastic visual manifestation, employing exceedingly complex shapes and forms, with poor relationship to the prevailing architecture or natural context. [3].

Since the inauguration of the Guggenheim Museum in Bilbao (Figure 1), in 1997, which represents ground zero for a new urban pandemic, also called *The Irritable Bilbao Syndrome* [4], due to insufficient urban understanding, cities with crumbling economies and declining industries, cities discouraged, depopulated and facing a problematic future, found a new Mecca in terms of solutions to boost the revitalization or their towns.

Figure 1. Guggenheim Museum, Bilbao.
Source: http://eventsmapping.wordpress.com/2014/01/04/guggenheim-bilbao-collection/

In this age of plurality of styles, could it be the decline of religion and the rise of consumerism or the weakening of the traditions [5] the reason why these so called iconic buildings try to be unlike anything built before, in order to shock and captivate the attention of potential viewers? If so, could individual architecture be the sought answer or do we need to pursue a far more complex strategy and not shortcuts?

As several examples demonstrated, the aftermath, in most cases, was a complete failure, since planting "cultural trophy buildings", such as museums, arts districts, convention centers, aquariums, sports stadiums, and such like, designed by "starchitects", did not ensure a cure for the diseased patient. Unfortunately, entertainment, spectacle, creativity and consumption are taken out of the

context of authenticity, practice and production, resulting in expensive and embarrassing urban and architectural developments.

When they are successful, the landmarks, commissioned by local authorities, to attract and to be a designated hotspot for sticking flags and photo backgrounds, sometimes get to be used for branding purposes, famous are the cases of Dubai's Burj al-Arab, Valencia's Ciutat de les Arts i les Ciències, Bilbao's Guggenheim Museum and countless others. [6]

One person's palace is not only his home, but his neighborhood, thus civic counteractions such as NIMBY (Not In My Back Yard), NIMM (Not In My Neighborhood), NIABY (Not in Anyone's Back Yard), BANANA (Build Absolutely Nothing Anywhere Near Anything), FRUIT (Fear of Revitalization Urban-Infill and Towers) or CAVE (Citizens Against Virtually Everything) are perfectly explainable. The majority of people, without an architectural education, would almost undoubtedly always choose not to change the historical buildings over eccentric and shocking modern intervention. City branding follows high values sites, often already branded, so they reinterpret, reuse, parasitize the concept, piggyback on existing buildings, replace older *inhabitants*, because compromise is allowed by the authorities and ignored by the citizens until a degree of transformations (read mutilation, in most cases). Cannibal architecture takes advantage on the inaccuracies found in the urban planning and strategies in order to exploit 'unprotected high potential' sites and buildings. [7]

2. Bilbao's Guggenheim

The medium size city of Bilbao (about 350.000 inhabitants) was facing decline at the dusk of the 20th century. A not-for-profit public-public partnership was set up in 1992 by the local, provincial, regional and national government to act as a project developer for major redevelopment sites formerly in harbor, railway or industrial use in the Bilbao area. The self-financing mechanism put in place by the actors was the most significant element in the renowned triumph of the metropolis. [8]

Unquestionably, Frank Gehry's Guggenheim Museum has had a major impact on the revitalization, regeneration and development of the declining industrial city. The intervention, in terms or impact, successfully enrolls in the line drawn by other cities with easily recognizable iconic buildings, by attaching an image (in this case the museum) to the city's name. Similarly as Eiffel Tower represents the symbol of Paris or Sydney Opera House the symbol of Sydney, Bilbao's icon is the Guggenheim Museum. As the previous examples, the museum is intelligently positioned in the urban tissue in order to benefit from a postcard like image. "The evaluations of the project for the Guggenheim Museum in Bilbao and its impact on urban regeneration and economic development in the city are countless. However, most of them seem to be affected by severe inconsistencies, depending on the viewpoint of the commentators." [9]

In the first three years of its activity, the Guggenheim Museum hosted 1.385 million visitors, its impact over the local economy was at around 220 million dollars [10: 45-74], as well as a 70 million dollars increase in the economic activities complementary to the cultural supply [11].

The estimate of the project for an extensive period, 1998-2006, revealed 9.2 million visitors, 2.16 billion dollars direct expenditure, more than 2 billion contributions to the GDP of Spain, followed by 342 million dollars tax revenue for the Basque Government and a return on investment of 12%. Mentioning the more than 4000 jobs generated per year is compulsory. [12]

Before the development of the waterfront area, the unemployment rate in Bilbao was 20-25%. By 2009, the unemployment rate dropped at 14,4%, well below the national rate of 18.01%. Even after the Global Crisis hit, which affected not only the entire Spain, but the entire world in terms of work places, we find that in 2014, the Basque unemployment rate reaches 14%, the lowest since the

interventions in Bilbao, whereas the average unemployment rate in Spain is almost double (at the other extreme is Andalusia, with an unemployment ratio of 36%). [13], [14]

Large and medium size cities interpreted these information as a guaranteed mean or way to boost their economy and growth. This way project templates could be a recipe to be transmuted and implemented wherever necessary, without making reference to the macroeconomic factors, infrastructure and accessibility, physical and environmental conditions, institutional setting or political and social problems, specific to the urban territory [15: 836-957].

The misconception lies in the fact that the majority thought that these were only the positive results of the Guggenheim Museum. In fact, the redevelopment was conducted by a public-private agency, Bilbao Rea 2000, financed by the Basque government, the City, the Province, the port authority, the city of Barakaldo, two railway companies, etc. [9]

3. Signature cultural institutions. The good, the postponed and the fail [16].

On the subject of the success of the Guggenheim Museum, Frank Gehry said in an interview [17] that since the completion of the museum, people came into his office and said that they wanted to hire him to do the *Bilbao effect*. Also, the former director of the Guggenheim Foundation claimed that he received about 60 proposals for participation in urban development projects in the world [18]. However, of all the offers, the most appealing, by far, is the package deal of the Cultural District of Saadiyat Island (The Island of Happiness) (Figure 2.). It is like a class reunion of starchitects in the fairyland of sculptural architecture, since Frank Gehry, Jean Nouvel, Tadao Ando and Norman Foster are each designing a museum. Zaha Hadid as well could not have missed the opportunity and her design for the Performing Arts Centre will complete the happy island.

Figure 1. The Cultural District of Saadiyat Island, Abu Dhabi, United Arab Emirates: Performing Arts Centre – Zaha Hadid; Guggenheim Museum – Frank Gehry; Maritime Museum – Tadao Ando; Sheikh Zayed National Museum – Norman Foster; Louvre Museum – Jean Nouvel

Yet in the recent history, we see that Bilbao effect has lost its charm. The Guggenheim Museum, designed by Rem Koolhaas for the Venetian Casino in Las Vegas, had a short life. It lasted opened for only of a few months. This is not unusual for Las Vegas since this is city that thrives from its attractions. In this case the outcome was predictable. An almost 1 billion dollars investment for another Guggenheim Museum in New York and its complementary programs, designed by none other than Gehry himself, was recently cancelled. The same thing happened with Jean Nouvel's Brazillian Guggenheim Museum and Zaha Hadid's Taiwanese Guggenheim Museum. The reasons behind these cancelations (Figure 3.) are varied: financial problems, slow development of the project, local conditions and bad infrastructure, unsustainability, more urgent investments, existing local consecrated art museums, etc. This is just to prove that a cultural building is not a magical wand that with a stroke would remove all economical and financial problems of a city.
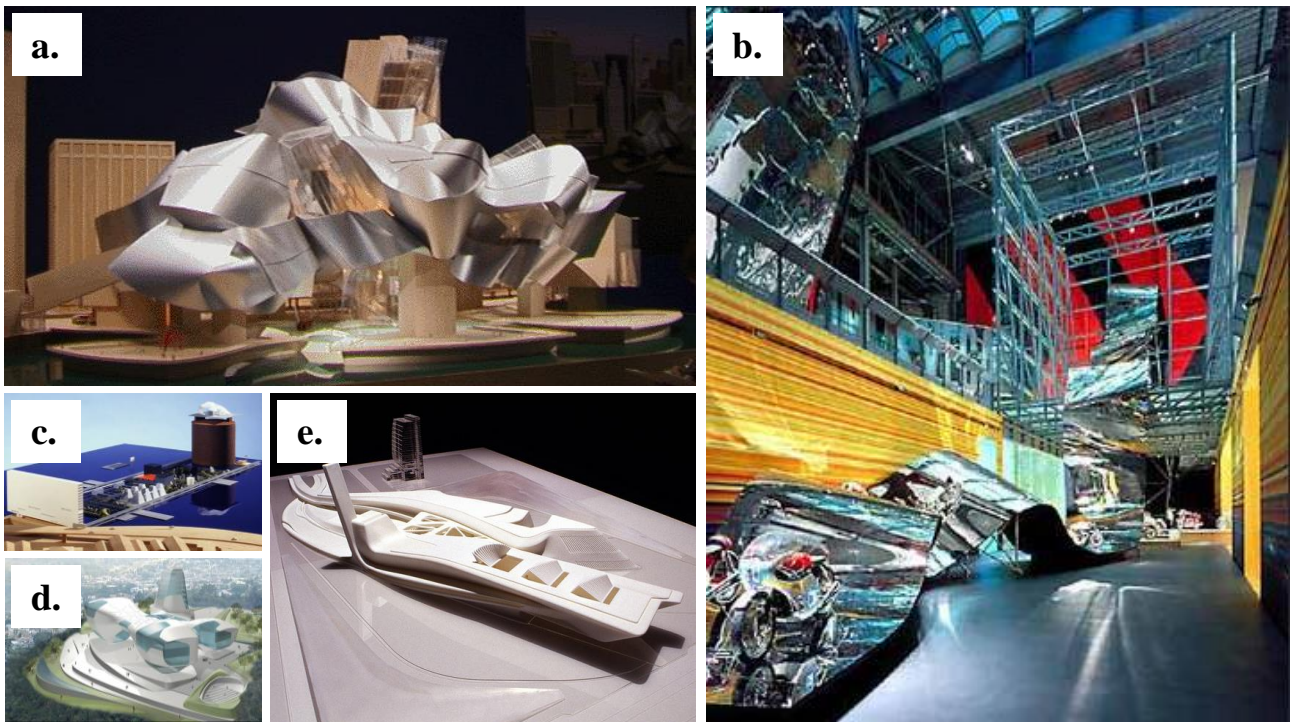

Figure 1.a. Guggenheim Museum along East River, New York – Frank Gehry; b. Guggenheim Museum, Las Vegas – Rem Koolhaas; c. Brazilian Guggenheim Museum – Jean Nouvel; d. Guggenheim in Guadalajara – Asymptote; e. Guggenheim in Taichung – Zaha Hadid.
Source: a. http://www.thecityreview.com/gehgug.html ; b. http://plottegg.tuwien.ac.at/vo031106.htm; c. http://www.artnet.com/Magazine/news/artnetnews2/artnetnews5-2-1.asp; d. http://www.banderasnews.com/0806/art-guggenheim.htm; e. http://www10.aeccafe.com/blogs/arch-showcase/2011/12/04/guggenheim-museum-in-taichung-taiwan-by-zaha-hadid-architects/

Ordos Art Museum, Inner Mongolia, China (Figure 4.b.) proves that just building a unusual museum is not enough to ensure success. The city of Ordos has sprung up fast, falsely, being part of the famous Chinese *ghost cities*. The city has potential for development, thanks to the discoveries of oil and gas. Unluckily the museum has no collections and thus not many plans for exhibitions. The museum is most of all the time empty, being populated mostly by the people who maintain it.
A year and a half after the opening of the Experience Music Project in Seattle (Figure 4.e.), the attendance was down by more than a third, leading to a layoff of more than one hundred employees. The same thing happened to the new Taubman Museum of Arts (Figure 4.c.). On the contrary, the Art Museum in Roanoke, Virginia, proved to be more expensive than originally anticipated and had to find additional funding for the architectural landmark.

Probably the most prolific example is represented by the National Centre for Popular Music in Sheffield (Figure 4.a.), also pejoratively called 'Sheffield's teapots'. When it was inaugurated it was stated that the modest museum would change the image of the small industrial city in the same way as Guggenheim did for Bilbao. Unfortunately, in less than an year, due to insolvency, the museum closed its doors.

Figure 4.a. National Centre for Popular Music, Sheffield, England; b. Ordos Art Museum, Inner Mongolia, China; c. Taubman Museum of Art, Roanoke, Virginia, USA; d. Kiasma Museum of Contemporary Art, Helsinki; e. The Experience Music Project in Seattle.
Source: a. http://www.geograph.org.uk/photo/41658 © Copyright Mark Morton;
b. http://arquitecturamashistoria.blogspot.ro/2011/09/sc-157-erskine-y-mad-el-arca-de-londres.html;
c. www.flickr.com; d. http://moleskinearquitectonico.blogspot.ro/2010/08/steven-holl-museo-kiasma-helsinki.html; e. http://www.netambulo.com/2006/02/20/edificios-imposibles/

4. In discussion Cinderella transformations

The fairytale of Bilbao influenced and is still influencing power actors in cities that want to be contenders in the competition for the fairest metropolis of the world. Unfortunately, the museum, the prince charming of the story, does not deliver the much expected outcome. The motivation to

attract investors and developers in order to rejuvenate areas and towns or to assert some sort of identity is strong, especially in the Eastern and Central Europe. However their success is at least questionable, since the happy ending for examples such as Guggenheim Hermitage in Vilnius, the Museum of Contemporary Art in Riga, Muzej Suvreme Umjetnosti in Zagreb, MNAC in Bucharest, KUMU in Tallinn, LUMU in Budapest or the Museum of Modern Art in Warsaw has yet to come. [19:167-182] New museum additions, expansions of existing ones or renovations in America were postponed or even abandoned. Such are the cases of the additions to the St. Louis Art Museum, the Cincinnati Art Museum and the Columbus Museum of Art (recently delayed), the expansion of the Albright-Knox Art Gallery in Buffalo and the University of California Berkeley Art Museum and Pacific Film Archive (abandoned). Also, in more stable urban contexts, the Avery Fisher Hall at Lincoln Center and the renovation of the New York Public Library's main Fifth Avenue branch were put into question. [9]

The impact of these examples on the social, economic and urban life, much lower than expected, is the reason why they were listed in the above section, reason some may consider them unsuccessful. Cinderella has not turned into a princess, the town into a metropolis, nor have tourists announced their arrival in waves from overseas to experience the beautiful fairytale of the land that wanted to be magical. Reasons such as small scale projects, scarce thing to present and not very attractive on a global scale, high operating costs compared to the revenue, unsustainable expansions, etc., but still primarily the lack of a project similar to the one that stood behind the revitalization of Bilbao and not at the base of a cultural building, make these interventions or intents not to reach the desired outcome.

5. Conclusions

Opponents of the Bilbao effect or the Bilbao syndrome labelled the Guggenheim franchise as ArtDonald's or McGuggenheim in a more or less comic effort to protest against polluting the image of the cities with buildings that represent questionable exhibits. Shock does not wipe all the urban, financial, cultural, social, etc. problems, it just shocks. Cities are not zoos or theme parks that exhibit, in "key" points, strange building specimen only for the sake of attracting the curious. This is a risk that must be studied, faced and assumed in order to set at rest the unspoken or whispered question: If we build it, will they come?
Following the case of Bilbao, which represents the successful example, "the good" so to speak, with all its multi-tiered urban, cultural and social approaches, and not the postcards of Gehry's Guggenheim, appears to be the path to go. In other words, if we focus on the recipe, the success will be within reach. Whereas if we focus on the cake, failure will most likely occur and we'll be left with nothing but unpleasant scars in the tissue of our towns.

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A Case Study for Gridshell Design using Physics-based Simulation

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Abstract

This article presents a case study regarding the design approach of a gridshell using a physics-based engine. The aim of this research is to investigate how physics simulation tools can be introduced in the process of designing the geometry of the building as an integrative method of design. The research focused on the design of a gridshell because of the close relationship between form and forces revealed by this type of structure. A substantial part of the research is focused on the definition of the gridshell's pattern, which is used as a structural pattern in the subsequent simulation stage. The research seeks the generation of a geometrical pattern, different from the orthogonal network that is usually used for gridshells.

Rezumat

Articolul de față prezintă un studiu de caz în care s-a urmărit procesul de proiectare al unui pavilion cu structură de pânză subțire reticulată. Scopul cercetării este de a identifica modalități prin care unelte computaționale precum solverele de simulare fizică pot fi integrate în procesul de proiectare în fazele incipiente ale proiectului. Proiectul s-a axat pe proiectarea unei structuri – pânză reticulată subțire datorită relației explicite între formă și structură care este exprimat prin acest tip de structură. O parte semnificativă a cercetării se axează pe definirea modelului geometric al rețelei,care are de asemenea rol structural, pe care se bazează procesul ulterior de simulare a căutării formei. Demersul a urmărit generarea unui motiv geometric diferit de rețeaua ortogonală bidirecțională, uzuală în proiectarea pânzelor subțiri reticulate.

1. Introduction

Simulation is a computational method that analysis the actual behavior of a design object. Through simulation, one can visualize, assess and model a design object in a computational environment. Simulation allows significant changes of the geometry throughout the design process in order to adapt to changing performance criteria.

In engineering, simulation is used for analyzing and modeling complex geometries, such as free form, double curved surfaces. The methods rely on algorithms such as dynamic relaxation and force

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density methods. *"Relaxation is a natural process that minimizes the potential energy in a system as that system tends towards equilibrium".*(Attar, Aish, 2009 [1])

On the other hand, architects can employ simulation as a new method of design investigation, from early design stages as means of defining a search area for the design object. Physics-based simulation can replicate real life behavior of objects, and it is visualized as animation.

In the last decade, commercial software that integrate physics-based engines have been developed in order to support increasing formal complexity. The architect is able to interact directly with parameters such as material characteristics and forces acting upon the object, and influence the result according to a set of requirements and constraints. One category of physics-based simulation is suitable for designing objects constrained by equilibrium conditions such as gridshells and minimal surfaces. *"The physics-based engine allow behaviors such as tension or compression to emerge as a form finding mechanism".* (Attar, Aish, 2009 [1]). It relies on the concept of springs and particles, particles represent points and springs represent tensioned members between the points trying to achieve an equilibrium state according to input parameters. The reference geometry, considered "in tension" tries to achieve a state of equilibrium , springs try get to a so called "rest-length", according to the material specifications.

In the last two decades, gridshells with evergrowing complexity of their skin and paneling are being used in different architectural programs, for their aesthetical and functional properties. Relativly recent softwares allow the integration of the workflow for the design of such an object on a single working platform that can be shared by architects and other specialists. Such softwares enable designers to define an efficient , target oriented search space, and meet at the same time multi-objective criteria. In the case of gridshells, multi-objective criteria refers to satisfying at the same time aesthetic, material efficient(that implies structure effective objects) and environmental aspects.

The prezent paper focuses on the aesthetical and structural aspects, and the way they can be simultaneously pursued in the workflow of designers, as softwares at hand for architects are available . Such softwares like Rhino, with plug-ins like Grasshopper and Kangaroo enable the implementation of architectural as well as structural aspects from early design stages.

2. Gridshell definition

"Shells are the most efficient structural alternative for extreme situations like: long span, minimum mass or high resistance. The extraordinary behavior of shell structures is caused by the double arch effect, which, in contrast to one-dimensional curved structures, allows them to carry different loading constelations by a pure membrane action. This means that shells designed to act like membranes are already optimal structures," (Bletzinger, Ramm, 2003[2])

Membrane action means that the loads are carried through internal axial forces: compression and tension, and not through internal bending. The curved shape achieves stability through membrane stiffness. So, if the general geometry is correctly configurated, the ratio of thikness of section to span is very high, proportionally comparable the shell of an egg.

3. Traditional Form-finding

Traditional form-finding process consists in an analog process , that relies upon physical models. The material, a hanging a cloth or a net of chains was hanged under its own weight, and the

rigidified model was then inverted. Gaudi, Otto, Isler used physical form-finding techniques, which for a given material, created a set of boundary (support) conditions and gravity loading that found the efficient 3d structural shape.(Adrianseens 2012,[3])

In traditional form-finding *, "form follows force"., that is in the design process the shape of the grid is defined by static equilibrium of the forces throughout the structure. The structural shape is dependent upon the forces, and the other way around*.(Bertin 2013 [4]) The form-finding relied upon a single criteria, the structural one.

4. The new perception of Form-finding

Today , form-finding has a new understanding ,the form-finding criteria is extended from a single,structural one , to set of requirements that can be structural and non-structural. *The new perception of form-finding is finding the description of the geometry and the process of identifying an appropriate architectural and structural shape.* (Bertin 2013[4]) The general form is not necessarily structural, responding to sculptural and aesthetic, or environmental factors. The expansion of criteria that need to be satisfied steers the structural system from gridshells to a category of free-forms.(*Examples : Graz Museum and Pavilion on the river from Graz, , YAS Hotel Abu Dhabi,Azerbaigian National Library)*

The range of new, numerical methods vary from optimizing a free-form to generating a grid-shell in the classical term. (Bertin 2013, [4]) Numerical form-finding techniques that have been developed in last years are in engineering domain are : stiffness matrix methods, geometric stiffness methods , dynamic equilibrium methods.(Bertin 2013 [4]).

5. Particle spring system

Kangaroo plug-in for Nurbs comercial software Rhino is based on particle-spring system method, which can be used in order to solve the equilibrium geometry of a gridshell. Particle spring system is a dynamic equilibrium method.(Bertin, 2011[4])

*Particle-spring system is a method of aproximating real physical behavior of material systems.(*Kangaroo draft manual [6]) The particle-spring system was *Particle spring systems can help to introduce structural evaluation environments into the architectural design process as early as possible, allowing the designer to interact with a form and experiment with alternative solutions.(*Killian, Orchsendorf, 2005[7]).

Particles are objects that have mass, position and velocity, and respond to forces, but have no spatial extent.(Witkjin97). They behave like points in which mass is being lumped. „*The distribution of those particles and their masses give a good aproximation of real physical behavior such as bending, shear or torsion".* (Kangaroo Draft Manual [6]).

„Springs are the elements connecting the particles, and they act like springs. The initial input length is usually considered tensioned. *The rest length (the natural or slack length) of the springs is the length"it wants" to be." (*Kangaroo Draft Manual [6]) *Each spring is assigned a constant axial stiffness, an initial length, and a damping coeficient. Springs generate a force when displaced from their rest length. External forces can be applied to particles, as in the case of gravitational acceleration.* (Killian&Orchsendorf, 2005 [7])

6. Gridshell construction methods

Gridshell are either made from initially straight elements or prefabricated from curved members. Strained gridshells (or form-found shells) are built from initial straight laths that are bent into a spatial , continiouus curve. *"When combined in a grid and bent, the splines form a structural, complex, curved wall. This initial action strains the shell, hence the term "strained "gridshell. In contrast, unstrained gridshell is a system that in its initial state is stress-free, apart from stresses due to self-weight."(*Adriaenssens,2014 [8])

Unstrained gridshells are assembled from prefabricated curved subframes. The curvature can be induced in two ways: one way is to use pre-bent steel or aluminium members, or curved laminated timber. The other alternative is to use straight elements that change direction at nodes. The nodal connections have to be moment resisting to prevent buckling , or the shell has to consist of more than one layer , producing a curved space-frame. (Adriaenssens , 2014 [8]).

7. Research objectives

The research project falls in the second category of unstrained gridshells, made out of straight elements with rigid connections. The research project explores the possibility of designing gridshells with a different pattern than the usual triangular or quadrangular mesh grid. The work comprises two stages: the first is finding a method for creating a pattern which can be applied to a UV surface, and the second objective is to explore how the UV surface, considered as the geometry of the gridshell, undergoes a form-finding process through dynamic relaxation.

7.1 The Workflow: Creating a parametric pattern on a square grid

The first step is to choose an initial form that is going to be optimized. In this case, we experimented with a relatively regular form, a rectangular perimeter with four sides. First , we defined a parametric surface. A parametric surface is defined by a set of three functions , one for each coordinate $\mathbf{f}(u,v)=(x(u,v),y(u,v),z(u,v))$, where parameters u and v are in domain between 0 and 1. Parametric surfaces or more precisely parametric surface patches are not used individually. Normally, many parametric surface patches are joined together side-by-side to form a more complicated shape.[2]
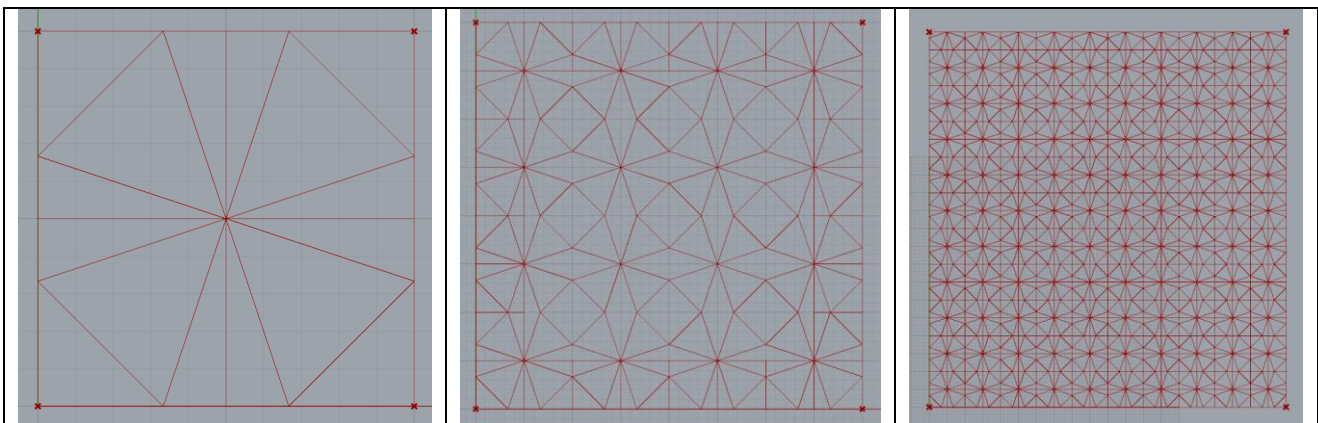

Figure 1. The geometrical pattern

The density of the grid is set by manipulating the values of u and v parameters.(Fig.1) For the

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[2] http://www.cs.mtu.edu/~shene/COURSES/cs3621/NOTES/surface/basic.html

definition of the surface and of the points we experimented with two different approaches:

In the first approach (fig.2) , the initial referenced surface was subdivided into a rectangular grid of isosurfaces along u and v direction. This way, it resulted a surface with variable *u* and *v* parameters that are stretched along the surface. We obtained rectangular patches with four points each. The form and dimensions of the patches depend on the u and v parameters , controlled by the designer.
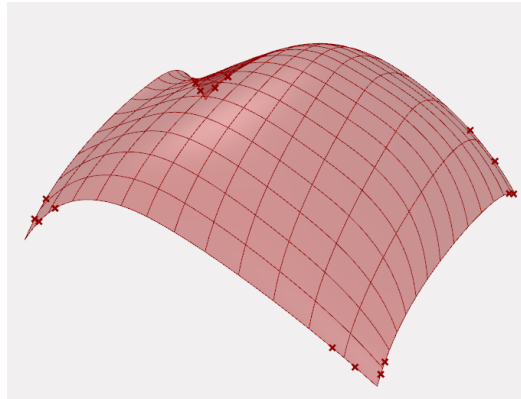

Figure 2. Approach 1. Discretization of NURBS Surface: extracting izoparametric subsets of the surface

The next step was to organize the information regarding the points in order to be able to create the desired geometrical pattern. In other words we modified the data tree in order to get groups of four connected patches, which were the base for the pattern unit cell. The points on the surface were originally organized in groups of four points corresponding to the corners of the patches and they were numbered from 0 to *u* x *v* in a single branch. We separated the tree in four branches, each containing every fourth cell, in order to get groups of four patches, on which to create the pattern unit (Fig.3).
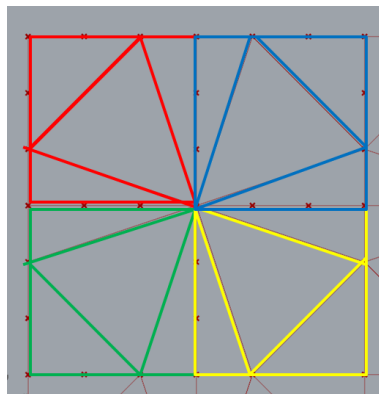

Figure 3. The pattern unit created on four base cells.

We identified the perimetral curve for the patches, which are used to define the inner pattern. The pattern (constituted by triangles) is oriented differently in the for cells, and therefore defined separatly. The resulting data structure is woven into a list, that is further interpreted for the particle-springs solver.

In the second approach (Fig.4), the pattern was mapped onto the surface. This time, we first define the pattern on a square flat grid , that is then applied onto the NURBS surface. The points on the square grid are reparametrized to a domain from 0 to 1. Then the surface is evaluated at the corresponding *u* and *v* coordinates of the grid. This way the pattern is stretched proportionally across the surface in reference to the density and shape of *uv* curves.
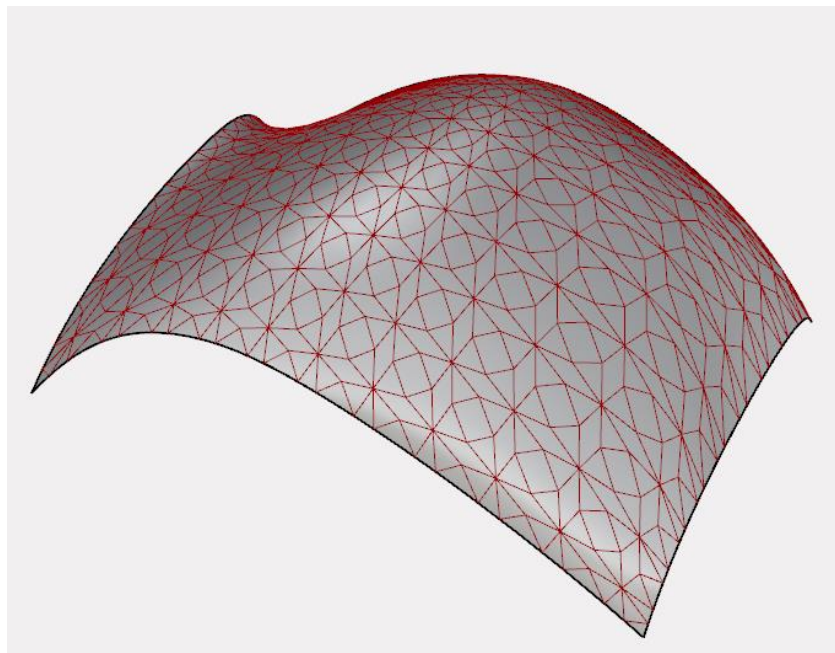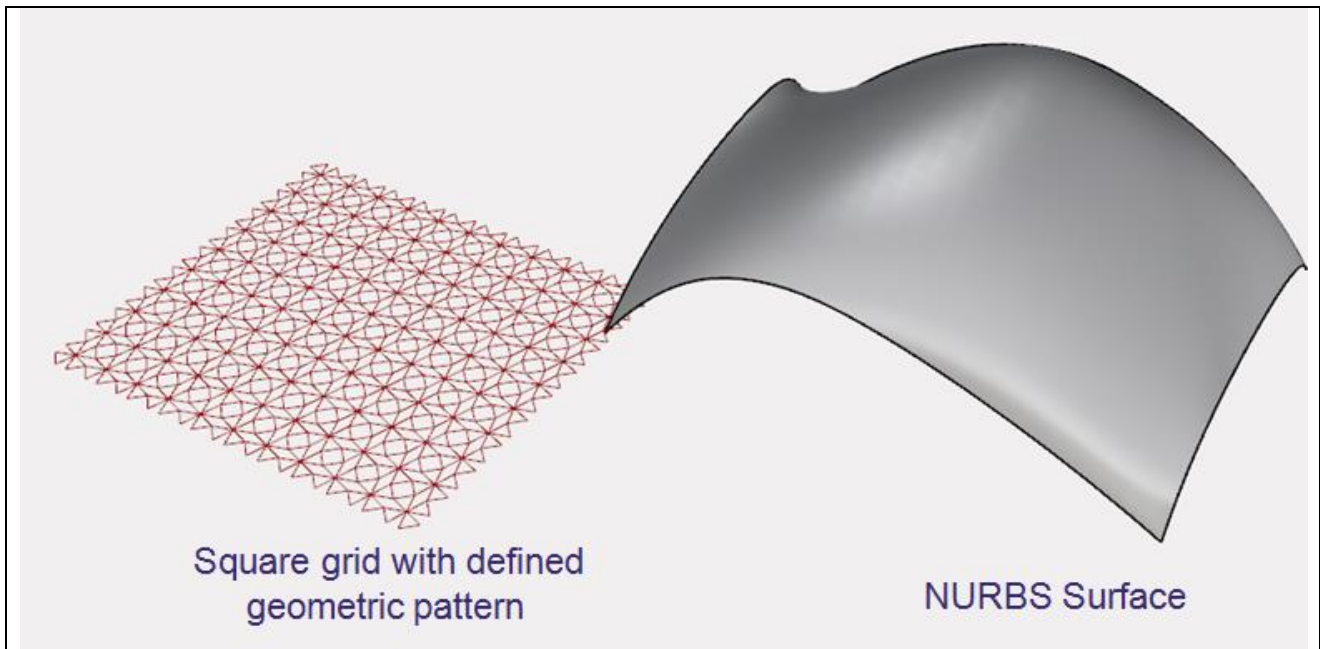
Figure 4. The pattern applied on the NURBS surface.

8. The physics based form-finding role in the design project

The data structure gives information about the defined points on the surface and the established connections between points. This means that the topology of the surface is defined, and the modifications will operate upon the geometry: through the form-finding process using physics – based engine Kangaroo, the points are free to move in vertical direction, therefore changing the distance between points. This leads to a gridshell with members with different lengths.

In order to set up the physics-based solver, we identifiy two sets of elements: the first consists of the points set on the surface (the trianles' corners), were we apply a vertical load that mimics inverted gravity load; the second set of elements are the connections between the points, that is the gridshell's members. These are considered to act like springs, that try to compensate the forces applied at the springs. The member elements are considered to have a rest-length, meaning the

element will try to achieve that length during simulation. The outcome is equivalent to an equilibrium state. The value of the rest-length is required , and it can be set up as a proportion on the actual length. In this case the rest length was set to have the same value as the initial members.
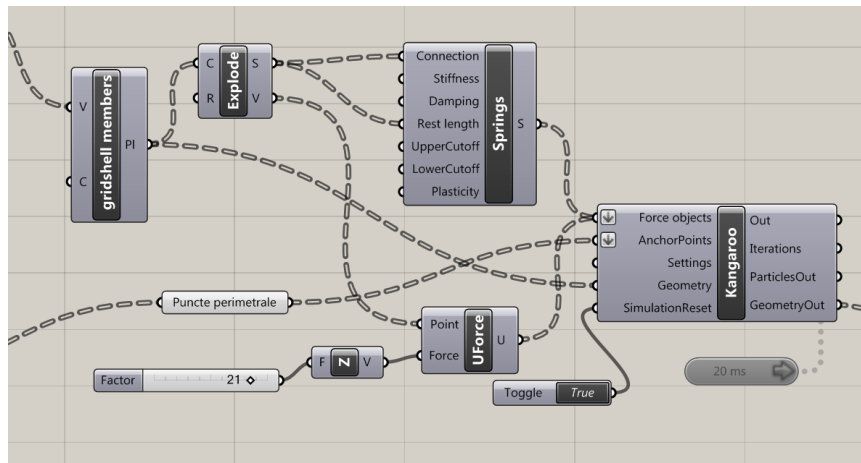

Figure 5. Particle-Springs Relaxation

During the form-finding process , the values of all numerical values are taken arbitrarily (load, bending stiffness, axial stifness) since it is only their ratio that affect the shape.(Adriaenssens, 2014 [1] p.94) The vertical load is fictious and negative, applied at nodes, in order to evoid having to turn upside down the structure.
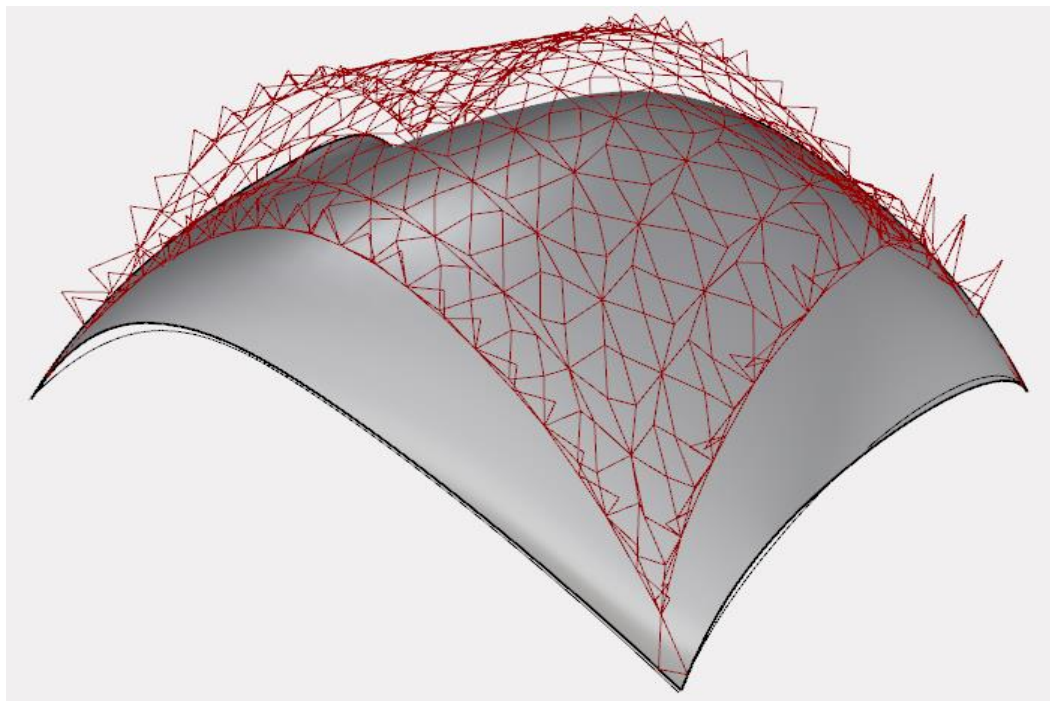

Figure 6. Particle spring relaxation. Modification of the overall shape.

9. Conclusions

The relaxed geometry of the gridshell consists of triangles and quadrilateral cells, the last not being planar. The downfall to this is that it needs curved pannelisation that can be more expensive and more difficult to implement. For further optimization for the fabrication process, planarization forces can be added in the relaxation process in order to get planar quadrilaterals. This process

deforms further the members. The obtained members from the relaxation process have different lengths, equal elements being obtained due to the general geometry (symmetry axes) , but in general the members are unique. The node connections need to be rigid to prohibit out of plane bending.

The undergone research project aimed to create a methodology for creating gridshells with various geometric patterns , either repetitive or non repetetive. The prezented project method can be extended to other repetitive geometric models. Additional variation can be added at the level of panneling , where variated perforations can occur. In order to create a non-repetitive model with individual units, such as Voronoi patterns or with gradient variation of the member geometry, other approach needs to be taken.

Eventhough the pattern can be applied on any surface, either found or free-form, the fact that the geometry is optimized with a physics based engine points towards a more efficient design oriented practice. Professor Pugnale points out that "physics based engines" –which are based on numerical analysis algorithms are suitable for evaluating design solutions in the conceptual , early design phases. Using these tools , at hand to architects , can help defining more accuratly a feasible search space.

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The changing relation of the city of Timisoara with water

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Abstract

Although situated inland at hundreds of km from sea, on the course of a minor tributary of the Tisa River, the history of the city of Timişoara is narrowly linked to water. The Roman town having presumably existed on the site is believed to have sunk in the marshes. The first fortress appeared on the narrow land strip linking the northern and southern plains between swamps. The medieval city developed spontaneously with a structure following the channels lines. Water was plenty and shaped the city. After the Austrian conquest, at the beginning of the 18th century, some of the most important works undertaken were the hydro technical ones: the drying of the swamps, the filling of the channels, the canalization of the Bega River, the regularization of the water flow. A completely new fortified city was constructed on the site of the medieval town. The long association of Timisoara with water may have seemed to have reached a dead end. But other lasting links occurred and the economic and urban development of the city was marked by its dependence on the river course. The article opens a new perception over the history of the city.

Rezumat

În ciuda poziţiei geografice care plasează Timişoara la sute de kilometrii de mare, pe cursul unui afluent minor al râului Tisa, istoria oraşului este strâns legată de apă. Oraşul roman care se presupune că ar fi existat în aceste locuri ar fi dispărut în mlaştini. Prima fortificaţie a apărut pe fâşia îngustă de uscat care lega zona de câmpie din nordul mlaştinilor cu cea din sud. Oraşul medieval s-a dezvoltat spontan, având o structură care urmărea traseul canalelor. Apă exista din plin şi ea a determinat forma urbană. După cucerirea austriacă de la începutul secolului al XVIII-lea, unele dintre cele mai importante lucrări întreprinse de noua administraţie au fost cele hidrotehnice: desecarea mlaştinilor, umplerea canalelor, canalizarea râului Bega, regularizarea debitelor. Un oraş fortificat complet nou a fost ridicat pe amplasamentul aşezării medievale. Lunga asociere a Timişoarei cu apa părea a se fi încheiat. Dar noi relaţii trainice au apărut, şi dezvoltarea economic şi urbană a oraşului a continuat să fie dependentă de cursul râului. Articolul deschide o nouă perspectivă asupra istoriei oraşuluji Timişoara.

1. Characteristics of the site: a wetland

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The site in which the city of Timişoara is located was originally a low swampy plain in which the two river courses, Timiş and Bega, their branches, their tributaries and their channels crossed in a confusing network. The presumption of an antique Roman settlement on this location (justified by the fairly important number of Roman camps excavated in the region) was never proved, either by archaeological excavation or through documentary sources) and it was assumed it had disappeared in the marshes.

2. Medieval Hungarian fortress and town (1028-1552): a strategic position

The first certain documentary mention of a settlement dates from the early Middle Age. In 1028 the Banat low land was conquered by the Hungarian Kingdom. A former settlement, presumably having existed on the site, is mentioned as *Castrum Tymes* in 1266 [1], a fortress erected by the Hungarian King after the Mongolian invasion of 1241-1242 (Steven, king of Hungary, gives to the Parabuch county magistrate several feudal possetions, including the land of the Timiş fortress („terram castri de Tymes Rety vocatum").

The emplacement of the fortress was chosen on strategic grounds, on a kind of promontory of dry land between river courses, channels and marshes, a site protected by water and controlling the region due to its advantageous position. In the 13th century the fortress occupied a rectangular surface of 170 x 110 m. It was protected by an earth dam with palisade and river branches on three sides. An artificial canal protected the forth side. Carol Robert of Anjou, King of Hungary, owner in addition of possessions the south of Italy, built a castle in Timişoara and took his residence there between 1315 and 1323 (Fig.1). It triggered a quick development of the city. The town developed outside the fortress walls in a spontaneous form, depending on the dry land areas, river branches, water channels and marshes, to the north and south of the castle.

Fig. 1: The castle to the south, the fortified town to the north, on a narrow strip encircled by water.

3. Ottoman Turkish Timişoara (1552-1716): water courses for military defense

At the middle of the 16th century, at the time of the Turkish expansion to the west, Timşoara became the object of the Ottoman Empire interest. The Ottoman chronicler Mustafa Celalzade (ca. 1490-1567) writes: "Demeşvar is a fortress envied in this world and has powerful towers and walls, impossible to be passed. That is why it (the fortress) is difficult to be taken. It is the most important and powerful of the fortresses of Transylvania (…). Under the fortress walls flows like a spring torrent the river called Timiş (Dimeş) and the surroundings are covered by swamps and reeds" [2]. After several unsuccessful attacks (1462, 1476. 1491, 1522 and 1551), in which, in addition to the man made defence systems the characteristics of the marshy site protected the fortress, the Ottomans surrounded the city in 1552 with an army of 160,000 men. Bridges over the rivers and wooden pathways over marshes were built. After 25 days long siege, the water tower was destroyed and the city garrison of only 1,000 men surrendered. Timisoara became the siege of an Ottoman Empire vilayet (eyalet).

The Turkish town developed in the form of a fan, mainly to the north of the fortress and castle, because to the south, between the Bega and Timiş Rivers, dry land was scarce. Each part and district was separately fortified with walls and water fosse (deviated channels) (Fig. 2). About 90 bridges allowed the access to the six entrance gates and the relation between the districts. Probably most of the bridges were built of wood, but the access to the castle seems to have been ensured by a brick or stone bridge.
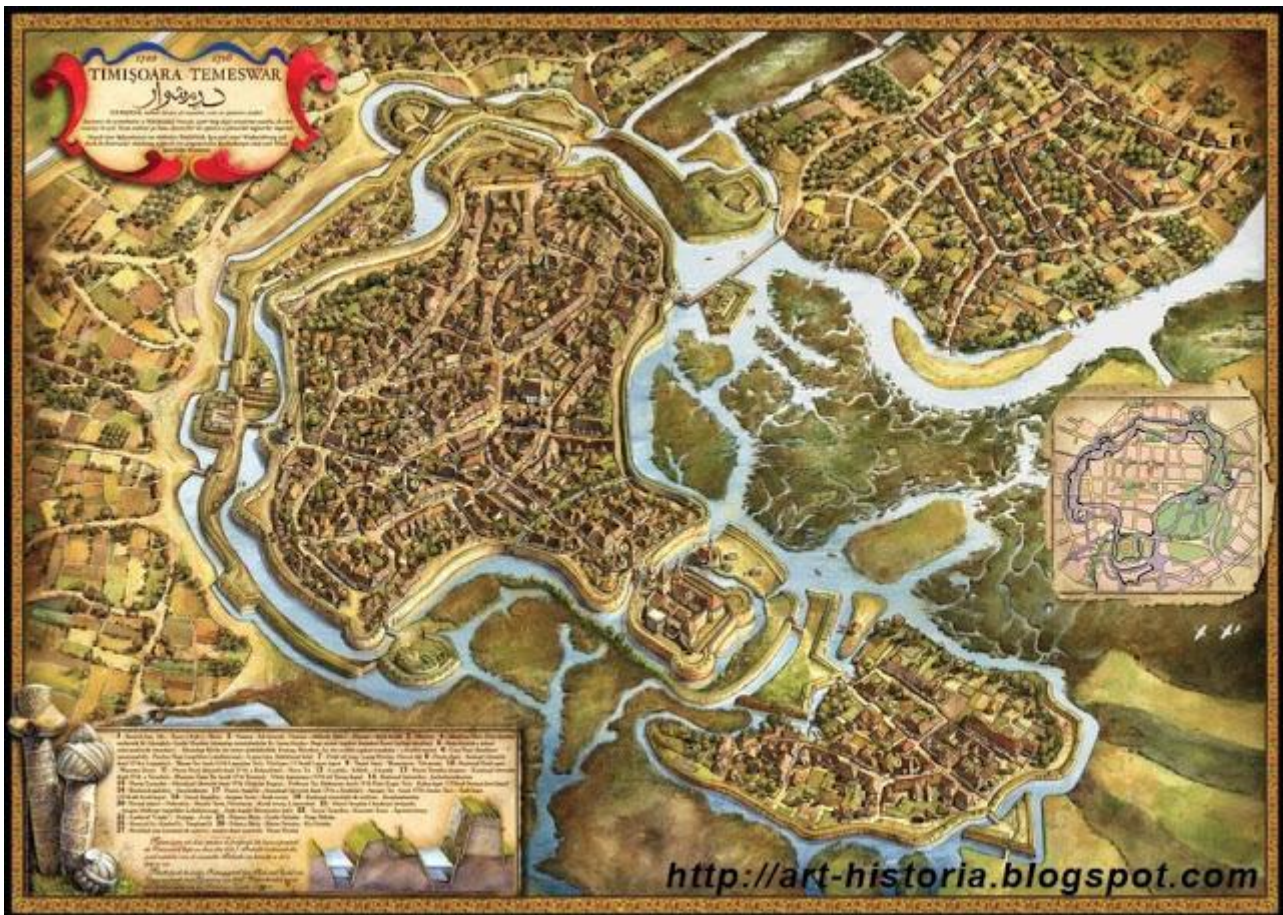

Fig.2: The urban medieval structure was determined by the water courses and swampy areas

3. Austrian and Austrian Hungarian city (1716-1919): tamed water courses

The prince Eugene of Savoy lead the Austrian army which conquered Timisoara in 1716. The Turkish population retired with the army to the south of the Danube. The under populated region was colonized by German catholic immigrants which populated the town and the surrounding rural areas. Cultural incompatibility and the effects of unhealthy climate due to the swamps caused the radical decisions the Austrian rulers took: to dry the swamps and reconstruct the city on dried land. The decision had important urban effects:
- Appearance of a new grid of rectangular streets
- New urban layout and property limits
- A complete change of the building stock
- The building of *extra muros* districts
- A new bastion fortification system (Fig. 3)

Fig. 3: The 18th century powerful fortification and new city centre of Timişoara

By taking the decision to dry the wetland, the long association of Timişoara with water seemed to have reached a dead end. Although the building of a new town on the exact location of a medieval settlement after the destructions caused by a fire at the middle of the 18th century was one of the most important building efforts in Europe and the most important undertaking of the time in the region, it was surpassed by the hydro technical works. These aimed the protection of the city from flood, after the drying of swamps and filling of the channels. Additional works were undertaken, under the guidance of the Engineer Maximilian Fremaut:
- The regularization of the Bega River (1728 – 1732) from Faget, about 80 km upstream
- The construction of dams along the Timiş and Bega Rivers

- A navigation canal, beginning from Timişoara and linking the Bega River to the Tisa and the Danube, which made possible heavy transport from and to Central Europe and the North Sea. For the building of the canal only, 3 million working hours were necessary
- The construction of the Timiş – Bega system of barrages and canals, ensuring the deviation of any excessive quantity of water from the Bega River to the Timiş and vice versa, the adduction of water from the Timiş River to provide the necessary depth for navigation on the Bega canal.

Water again played an important role in Timisoara during the second half of the 18th and the whole of the 19th centuries:

- The new city was protected from flood
- The canal provided water for industrial development
- Heavy ware transport by water ensured efficient and inexpensive commercial links to Central and Western Europe.

The economical development of Timişoara was triggered by its two main *extra muros* districts: the comercial district, with its busy port on the West of the Fortress (Josefin) and the industrial district, with its canals bringing water to factories on the East of the Fortress (Fabric). The population growth of Timişoara was significant: in the second half of the 19th century (between 1850 and 1910) the population increased from 20,000 to 68,500 inhabitants (200% growth). The growth of the Eastern industrial district Fabric was the fastest; at the end of the 19th century it clearly overtook the city centre (the Fortress):

- In 1870, Fabric had **16,000** inhabitants, and the Fortress only **6,500**.
- In 1910, Fabric had **23,500** inhabitants and the Fortress only **5,100**.

Industrial development caused the early introduction of urban facilities in Timişoara:

- Gas lamps for street lights   1857
- Railway   1857
- Horse tramway   1869
- Electric public lighting   1884
- Electric tramway   1899.

The town flourished outside its walls. A radical decision was necessary [3].

4. The 20th century modern city: water course for leisure and transport

The development of the city centre was hampered by the large belt of bastions (500 m width) and by the extensive esplanade (900 m around the fortress). The demolition of the walls was decided in 1892 and begun in 1899. Urban projects foresaw the linking of the city centre with the main *extra muros* districts with large boulevards. These districts being positioned on both banks of the river, by the completion of the urban texture, the built area embraced the Bega River. The canal continued to represent an important transport route. In 1937-1938 the goods transported on the canal reach 250,000 tons/year. Since 1869 it was also used for passenger transport. But on its banks, along the canal, parks surround half of the city centre. This park belt granted a green aspect of the central area and became attraction elements for leisure and aquatic sports (Fig. 4).

5. Water courses in the contemporary city: a presence in collective conscience

The communist regime stopped the commercial and, for a long lapse of time, the public passenger transport on the Bega canal. It remained just the axis at the heart of the central green area.

After 1990 there were several initiatives to revive it, without a realistic economic plan. The recent dredging of the river bed mainly targeted environmental issues.

The rehabilitation of the banks is under way, providing continuous bicycle tracks. The Timiş County Council was granted European financing for the building of a bicycle route from Timişoara to Ziliste (Serbia), on the banks (dam) of the Bega Canal. The cycling track is 40 de kilometers long. Another common project Romania – Serbia advanced by the county Council for European financing is the "Study to enhance the tourist values along the Baga canal" [4].

Fig. 4: A green belt encircles the city centre to the south

Already since 2008 the townhall of Timişoara in collaboration with Gesellschaft fuer Technische Zusammenarbeit (GTZ) and other partners had the initiative of the "Bega Bulevard" festival, aiming to focus the attention of the citizens on the potential of the Bega River as element of attraction and on the necessity of projects for the rehabilitation and reclaim of the river. The Bega River becomes for some days the heart of local community events.

6. Conclusions

Water was a decisive factor for the medieval city of Timişoara:
- Swamps and channels singled a strategic position for the 11th-13th century fortress. The wetland shaped the medieval city: districts developed on the scattered dry areas and the channels determined the lines of the street grid.

- The abundance of water offered a complex, polycentric system of fortification

Flat dried land and tamed rivers granted a new life to the city of Timişoara in the 18th-19th centuries:

- The artificial dried terrain permitted the development of the powerful Austrian fortification and the existence of a wide *non aedificandi* area.
- Dams and canals system protected the city of Timisoara from flood.
- Navigation contributed to the economic development, affording means of heavy transport before the appearance of railways.

The 20th and 21st centuries city of Timişoara became an opened urban entity:

- Freed from the powerful belt of bastions, the inner city and outer districts unified gradually, embracing the river.
- The green belt along the river gave personality to the city centre.
- Bega Boulevard, for the moment just an event with a 5 year long tradition, is intended to become a traffic route.

In short one can conclude:

- Water (rivers, channels and canals, swamps) were decisive factors for the city of Timişoara along history.
- For each historical period, water took a different form, assuming different roles.
- Essential as it is in the contemporary urban landscape of Timşoara, efforts are undertaken to increase the visibility and functional importance of the river in the awareness of the inhabitants.

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SECTION 3

Private – Public

Boundaries & passages, expressing ways-of-life, faces of the city, transitions & public art

The Concert Hall as an Extension of the Public Space

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Abstract

The concert hall is a rather late apparition compared to the length of western history of architecture. The architectural program will soon reveal itself as a very demanding one for the architects and the acoustic engineers, as the complexity of the acoustical problems will surpass the theory for a long time. This fact will establish the concert hall as a technological mediator for music, an complex set of mechanisms for the musical audition. This fact is one explanation for the formation of concert-going culture, with the established rules and dress-codes, specific programs and specific music. The study will discuss the position of the concert hall as belonging to the urban environment – an extension and, in the same time, a separation of the public space – and the cultural and technical mechanisms involved in this positioning.

Rezumat

Sala de concert este o apariţie târzie în istoria arhitecturii. Încă de la început programul arhitectural se va dovedi unul dificil din punctul de vedere al cerinţelor acustice, acestea depăşind nivelul cunoştinţelor teoretice pentru o lungă perioadă de timp. Sala de concert va deveni un mediator tehnologic pentru muzică, un set de mecanisme complexe pentru audiţia muzicală. Faptul se va reflecta în cultura mersului la concert, în etichetă, în programele muzicale specifice şi chiar şi în muzica însăşi. Studiul urmăreşte poziţia sălii de concert ca apartinând mediului urban – o extensie şi în acelaşi timp o separare a spaţiului public – împreună cu mecanismele culturale şi tehnice implicate.

1. Introduction

The relation between urban space and the concert hall has multiple dimensions. In this study we will refer to the aural relation and to the way that both terms have affected one-another in the relatively short history of the concert hall as an architectural program, from the middle of the XIX-th century to our days. We will refer to the technical achievements that have influenced the auditory perception of space and that have determined the specialized modernist approach to the *soundscape*.

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In the end, we will look at how the today's concert hall is reintegrated in the public space not just as a simple cultural program, but as a main actor in the revitalization of the public space. It is an circular line that connects the first concert halls in terms of cultural meaning and social achievements to the contemporary approaches.

2. A short history of the concert hall apparition

The concert hall is an architectural program specialized in instrumental music. It has evolved from the aristocratic salons once the instrumental musical program demanded a bigger orchestra, hence a bigger hall to accommodate the more powerful sound[1,2,3]. The first instrumental concerts were destined to the aristocracy, but by the middle of the XVIII-th century we see the apparition of the public concerts in England. The first public concert hall appears in England in 1748 – *Hollywell Music Room* in Oxford – followed by another concert hall in Hamburg in 1761 and by *Hanover Square Room* in London in 1775 – a concert hall which will become the most famous one for the next century. It will pass another century until the public concert hall will be found all over the continent.

The fundamental step in the spreading of the concert hall is the practice of public concerts. In contrast with the concerts for the aristocracy, the public concerts were intended to anyone who could afford the price of the ticket. The first effect of the liberalization of access was that the symphonic concerts gained a wide public which offered financial freedom to the artists that, in turn, favored the expression of musical genius. In fact, the romantic genius was often associated with the romantic composers, beginning with Beethoven. The second effect of the increased number of concerts was that the concert halls and the concert-going practice specialized and revealed new problems to deal with.

The technical aspects of the symphonic program were mainly acoustical ones, and by the middle of the XIX-th century the level of knowledge couldn't address them yet. The practice of the opera performances was by this time over two centuries old, and one could say that the opera theaters were largely unchanged, yet from the beginnings the acoustical qualities of the concert halls were subject of discussions. The main reasons for this fact are twofold: the obvious one is that because in a symphonic concert the music is the main subject, the auditory attention is increased compared to other type of musical programs. The other reason resides in the capacity to discern acoustical faults and to consider them as such, capacity based on *attentive listening.*

Attentive listening is the capacity to focus one's attention on hearing[4]. It is considered to originate in the practice of time announcement by bell ringing in the country side and later in towns, once the labor program generalized [5]. In the case of concert-goers, the attentive listening will become the norm by the end of the XIX-th century, when the symphonic concerts will evolve from an fashionable activity to the most important cultural act[6]. The capacity to discern and to interpret the aural meanings of the surroundings will soon lead to an auditory awareness of the urban environment. This will be the base to some political decisions regarding noise pollution and, later, to the establishment of a new concept meant to define the auditory environment: *the soundscape*[7].

3. The concert hall and the beginnings of the Modernism

At the beginnings of the Modernism the urban environment is characterized by the sonic mark of the technical objects that overwhelmed the traditional urban sound sources. The effects of the noise are more and more acknowledged[8] and we see the apparition of the political decisions meant to limit it. On the one hand we see the beginnings of the awareness of the noise as a concept, and, on

the other hand, the amplified auditory characteristics of the environment are drawing attention to the environment itself. But it will pass a few decades before the concept of *soundscape* would be used and the scientific means to measure and to deal with urban noise would develop.

By the end of the XIX-th century, two major events would change forever the history of music and of the concert hall construction. The first is the invention of the phonograph by Thomas Edison in 1877 and the second is the discovery of the reverberation formula by Wallace Sabine, in 1895[1,8]. The phonograph is considered to represent for the music what writing represents for the thought, the main invention after the apparition of music itself. For the first time, music could be saved for a later time and played whenever desired, indefinitely. The phonograph broke the direct link between the music and it's source, and between the place of it's playing and the place of listening[9, 10]. This meant that the music could reach to a lot more people, in a greater period of time. This provided the technical means for what later would be known as the mass culture. The apparition of the phonograph and, later, of the radio and of the electro-acoustic devices, will also provide the means to study the properties of sound and to enhance the acoustical characteristics of concert halls.

The discovery of the reverberation formula by Wallace Sabine will mark the shift from empiric concert hall construction to scientific architectural acoustics[2, 11]. For the first time architects and engineers had a proper method to predict acoustical qualities of architectural spaces. If one could predict the reverberation time of an architectural space, the question is what was the appropriate value for the reverberation. It soon will become obvious that each architectural program must have specific values for this measure. In case of conference auditoriums, it was as low as 1 second or less, the radio studios will have almost no reverberation, but the concert halls needed a reverberation suited for the musical program. At first, the engineers measured the values of the most respected concert halls of the time – the *Musikverein* in Vien, the C*oncertgebouw* in Amsterdam and *Symphony Hall* in Boston – that had a reverberation of around two seconds. But, as the recorded music grew on popularity, the public developed a new taste for the clear, direct sound[2]. This tendency will materialize in the modern fan-shaped concert halls, a model in which the sound is directed to the public by specific construction elements.

4. The modern directed sound concert hall

An important aspect marking the evolution of the concert hall at the beginning of the XX-th century was it's relation with the electric sound recording and transmission technology. The radio determined a shift in the aesthetic values that governed musical audition to that time[8, 12]. Because radio found it's way to almost every home, a large public had access to radio broadcasting. The activity of listening to music at home was significantly different that going to a concert hall. At home, the comfort was as good as it could be and the listener could enjoy the musical piece in silence. The character of the sound transmission was also different: the sound source was very close, the clarity was very high and the frequency balance was determined by the technical performances of the recording equipment and by that of the speakers. In essence, sound was perceived as more intimate, clear and with a reduced dynamic range.

The first impact in concert hall design and in entertainment avenues in general was the attention for providing the best comfort for the concert-goers. The chairs got larger, equipment for air-conditioning was installed and measures for fire safety were implemented. Acoustical conditions changed too: engineers tried to obtain the same sound qualities of the recorded music, considering reverberation as noise, and thus trying to suppress it[8]. Besides the aesthetic influence of the radio, also the aesthetics of the modernist architecture imposed a new language of shapes, distanced from the historicist architecture. If the later was often characterized by richly decorated surfaces, the former would rely on the pure geometrical shapes, with large bare surfaces and minimal, if at all,

decoration.

The concert halls borrowed from the new entertainment venues and especially from the cinema the layout of the plan, in which the public seating was arranged in a fan shaped layout. The main reason for this arrangement was that this was the only way to accommodate a larger number of people and in the same time to provide each of them with almost the same conditions.

Salle Pleyel in Paris is a eloquent example for this practice: in 1927, French acoustician Gustave Lyon was commissioned by Pleyel to design a replacement for the old concert hall, which had a seating capacity of 300 places. The new hall should have a seating capacity of 3000, which exceeded by almost 1000 places the biggest concert halls of the time. The solution was found in the adoption of the fan-shaped layout, with two balconies at the rear, that managed to keep the places in a distance range suitable of 45 meters, the maximum allowed for musical audition. Through a series of experiments, Lyon concluded that sound reflections were necessary to conduct the sound from the stage to the listeners, so he designed an angled ceiling that would deliver the desired reflections. The design was appreciated by Le Corbusier and by musical critics of the time who welcomed the innovative solution[1]. We see in this model an expression of the modern methods that tries to elevate the functional architecture to the heights of the acoustical taste of concert-goers. Although the model will be perpetuated to the 1980's, they never deliver the acoustical excellence of the classical concert halls. The main reasons were the uneven acoustical conditions throughout the hall due to the specific disposition of the lateral walls, the increased noise projected by the ceiling from the hall onto the orchestra, the lack of lateral reflections and the sound distortion by the large bare walls. Some of this problems would be addressed in four interventions, in which also the number of places was reduced to under 2000[1].

5. The concert hall and the urban space

As we mentioned earlier, by the beginning of the XX-th century, the sonic level of the urban environment was much higher than ever before[8]. The reason was the increase of the number of machines and the increase of population as well. The pattern of distribution of these sound sources was, as a consequence, rather obvious, marking the places of production and the trajectories of people engaged in productive activities. We can speak of specific sound patterns marking specific times of the day or specific areas of the urban environment. This determined Henri Lefebvre to develop a method of sonic analysis – *rhythmanalysis* – by which the sound of the city could provide the signs of dysfunctions[13]. Lefebvre goes on saying that anyone can make this type of analysis, provided that he or she pays attention to the daily rhythms. A direct conclusion is that specific areas of the town developed a specific sonic print. This sonic print was specific not only to the urban space, but also to the architectural space. It is known that, in order to capture the visual characteristics of a building, on needs light to give it contour. The same goes for the acoustical characteristics. In order for the sound to develop, it needs an enclosure, but this enclosure will put it's signature on the resulting sound. The dimensions, shapes and materials have a direct influence on the way the sound builds up and decays in a specific enclosure. The functional architecture of the Modernism meant that each architectural program was built to specific dimensions and materials. If we add to this the specific machinery, we get very particular sound prints for every architectural program.

The concert hall is no different in this respect. Because it's function is to deliver the live musical signal from the orchestra to the ears of the listeners, it has to meet certain requirements. First of all, it has to be very quiet, so there is no noise disturbing the music. In the increasingly loud urban environment, there can be only few means to achieve that. From an urban point of view, it could be placed in a place remote from disturbing sound sources, but that wasn't always an option as the

concert hall should be easily attainable, which means that we find it usually in the center of the towns. The solution was found on a technological level. Architects developed specific layouts that would separate the hall from the surroundings as much as possible and engineers developed building techniques and materials that helped to reduce the transmission of vibrations[8].

6. After modernism

The evolution of the science of acoustics in the Modernist period was especially oriented towards the control of the sound. This was achieved by means of electrical technical equipment and special construction materials and techniques. The construction technique suppressed reverberation, while the technical equipment provided the sound to the listeners. Soon the impact of this practice was felt as spaces became impersonal and alienating[8]. The public venues, except for the cinema, failed to attract the public who could seat at home and enjoy the same audio quality, for free. Especially in concert hall design this effect was obvious, and engineers soon realized that the phenomenology of music perception is more complex than they thought. In the process was involved not only the sound, but also the relation between the public and the performers. The modern hall amplified the separation between the public and the musicians, which, combined with the impersonal acoustics, reduced the appealing of the performances[1]. It would pass a few decades until a new type of concert hall will address those problems.

In 1963 opened in Berlin a new concert hall for the Philharmonic Orchestra. Designed by architect Hans Scharoun and acoustician Lothar Cremer, it will become the most innovative hall of the time and a model for many future concert halls. The concept on which it is based is that when making music, usually people gather in circle, with the musicians playing in the middle. This materialized in an arena-shaped hall, in which people are seated all around the orchestra. The acoustics of the hall are rated among the best in the world, but what really set aside this solution is the change in the relation between the public and the musicians. The sense of cohesion between the participants – a social advantage as Beranek describes it – offers a remarkable experience.

By the time of the opening of the *Berlin Philarmonie* the science of acoustics had developed enough to take note of the complex nature of sound transmission in a space, but also of the complex psychic processes that governs it's reception by the listener. The subjective dimensions of the sound were considered at least as important as the objective ones. The evolution of sound technology would continue at accelerated rates, but we see a new tendency in the appreciation of natural acoustics in concert hall design[1]. The amplified sound was still used, but only for very large audiences or in spaces that accommodated mixed programs. In the concert halls though, the quest was for the best natural sound.

7. In place of conclusion - the contemporary concert hall

Concert hall design is rarely innovative, and there are few examples of good innovative designs in it's history, the majority of the cases being based on precedence. This fact arises from the economic constraints, but also from the fact that, to our days, among the best five concert halls in the world are three that are also over a hundred years old[1]. Those continue to be examples of acoustical excellence and are perpetual subjects of scientific research. Contemporary concert halls are divided largely in two categories, *rectangular concert halls* and *non-rectangular halls.* The rectangular model has seen a recent revival, based on the reputation of their exponents. Another revival is noted on a theoretical level, with the rediscovery of Sabine's research, and, most importantly, of it's reverberation formula. Those facts had determined some authors to consider that after one century of research, the architectural practice has return to it's origins, both in the model of the concert halls

and in theory practice.

In the case of the relation between the concert hall and the city, we see the reemergence of the concert hall as the pinnacle of sound excellence. All the efforts are made so that the concert hall can defend it's position in the world of entertainment and of culture. We see recent examples of concert halls meant to revive urban areas or examples that are meant to put their towns on the map of cultural excellence. Their architecture embodies the latest technological achievements, the latest trends on design, but, no less importantly, elements of social interaction and inclusion. The spaces that they provide are often with mixed functions, combining the cultural with the commercial, the private with the public. The latest developments in computer technology are opening new perspectives for new forms of art that expands the addressability of the concert halls, ranging from world culture to multimedia experiments. Even in the case of the classical symphonic concerts we see new approaches meant to broaden the experience of the public, like in the using of video screens during the performance which are displaying meaningful foregrounds of the orchestra in the case of Los Angeles Concert Hall, or in the live broadcasting of classical concerts in the case of the Berlin Philharmonic. The mass media have influenced the way we perceive the culture but the concert hall will continue to represent the finest aural experience and, by that, one of the most important cultural achievements of our society.

Acknowledgements

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The Impact of the Built Environment on Seniors.
Urban vs. Rural, Influences and Perceptions

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Abstract

As time passes by, the society evolves in terms of its exponents, who have different desires and expectations, regardless of the age group they belong to. Society nowadays is in a perpetual change, with an accelerated dynamic, where its members try to find their place and give a meaning to their existence. As far as seniors in this society are concerned, they belong to a particular category with special necessities, requiring an environment suited to their needs. Architecture involves the activation of some senses, without which, the created object would lose its value, because architecture must be linked to the experimentation of space and with the sensations perceived through the sensory capacities. Moreover, architecture must represent an aesthetic, social and economic response, that suist the needs of all social categories. Which is the answer for the seniors in our society? How are we influenced by our perception regarding the everyday living space? How does the location of the senior center influence its residents? The relationship between humans and the physical environment is an interchangeable one; we can speak of an interrelated relationship because the built environment is not just an aesthetic statement, but a response to human needs. Thus, for the seniors, this relationship must be treated with great delicacy. The purpose of this paper is to evaluate the relationship between the built environment and seniors, especially focusing on how it can influence our perceptions, senses and actions. Also, the paper analyzes the advantages and disadvantages of locating a center for seniors in a rural versus an urban area.

Rezumat

Pe fundalul trecerii timpului, societatea evoluează prin prisma exponenţilor săi, care au diferite dorinţe şi aşteptări, indiferent de categoria de vârstă din care fac parte. Societatea din zilele noastre este una într-o perpetuă schimbare, cu o dinamică accelerată în care membrii acesteia încercă să-şi găsească locul şi să dea un sens existenţei lor. În ceea ce-i priveşte pe seniorii societăţii, ei fac parte dintr-o categorie aparte, cu recerinţe speciale având nevoie de un mediu adaptat nevoilor lor. Arhitectura presupune activarea unor simţuri, fără de care, obiectul creat şi-ar pierde valoarea, deoarece arhitectura trebuie corelată cu experimentarea spaţiului şi cu senzaţiile percepute prin intermediul capacităţiilor senzoriale. Mai mult decât atât, arhitectura trebuie să constituie un răspuns estetic, social şi economic, astfel încât să se potrivească nevoilor tuturor categoriilor sociale. Care este acest răspuns în cazul seniorilor din cadrul societăţii noastre? Cum ne influenţează percepţile noastre asupra spaţiului traiul de zi cu zi? În ce măsură îi

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influenţează pe seniori amplasamentul centrului ce le este destinat? Relaţia dintre om şi mediul fizic este una interşanjabilă, putem vorbi de o relaţie de interdependenţă deoarece, mediul construit nu e doar o declaraţie estetică ci un răspuns la nevoile omului. Aşadar în cazul seniorilor această relaţie trebuie studiată şi tratată cu multă delicateţe. Obiectivul acestei lucrări este de a evalua relaţia dintre mediul construit şi seniori punând accent pe modul în care acesta ne poate influenţa percepţiile, simţurile şi acţiunile. De asemenea lucrarea de faţă analizează avantajele precum şi dezavantajele amplasării unui centru destinat seniorilor în mediul rural vs. mediul urban.

Keywords: architecture, perception, seniors, housing, built environment, rural, urban

1. Introduction

Multifaceted and personalized, the built environment plays a significant role in our existence. It generates powerful meanings, because people generally tend to form strong attachments to places as a part of their everyday life.

Romulus Zamfir and Mircea Moldovan claim that, as a result of the extension of the synthetic environment in relation with the natural one, the concept of design is globalizing more and more. Almost everything that forms the artificial environment of today's everyday life is tributary to the concept of design. In design: skill, technology, experience and great sensitivity should merge. Ultimately, the design represents a method, a problem solving technique and an attitude [1, p. 138]. Analyzing from a macro to a micro point of view, the relationship between the senior and the surrounding environment plays a crucial role and it is built as a plurivalent relation, with an emphasized dynamic, with interconnections in two directions, modeled through the architectural process, but also defining the architectural view.

2. Location of the senior center (rural vs. urban)

It can be really difficult deciding upon a right site for a senior center when choosing from an urban or a rural area, because each option has its own advantages and disadvantages. Also, the meaning of an urban or a rural environment can have different values depending from one country to another, even from one person to another.

According to William Frey and Zachary Zimmer here are 3 major elements that define the differences between urban and rural areas: ecology, economy and the social factor. The ecological factor includes the population and its density, the economical one refers to the activities that are specific to one area and the social factor is defined by customs, values, communications and the way of life. [2, p.26]

3. Rural area

Usually associated with agriculture and primary production [3, p.12], the rural environment is also known for being quiet, unpolluted, with beautiful views, and with a specific climate that allows people to experience profound relationships with nature, family and friends. [4, p.1] It is demonstrated that seniors that live in the rural areas are more involved in the local activities, so that the feeling of belonging to a community is much more intense. [4, pp. 72-73]

However, there are a series of disadvantages that make it difficult for some centers to function in

such areas. First of all, rural sites are more isolated [4, pp. 77-78] and that makes transportation and delivering services a real physical and financial challenge both for the residents and for the working personnel. [5, p. 93].
Many sites with undeveloped or weakly conceived infrastructure, limit the access to financial, commercial services or health care, [5, p.93] meanwhile other rural areas confront a very harsh environment in some seasons. [4, p.45].

However, seniors find comfort in these rural isolated environments through home care, especially when there is no hospital or other health services near by. [4, p.43]

According to different analysis, we have determined that, in general, the rural settlements are centers dedicated to seniors with various disabilities, dependent seniors that need permanent assistance. These centers are mostly developed horizontally, with a lower number of stories than the ones located in the urban areas.

An eloquent example of this type **is St. Nikolaus senior center** located in Neumarkt am Wallersee, Austria, designed by Kada & Wittfeld Architekten from Aachen. The „H" shaped two stories high building is entered by a central main hall, which creates a semi-public space, connecting the two residential segments.

The complex is covered in wood and is east-west orientated. It relates to the surroundings through the shape and the size of the building, the materials used and the generous glass surfaces that allow a great amount of natural light to enter the building. In every room the dinning area is located in front of the bay-window, offering a beautiful view, emphasizing the special connection established between in and out doors.
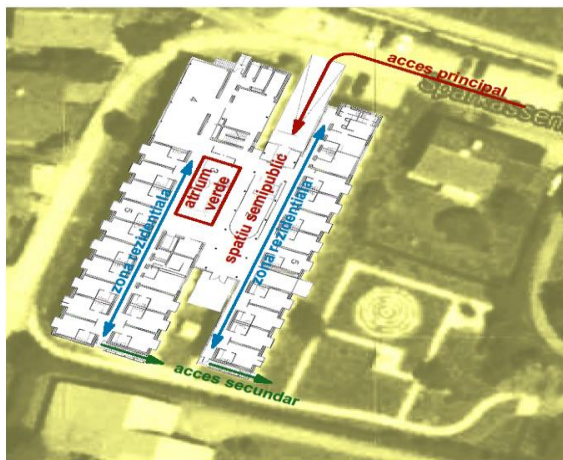

Figure 1. Ground floor outline.   Figure 2. Exterior view.

The residents are seniors with Alzheimer or with different degrees of physical or mental problems. The building offers accommodation for 60 elderly people and it is designed like a small community. The whole inner space is organized as a home-like environment both because of the materials that were used and the combinations of colors and lights, trying to give each and every one of the residents the feeling of belonging.

The rooms are very flexible in their design, and seniors can choose to have a kitchen installed inside the room if they desire. Even though every room has its own bathroom, there is a common bathroom for the ones that need special help. Due to the fact that the residents have different problems, an important part of the interior design was inserting safety elements such as ramps, handrails, panic buttons etc. without interfering with seniors' need of intimacy.

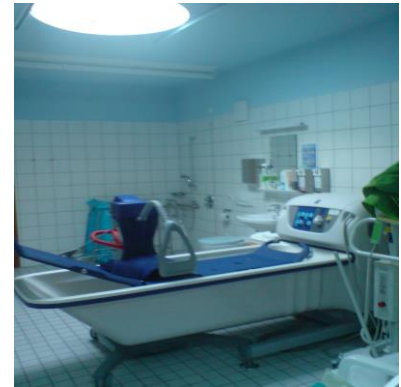Figure 3. Bay-window.

Figure 4. The hallway.

Figure 5. Common bathroom.

The main atrium is dominated by vegetation, imitating an outdoor park. We can say that, the concept of the house is based on the idea of transcripting the outdoor context inside of the building. The wooden louvers from the outer façade are also found on the inside corridor walls, forming an internal façade. The corridors have street names, helping with the orientation of the residents. Every two doors share a niche, shaped like a porch, with a bench and wooden floor, which offers the residents the chance to socialize, and also forming a buffer-zone between the public and the private areas.
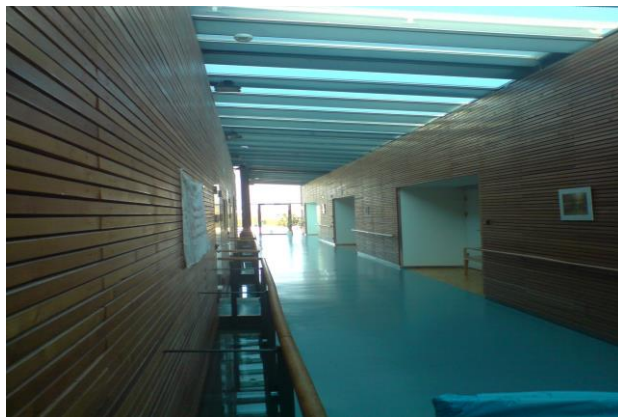

Figure 6. The hallway.

Figure 7. The niche in the hallway.

The dynamics of the inside space is sustained by the insertion of different intermediate zones specially designed for walking, interacting, or simply relaxing. The whole concept of the building is based on establishing a clear relation with the natural environment, bringing it from the outer space in the lives of every resident. All this is possible through the way the building is located in the village and on the site, and through the design of the façades.

The architects describe the concept and state that „The relationship of tension between glass and wood, inside and outside, public openness and private intimacy mirrors the life of its senior citizens: the house becomes a protective shell that consciously filters and enables the public space so that it is integrated into the surrounding." [6]

4. Urban area

The urban settlements are defined by their economy, industry [7, p.23] and diverse work force [7, p. 16]. All of them support the forming of social connections, relationships and also offer the possibility of a very stimulating social life [8, p. 57]. The city can offer interaction with different generations, more possibilities to stay in touch with friends and family and permanent access to information. The urban is more convenient than the rural area due to its facilities, embracing all social categories. It is known that the bigger the community, the bigger number the chances of receiving a better health care and more offers to choose from. [9, p. 119] Another advantage consists in the development of public transportation and infrastructure. [9, pp. 119-120]

One of the main disadvantages is pollution, usually due to high traffic, construction sites, industry and noise. [8, p. 110] Sometimes the urban areas can make the elders feel isolated if the access to public transport is difficult, imposing long distances that need to be covered by walking through noisy, crowded and with high traffic areas, going up or down a significant number of stairs in order to reach a mean of transportation. [8, p.12]

In order to find a solution for all these problems, senior centers try to develop a homelike environment by building indoor gardens and familiar interior design. It is also crucial for them to have a public transport station near by.

Heinrich Schutz Residenz located in the central area of Dresden, is a relevant example of the insertion of a residential house for seniors in an urban area. A part of the building dates back from the XVIth century, having the façades renovated and reconstructed, while the new part and the interior were designed by Feddersenarchitekten in a very modern and fashionable way.

Figure 8. Exterior view.   Figure 9. Exterior view.

The plan of the building is a very compact one, developed mostly vertically. Six stories high, the residential house is dedicated to independent elders, who need medical care and attention, who are active and eager to interact with others while having all the opportunities the city can provide.
The ground floor is conceived as a very flexible space that can host different activities and gatherings, hosting many public events and through that stimulating the interaction between the residents, the locals and even the tourists, so it offers its residents an independent life, in a dynamic environment, guided by the concept of active ageing.

This center has rooms that can be rented to tourists, even for just one night. This way, in this house different generations can interact, so that seniors don't feel isolated and forgotten. Most of the

apartments have two rooms, and all of them have a separate bathroom and a kitchen. The whole space is organized with warm colors and materials, creating a homelike environment.

Figure 10. Interior view.

Figure 11. Interior view.

The location of this residence offers its occupants the chance to socialize, while having enough intimacy. In order to communicate directly with the urban life, the building has a lot of large windows and balconies. Also, on the top floor is a terrace linked to a common space, so that the residents are able to enjoy the beautiful, yet agitated city life, from a small green area with a therapeutical effect.

Figure 12. Interior view.

Figure 13. Terrace view.

5. The impact of the built environment upon seniors

Conceiving a space is a process related to analysis, concept and solution and must be adapted to the needs of its users. If the environment exerts a powerful influence on the individual, it should be noted that this relationship is a mutual one: the personality of the owner should also leave its mark on the space he occupies. Research shows the importance of the homelike environment within senior centers; this feeling is like a milestone in the life of every individual, a universe of the individual life is created which has the home as the central point.

A warm and friendly environment along with familiar feelings will change the way a place is perceived, from something regarded only as a shelter into something that gives the individual the impression of being at home [10, p.25]. This universe of life represents the basis for human

experience, for the emotional, social, mental and physical space, the place where deep and lasting relationships are developed.

The responsibility of the architect is significant, because he is regarded as a draughtsman of the environment which will exert certain determinism over humans, but also as a virtual leader of some multidisciplinary creation teams [1, p.122].

What should be taken into consideration when designing housing for seniors? Starting from a so-called architectural frame, the resulting built environment must satisfy the requirements of its occupants. Also, another important criteria that needs to be taken into account is the proper location of the center from a geographical point of view. The areas are very diverse with lots of advantages and disadvantages that must be weight carefully.

The built environment plays an essential role for the physical and emotional balance of all people and especially for seniors who have a higher sensitivity and particular needs and for whom the home represents a veritable scrapbook of memories.

Bradford Perkins, D. Hoglund, D. King and E. Cohen claim that „the built environment has a greater impact on the quality of life of those who require a more supportive setting than any other major demographic group. If properly designed, the living facility can enhance an older person's independence, dignity, health, and enjoyment of life." Therefore a proper setting can have a great impact on the seniors' well-being. Also, when speaking about the built environment, the authors state that, „if poorly planned and detailed, it can imprison, confuse, and depress". [11, p.2]

The space surrounding the elderly subjects them to permanent adaptations, a reality which implies the need to recreate a balance for seniors, to adjust their requirements and their sensitivity and to create an environment that represents them, one that is flexible and easy to adapt to their needs. Seniors often benefit from modern equipment, because advanced technology eases their daily life. This technological progress must smoothly merge with the surrounding environment, with the external environment and with nature, in order to avoid the risk of creating an environment that becomes too rigid or that can easily be turned into a hostile one. According to the high standards of today, the environment built with the help of modern technology must also be able to gain meaning, through sensitivity, imagination, associative values and to hold its head up when entering in the cultural and spiritual areas [1, p.138].

Even though the seniors have always occupied a special place in the society, the role of the elderly and the perception and attitudes towards them have changed over time due to mentality, traditions and customs that have been modified simultaneously with the meanings attributed to the notion of space and changes occurred through architectural design.

Thus, given the fact that architecture has a practical function, and also represents a strong aesthetic statement, it acts both as a material culture and at the same time it represents an immaterial and spiritual one through the strong meanings that it evokes. Architecture applied in senior centers must be perfectly adapted to the needs of the elderly, who have a special sensitivity. Thus, the living space becomes a kind of sanctuary, which is not limited only by the physical aspect, it is not just a palpable matter with a practical use, but it reaches to the psychological level, and it offers comfort and tranquility that cannot be substituted.

The relationship between man and the built environment is a dynamic one, it is in perpetual change, but also of an inevitable interdependence, yet it can be directed and shaped according to the needs of the users. For this, the architect must have sociological, psychological and anthropological information [12, p.10]. Therefore, taking precisely these issues into consideration, we are able to realize the importance of architecture in the existence of a man who has reached old age and how

precisely it manifests starting with the assumption that space is perceived by seniors as being their entire universe.

Edward Steinfeld and Jordana L. Maisel believe that "design is an active, purposeful adaptation method that people use to adjust their world to their needs. Through design, humans both remove barriers and develop supportive environments, products, and systems to facilitate achievement of their goals." [13, p.1].

6. The perception of architectural space by seniors

Perception is the framework that supports and guides all conscious actions. Memory in old age is often weak, and when perceptions become misleading, problems may occur at the sensory level. It is important to note that perceptions can be true or false. At the same time space can be organized in a way that stimulates seniors, so their senses may become more acute. Through architecture and design, a space can receive new values, different moods and feelings might be induced. For example, according to William Lam the negative elements such as light sources that cause discomfort by being dazzling can become distracting. These can create very difficult situations for seniors. Instead the focus should be on the positive aspects of natural lightning; besides the fact that it provides more orientation support, it also produces positive psychological impulses, encouraging various activities and providing visual rest centers [14, p.82].

Seniors have a special sensitivity and therefore problems must be approached with great delicacy. In addition to the difficulties faced on the cognitive and physical level, the psychological perception of space is also a challenge. This affects the way they relate to the senior centers. Sheila Peace, C. Holland and L. Kellaher believe that seniors perceive these spaces as inhibitory environments and those who inhabit them become under-stimulated and somehow disconnected from what is happening around them. The conclusion is that routine makes life shallower and the possibility of choosing the desired companionship becomes compromised [15, p.130]. In other more extreme cases when seniors are forced by certain circumstances to go to a senior center they are overwhelmed by the feeling that they are heading towards death and not to live there peacefully for the rest of their life [10, p.24].

All these perceptions can be overturned, by creating a proper psychological environment.

Every perceptive sensation takes place in a sensory field. Sensations and perceptions are correlated to our way of living and the way we relate to certain things. For example, the way a room is arranged, the disposition of the furniture, the light, the colors and the textures, all determine the quality and character of the environment and the image we create for a certain space is an instrument of power which issues a strong aesthetic discourse and delivers resonant messages.
So, although the interpretation and the knowledge of the environment is not a precise language, along with other factors, it may be associated with visual communication and thus it can be used to receive and send messages; psychological effects of a space can be manipulated triggering a complex of sensations, creating dynamics and facilitating a better perception of space. Because of this reason, a senior care center should juggle with these techniques and should use them to create an optimal image and to significantly influence the perception of the seniors.

Figure 14.Transparent background.

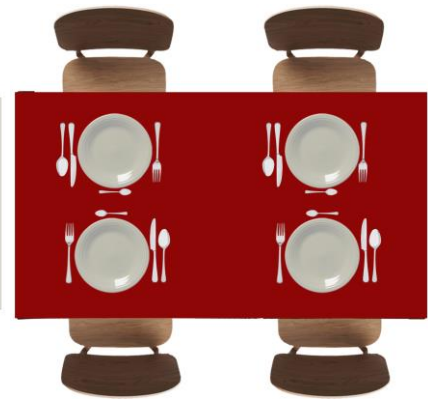Figure 15. Background without any contrast to the object above.

Figure 16. High contrast to the object above.

Moreover, architect Radu Radoslav defines perception as being an active process with the certain purpose to obtain more information from the environment. It is born from our needs and motivations [16, p.96]. External stimuli can promote the occurrence of certain sensibilities, the space might be perceived differently, but we must take into account the fact that the mind and body communicate forming a whole. For example, when architects use smooth or transparent materials, we are dealing with a truncation of perception, the architecture phenomenon status becomes incomplete and architecture becomes degraded [17, p.53].

The individuals' perception of the quality of the environment can be influenced by the provision of sufficient space for the desired activities. When the space is insufficient, people tend to feel cramped or crowded, and they become unhappy. For senior housing, personal space is a key factor in order for them to live in peace and tranquility. Another important aspect is the recreational area that lacks in many urban environments. In order for someone to feel truly comfortable these factors should not be overlooked and that is why placing the senior center in a favorable environment is crucial.

By understanding the way elders perceive the environment, we are able to develop more and more methods that make their life easier and more pleasant.

7. Conclusions

The period of old age brings many difficulties due to physical and mental problems seniors are facing, because this is a sensitive phase in everyone's life. The built environment is an important pillar in the structure of everyday life. The daily life is often a challenge for seniors and the built environment can come up with solutions to ease it. Our perceptions can be easily influenced by the way we juggle with architectural and design elements and they can induce different moods and feelings. Our psychic is influenced by external factors and it is easily malleable. Another aspect that should be taken into consideration when designing a care center for seniors is the location choice, which is also a decisive factor in terms of quality of life.

The location of a senior center along with the natural and artificial environment and also the interior design must be chosen in regard with the needs of its occupants.

Acknowledgements

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9. List of figures

Cities and Layers of Information

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Abstract

The emergence of digital technologies is at the core of a paradigm shift in urban planning that led to the concept of the smart city. Over the last years, it has become clear that it is computer science which will ultimately bring a higher degree of adaptability and intelligence to the built space. This paper has three objectives: (1) to assess the context from different perspectives and provide a possible definition for the notion of smart city; (2) to present examples from the major players stemming the debate on smart cities and (3) to introduce a tool for urban analysis and visualization which can be apllied to any urban or rural area. It is an experiment on understanding the city's informational exo-skeleton, using it to generate city-knowledge and eventually city-strategies.

Rezumat

Emergenţa tehnologiilor digitale stă la baza unei schimbări de paradigmă în planificarea urbană ce a dus la termenul de oraş inteligent. În ultimii ani, a devenit clar că sistemele hardware şi software vor aduce un grad sporit de adaptabilitate spaţiului construit. Lucrarea de faţă are trei obiective: (1) de a prezenta definiţia şi contextul oraşului inteligent şi a unor termeni conecşi; (2) de a prezenta trei studii de caz relevante oraşului inteligent şi (3) de a introduce o unealtă de analiză şi vizualizare urbană ce poate fi aplicată oricărei zone urbane sau rurale.

1. Context

In 2010, 3.5 billion people were living in urban areas around the world (Romania has 53% of its population living in cities), with cities accounting for 70% of all energy usage, 80% of all CO_2 emissions, but also for much of the economic growth with the top 30 cities providing 20% of the global GDP [1]. They host the largest part of innovation and account for most of the world data generation. Economy and cities have historically been intrinsically linked. In fact, urban emergence has been primarily based on connectivity and economy, and as Connor Riffle points out: "Major cities are looking for one thing above all – economic growth". The worldwide collapse of the financial and economic sector in 2008 led to a situation that rivals the Great Depression of the 1930s [2]. Smart city initiatives around the globe suggest models of development which are thought to be a strategic response to environmental issues, promising a rise in the quality of life for citizens

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and also offering the chance to talk about a new economical paradigm. In other words, the post-carbon smart city will create better, greener models while producing economic growth in the process. In order to reach this target, cities need a better understanding of where they stand ("the beginning of wisdom and of wise choices starts with knowing the facts"[3]). Therefore, one of the key aspects of reaching another level in city development is collecting, understanding and visualizing the data they generate. The smarter and more detailed cities are about data collection and measurement, the smarter and more efficient their policies can be, "If you can't measure it, you can't manage it"[4]. Policies for creating smarter cities involve big data which ultimately engages Information Communication Technologies (ICT). The green city of the future, along with the growth of its economy and quality of life is fundamentally linked to technology.

2. ICT (technology)

The term ICT (Information Communication Technologies) originates in academic circles and has been coined in the 1980s. The Green City Index (2013) recommends seven key lessons for cities to become greener and smarter, with one stating that: "Technology is the way forward and implementation can drastically improve *any* city". The Metapolis Dictionary of Advanced Architecture offers the following definition for information: "It is information, above all, that is becoming an essential component of the new architecture and new urban development. In fact, information in the architectural field plays at least three fundamental roles simultaneously. First and foremost, there is communication that either: educates, entertains or advertises (it is no coincidence that today's buildings go back to narrating stories); in addition, information also makes up the "production infrastructure" for the multidisciplinary development of projects and the future management of buildings. But most importantly, the presence of information in today's society is so great that it has become an aesthetic challenge. Architects around the world are attempting to create a generation of buildings that are conscious of the changes in the operational and social framework caused by ICT and capable of expressing this revolution. " [5]. In other words, the ICT and telecommunication infrastructure deployment is the foundation on which the information society is built and can flourish [6].

3. Types of data - Open Data - Big Data – Government Data (technology/statistics)

One notion that has been stemming conversation around the globe is big data. In short, it means having access to more and rawer information on the entirety, from things to people, research, real-time environment factors, everyone and everything. Each minute the world generates 1,7 million billion bytes of data. More digitized data was created in the last two years than in the rest of human history [7]. Furthermore, predictions say that by 2020 - 4 billon people will be connecting to the internet regularly and we will have 31 billon connected devices generating trillions of GB of data [3] . This trend and the mountains of data it produces is what is called *Big Data*. The big data sector is growing at a rate of 40% a year. Handling big data requires increased technological capacity, new tools and new skills [7]. The Digital Agenda for Europe presents big data as having key economic and development value. Computational power has doubled steadily every 18 months and developed countries have up to 95% of their population connected (using internet on a daily basis). In Romania this percentage is 50% with the E.U. investing heavily in creating infrastructure for much higher ICT accessibility and literacy. Obviously, more data brings new problems: (1) questions of data credibility - where does the data come from and who manages it; (2) data visualization - how and which data is visualized can be biased; (3) data relevance - the technology to measure most anything is here, but what is meaningful and what not?; (4) not everything is quantifiable. Some of the world's biggest organizations: The World Bank, the U.N., the E.U. and U.N.I.C.E.F. have made

among their key goals to end invisibility (more information needs to be gathered and published on everything and everyone in order to increase transparency on every level). It is an ambition with many positive aspects. One pro is gaining insight on the bottom 20% where many births and deaths are not declared. A huge unknown number of people do not exist in any statistic, which makes it impossible to take proper measures in providing help and support. However, ending invisibility poses many questions and privacy challenges, especially with World Bank representatives describing data as the new currency and future apanage of power. Some of the conclusions that can be drawn from The Data Revolution conference [3] are: (1) the data revolution is at a juncture but is visibly unevenly distributed; (2) the culture of dealing with data needs to be addressed (increase data literacy); (4) investments and improvements should be made for better the use of ICT for improved data-handling. The Data Revolution is basically bringing into conversation the importance of facts. Additionally, there is need to explore new data sources, including those coming from citizens themselves in order to discover if this data is useful and relevant. The historical time is as such as there is a confluence between a technological opportunity and a political dialogue. In essence, this dialogue can be translated in the concept of the smart city. One example of the use of big data is in conjunction with social media, using it to predict the outbreak of an epidemic by analyzing information on social media, such as Twitter. Analyzing geographic patterns for people tweeting something vague such as: "In bed with fever" and "weird spots on my skin" may allow health authorities to identify epidemics much faster than notifications by doctors and hospitals. Comparing data from social networks with official reports, including patterns of past epidemics, can refine predictive capacity and response [7].

4. The Third Industrial Revolution (economy)

In his 2011 book "*The Third Industrial Revolution; How Lateral Power is Transforming Energy, the Economy, and the World*", economist Jeremy Rifkin explains the occurrence of essential economic change when new energy regimes historically converge with new communication technologies. The diagram in Figure 1 below provides a basic explanation of the term.

The relevancy for the context of cities, urban planning and the future of urban habitation is manifold. First, the Third Industrial Revolution (TIR) is built upon a series of five pillars which have the implementation of new paradigms of design for buildings and cities at their core. These five pillars are: (1) shifting to renewable energy; (2) transforming the building stock of every continent into green micro–power plants to collect renewable energies on-site; (3) deploying hydrogen and other storage technologies in every building and throughout the infrastructure to store intermittent energies; (4) using Internet technology to transform the power grid of every continent into an energy network that acts just like the Internet (when millions of buildings are generating a small amount of renewable energy locally, on-site, they can sell surplus green electricity back to the grid and share it with their continental neighbors); and finally, (5) transitioning the transport fleet to electric plug-in and fuel cell vehicles that can buy and sell green electricity on a smart, continental, interactive power grid[8] and [9]. Second, since 2012, these concepts have been implemented and embedded in the European Growth agenda. Rifkin has been working with the European Commission on strategies to ultimately implement the five pillars of the TIR in all the European countries and its cities towards accomplishing the 20-20-20 plan. Although the 20-20-20 Agenda does not specifically state the "smartification" of cities as an objective, it is generally agreed that its requirements (smart, sustainable and inclusive growth[10]) can objectively only be acquired by (among other solutions) implementing smart solutions for cities.
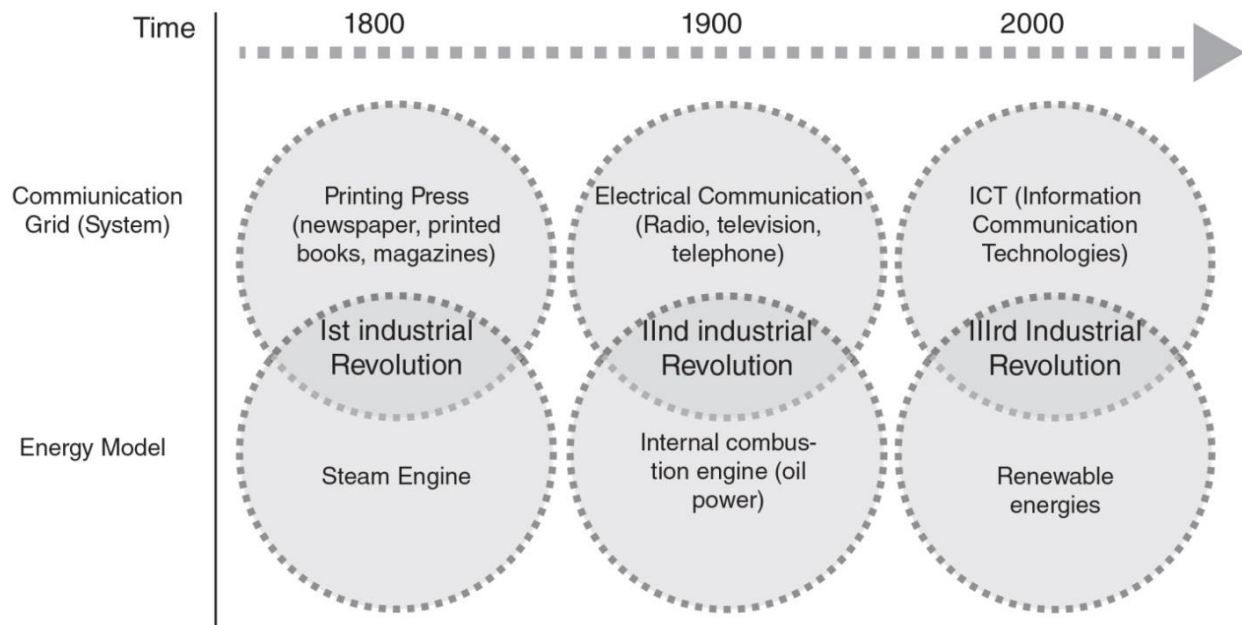
Figure 1. The Industrial Revolutions through history (interpretation and simplification of Jeremy Rifkin's concept)

5. The Internet of Things (IoT)

"IoT will boost the economy while improving our citizens' lives" states Mario Campolargo from DG Connect of the European Commission. On another note, Rodolphe el-Khoury from the RAD Lab assures that "The internet of things will keep architects busy for decades. Architects, yes, architects!" The Internet of Things is the network of physical objects (and sensors within or attached to these objects) which are connected to the Internet via wired or wireless network connections. These objects will gather data and communicate among each other. "In other words, when objects can sense and communicate, it changes how and where decisions are made, and who makes them. When an object can represent itself digitally, it can be controlled from anywhere. This connectivity means more data, gathered from more places, with more ways to increase efficiency and improve safety and security."[11] "There are currently 1.5 devices for every human being on the planet. All over the world, sensors, smart objects, and other devices are connecting through the reach and power of the Internet. And they're dynamically generating, analyzing, and communicating intelligence to increase operational efficiency, power new business models, and improve quality of life. Connecting the unconnected is the Internet of Things (IoT)"[11]. The majority of the governments in Europe, Asia and the Americas consider now the IoT an area of innovation and growth.

According to Jeremy Rifkin, the intelligent TIR infrastructure — the IoT — will connect everyone and everything in a seamless network. People, machines, natural resources, production lines, logistics networks, consumption habits, recycling flows, and virtually every other aspect of economic and social life will be connected via sensors and software to the TIR platform, continually feeding Big Data to every node—businesses, homes, vehicles etc — moment to moment in real time. The Big Data, in turn, will be analyzed with advanced analytics, transformed into predictive algorithms and programmed into automated systems to improve thermodynamic efficiencies, dramatically increase productivity and reduce the marginal cost of producing and delivering a full range of goods and services to near zero across the entire economy[8].

6. The Smart City (urbanism)

Smart is advanced architecture[5] and ICT put the smart in smart cities[12]. One study made by Vienna's Centre of Regional Science has identified six key aspects that make one city smart: smart economy; smart mobility, smart environment, smart people, smart living and smart governance. The Digital Agenda for Europe, states that: "In Smart Cities, digital technologies translate into better public services for citizens, better use of resources and less impact on the environment." [13] Crețu's key aspects for the smart city articulate: a smart city has a well designed ICT infrastructure, transforms real time data into meaningful information and allows inhabitants to predefine automated actions in response to events [14]. The area is one of interdisciplinary research and experimentation. Smart Cities combine diverse technologies to reduce their environmental impact and offer citizens better lives. "The 'smart city' has been introduced as a strategic device to encompass modern urban production factors in a common framework and, in particular, to highlight the importance of ICTs in the last 20 years for enhancing the competitive profile of a city. The presence of a creative class, the quality of and dedicated attention to the urban environment, the level of education, multimodal accessibility, and the use of ICTs for public administration are all positively correlated with urban wealth." [15] According to the Smart Cities Council, a smart city uses ICT to enhance its livability, workability and sustainability. In simplest terms, there are three parts to that job: collecting, communicating and "crunching". First, a smart city collects information about itself through sensors, other devices and existing systems. Next, it communicates that data using wired or wireless networks. Third, it crunches (analyzes) the data to understand what's happening now and what's likely to happen next.

The main responsibility areas where smart cities initiatives should operate as identified by the Smart City Council (SCC) are: energy, mobility, communication, health and safety. All these areas can be improved by gathering relevant data from either objects, buildings, sensor systems, people, social media and so on, from the IoT and using it to predict better traffic patterns, disease spread, to reduce waste, loss and cost.

In 2012, *The Smart Cities and Communities European Innovation Partnership* was launched with 365 million Euros available from the EU budget (for the year 2013) that cities in Europe could apply to receive financial contributions for local smart city projects.

7. Examples

The following examples are presented to help to gain a better understanding on what smart cities solutions are, how ICT, big data gathering and visualization and the IoT are all relevant to smart cities and paint a more accurate picture on the subject. On one hand, industry leaders and the programs they are putting forward in relation to the smart cities are highly relevant since they seem to be preparing to convert themselves into major actors on future urbanity. On the other hand, looking at leading city illustrations is useful and insightful since many examples can be simply copied and adjusted to other cities – cities can learn from one another, both from the positive and negative examples (for example: "Developing cities have the opportunity to avoid the carbon-intensive infrastructure choices."[4]).

7.1 Industry Leaders in smart city development

Over the last years, most of the ICT industry leaders have invested heavily in developing and trying to implement various concepts for the smart city and maybe setting the scene for a Third Industrial Revolution. From Cisco's IoT, to the Smarter Planet-Smarter Cities (IBM) to CityNext (Microsoft) and Siemens's Sustainable Cities, it seems that any city which aspires to be smart has to work with

one of these companies in developing strategies of ICT implementation towards the smart city goal.

7.2 Smart cities - leading examples

Much of the literature agrees that there are no truly smart cities yet. However, some parts of the world pilot the implementation of various steps toward creating a new urban paradigm. In Europe, the top 10 leading smart cities are: Copenhagen, Amsterdam, Vienna, Barcelona, Paris, Stockholm, London, Hamburg, Berlin and Helsinki [16].

7.2.1 Rio de Janeiro (with IBM)

Rio is considered the best, biggest, smartest megacity in the world with a visionary mayor. In collaboration with IBM, they have developed a system of monitoring (collecting information on most things that can offer data), communicating it to a control center (communicating the information) and sometimes offering predictions based on the data (crunching the information). The city collects information from 30 different city departments about transportation, water, energy, weather and other conditions. Then it communicates those conditions to powerful computers, which crunch the data and present it in a unified control center the city developed with IBM. Not only does the city gain full situational awareness, it can even predict some conditions in advance, such as where floods will occur during severe storms. It can also develop actionable tasks based on modeled patterns, creating a competitive advantage for smart cities [17].

7.3 Transportation and parking (mobility):

Cities and municipalities are collaborating to build interconnected intelligent traffic management systems that optimize the overall road capacity within a region and between regions. The mapping of flows of people, cars, public transportation or taxis has been used in more cases for determining mobility patterns, for informing the positioning of bus and bike sharing stops, pedestrian routes and optimization of traffic lights, in order to better understand how cities are used in general.

7.3.1 Mapping London

The Center for Advanced Spatial Analysis (CASA)[2] at University College of London directed by Mike Batty have produced numerous maps in visualizing and proving the concepts from the "new science of cities". These maps are used by the urban actors and decision makers to better understand various aspects of the urban fabric, how its users use it, what are the preferred routes for bikers and pedestrians, what are the peak hours and when/where commuters commute.

7.4 Waste management

Waste management has been an increasingly bigger problem for cities in the last decades. The concept of the IoT has proven to be useful in this area for a better understanding of flaws in recycling systems where simply visualizing information can bring a great deal of new insight.

7.4.1 Trash Track (Seattle)

One of the most famous case studies that has led to many other implementations is the Trash Track experiment developed by the MIT Senseable City research Lab. In 2009 MIT researchers mapped the flow of urban trash. The experiment involved placing sensors on more than 3000 items of waste

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[2] The Centre for Advanced Spatial Analysis (CASA) is one of the leading forces in the science of cities, generating new knowledge and insights for use in city planning, policy and design and drawing on the latest geospatial methods and ideas in computer-based visualisation and modelling.

which moved through the Seattle disposal system. The goal of the project, called Trash Track, was to monitor the patterns and costs of urban disposal and to help create awareness of the impact of trash on the environment. The tags attached to the waste were monitored in real time on a central server at MIT. An invisible infrastructure started unfolding that showed both the complexity and the problems of the recycling system – where for example, the carbon emissions produced in getting waste to a facility negate the expected benefit of recycling.

7.4.2 Porvo, Finland

Another example of the use of real-time data streaming onto the IoT for reducing cost and waste is one initiative in the city of Porvo in Finland. In 2011, the small city was facing problems at the local recycling stations with overflowing waste containers. Overfilling at the local recycling stations was becoming more common, causing increased littering and cleaning costs. To tackle the problem the authorities decided to pursue a smart city solution, installing wireless fill-level sensors at recycling. The sensor system measures and forecasts when waste containers will be full. By combining the forecasts with traffic and vehicle information, Enevo's system can generate millions of different route options and suggest the most cost-efficient to the user. By utilizing the smart sensor service, streaming data from an object onto the internet, crunching that data and creating predictions based on it, the municipality was able to: reduce the amount of collections by 51%; reduce unnecessary driving and emissions; significantly reduce the overfilling problem at recycling stations; achieve a net savings rate of 47% [18].

7.5 Social media overlay

The type of data that social media continuously streams to the geoweb[3] has been fascinating advanced social, city and medical analysts over the last few years. Some amount of work has been put into trying to create maps of the internet and understanding patterns, places and people. The mapping of the Egypt revolution on Twitter, for example, has gained a lot of attention. The work of the Civic Data Design Lab from MIT is particularly interesting. They claim to use data to create stories about the places that we live. The somewhat lesser known Data Republic analysis of Barcelona's touristic patterns was used by the City Hall to develop city strategies. Some scientists claim that Twitter feeds can be used to predict crime. Other research endeavors are developing ways to map disease spread in various areas based on geolocated tweets. According to medical researchers, this method helps at ending invisibility of patients who would otherwise only be monitored once they reach a doctor's office (which, in most cases, is too late and does not help in stopping the spread threat)

7.5.1 Using Flickr to map tourist behavior in Barcelona

A company called the Data Republic, now purchased by Kantar Media have produced a series of maps that look into geolocated Flikr pictures from internet users. From simple geolocated dots on a map showing when, where and who is taking pictures around town - they were able to see agglomerations and preferences according to season and weather. These maps were used by the municipality in Barcelona to gain a better understanding of how tourists and locals use various places in the city. Additionally, after insight from these maps, the municipality gained a better understanding of which areas of the city are most visited and which need additional promoting. This information also helped tourism businesses and institutions to better understand their current and potential customers [19].

7.5.2 Foursquare check-ins mapping

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[3] The geoweb is digital information about physical place, it refers to all of the digital data that is in someway tagged to a physical spot on the globe (geotech tweets, restaurant reviews, foursquare check-ins)

The Civic Data Design Lab at MIT claim to try and tell stories about places through social media. One series of such stories are their maps that tap into Foursquare and Facebook check-ins to give insight about the places that we live/inhabit. Social media is increasingly becoming part of our everyday lives, and has given us a different viewpoint to understand, explore, navigate and geographically report the urban fabric. Users provide information not only of what and where they are doing, but also on what they are feeling. This way, they are creating psychological, economical and emotional maps over the city. These maps set out to understand if there was a digital divide between socio-economic classes in NY. The check-ins tend to highlight locations that are economically driven, where the higher land values and show which areas are used by various races [20].
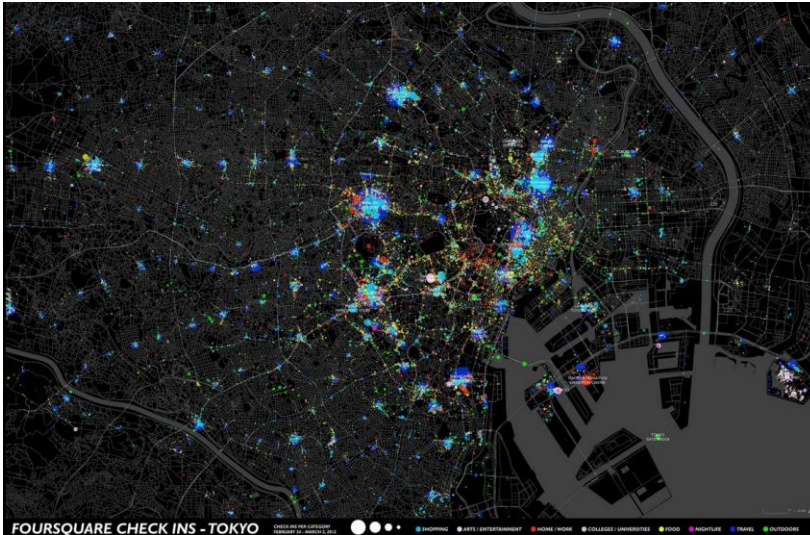

Figure 2. Maps from the Civic Data Design Lab for Tokio. Showing Foursquare check-ins, user typologies and places of interest in the city. Source: http://www.civicdatadesignlab.org/weareherenow/xpq6xiusn4fzy5arvthh5ndmwwo6w0 (accessed on 05/05/2014).Also presented as learning material in the Technicity MOOC on Coursera (02/2014 - 04/2014)

8. Tool development

Research in the field of creative coding for architecture led to the development of a visualization tool - the Mood Thermometer. It uses geolocated data for city understanding and analysis. The logic and the code apply to any area, be it rural or urban, although it is more relevant for the urban context. Cities are dynamic, complex systems, similar to live organisms. Planning needs to be responsive of real-time data and the fluid patterns of their agents. This is why, even simple visualizations of flows or of the geoweb can provide useful and meaningful tools to rethink public space as an adaptive dynamic canvas as has been shown in section 6 and in further examples like [21] and[22]. Spatial and temporal constraints have made it impossible to access vast datasets, and visualize the flows in Cluj, a city which lacks this kind of approach, but this is undergoing work. The analysis presented here was the first example the Mood Thermometer had for inquiry and is based in Barcelona. Using sensing devices placed on city users (i.e. mobile phones), preferred routes and average speeds on various streets can be assessed, not only for cars, but also for pedestrians and bikes. If the angle of the sensing device is considered to average the angle of the user, then this could point to her angle of vision. Analysis of city tracks, bottlenecks, mobility patterns will emerge and start to inform on discontinuities and other problems of the mobility system of the city. With data from many different users, at various times in a day, a week and a year models on flows and mobility patterns otherwise invisible and painfully hard to track will emerge. Once a considerable database is complete, Mood Thermometer will be fed the data and used to calibrate agent-based simulations of an area.

8.1 Tracking a path

One analysis is presented here using part of the Mood Thermometer's functionalities, namely to visualize trips (be it by foot, bike, car, public transportation etc). The data was gathered from a city user. A tracking application, The Antimap was used to record GPS longitude and latitude, angle, speed, distance and time during a trip by foot in Barcelona, starting in Placa Catalunya, following the Rambla and reaching the Mare Magnum. At the end of the trip, Antimap produces a .csv file which was fed to the Mood Thermometer. The length of the trip was of 1.92 kms, lasting 20 minutes with a maximum speed of 5.7 km/h.
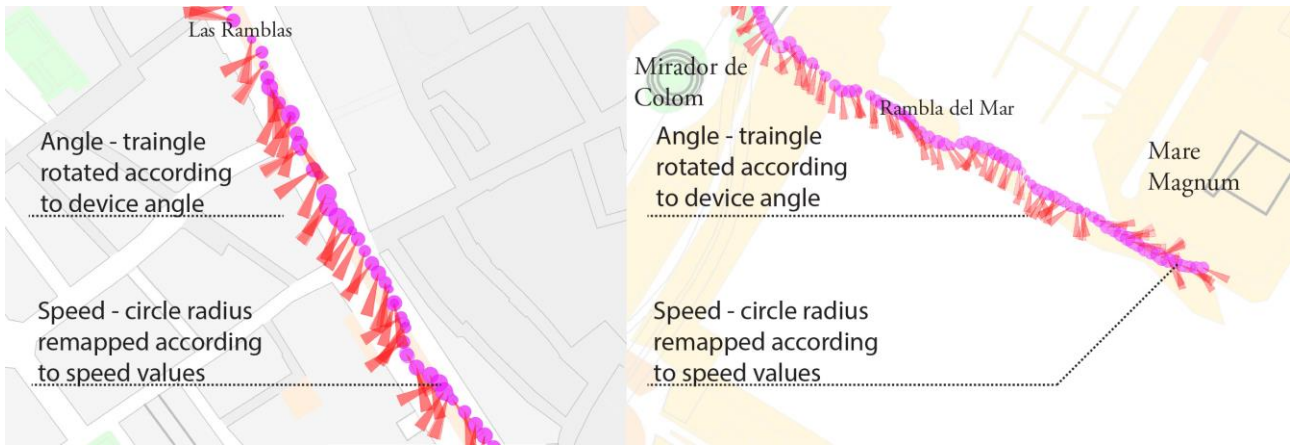
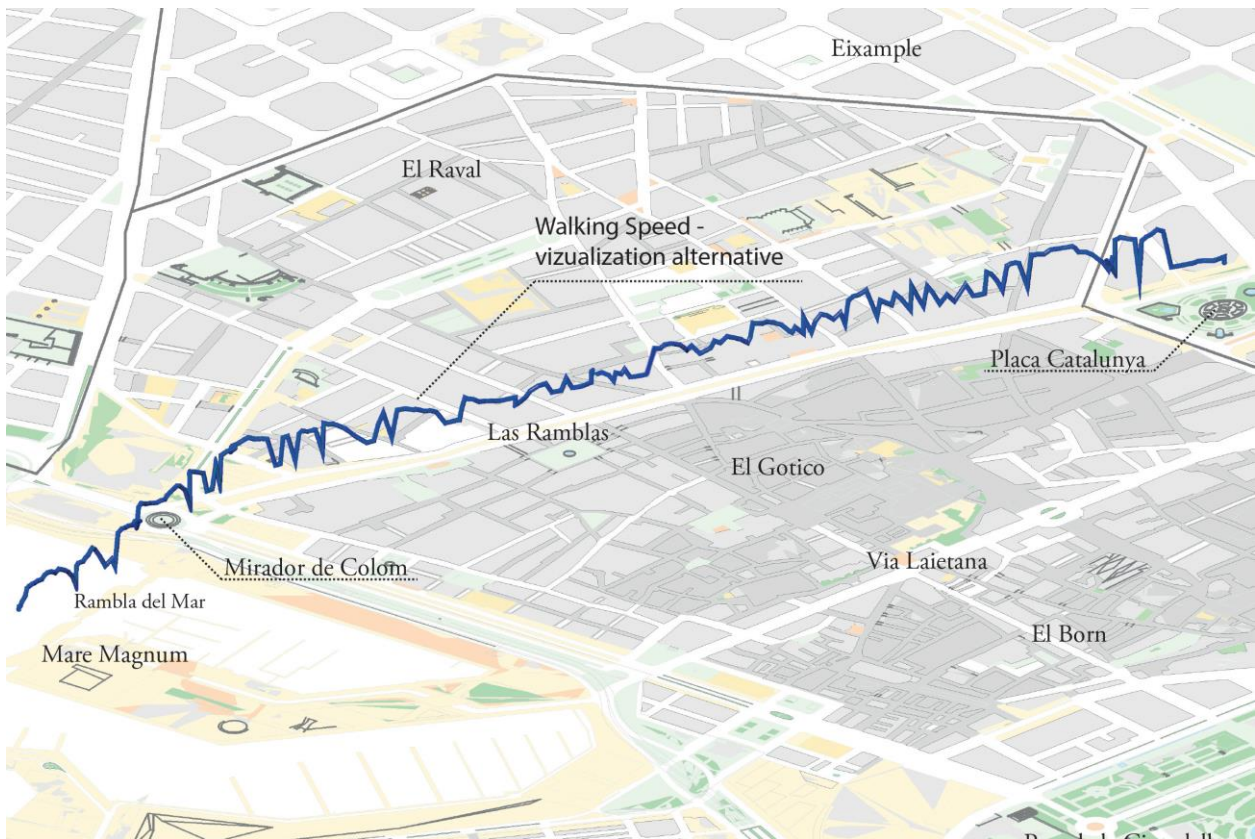

Figure 3. Plane views of the mapped path

Figure 4. Walking speed of one trip - visualization alternative

Figure 3 shows a visualization of a walk on Barcelona's Rambla. The speed of the user, her position and angle of vision (the angle of the phone to be more fair) provide an understanding of how the

street was used. Figure 4 offers an alternative to speed visualization in axonometric view. Stopping points at intersections are immediately visible as well as areas of a more homogenous speed/experience.

9. Conclusions

The point of this paper was to: (1) present the convergence of technical possibility with political and economical willingness to understand an information layer hovering over cities, which was not previously used in a significant way for city analysis; (2) look at leading examples in what is called smart cities, (3) introduce a visualization and analysis tool.

Reviewing state of the art literature at point (1), one cannot fail but notice some problems and directions of future inquiry which did not make the point of this paper: (a) the excessive use of the word *smart* used to define the future city coupled with the failure to properly pinpoint what a smart city is, needs to be addressed and discussed further; (b) ICT giants like Cisco, Microsoft, Siemens, Oracle, General Electric have invested heavily in the concept of smart cities. This was a strategy that has helped them recover or avoid the collapse of the economy in 2009. They have funded many reports aswell as the Smart Cities Council. Very few smart city initiatives have been undertaken without the help of one of these companies (Curitiba is one example). With both the E.U. and the U.S. creating development goals based on smart cities, there is a clear trend for these companies to try and gain monopoly over city partnerships (Rio-IBM, Barcelona-Microsoft, London-Cisco, Cluj-IBM). In this light, perhaps the smart city endeavor has a biased economic nature as opposed to sustainability. (c) Big data emphasizes quantity over quality. Simple data gathering is not enough. City strategies need to be developed in trans-disciplinary environments where a potential tech-giant is an added player. The visualization tool presented at (3) is both dependent on datasets and the interpretation of the maps it can produce. Its real potential or irrelevancy can only be assessed once substantial data is parsed and interpreted.

Looking at things from a more holistic perspective, and examining the bigger picture, ICT is the means to an end - designing things that closer follow the way nature works. Sensor systems, monitoring devices and visualization tools are the technological analogues of nerves and cells that perceive the environment. The data that these sensors generate (whether they are on objects, buildings, or part of the user "equipment") is essentially big data because of its size. The smartphones carried by many city dwellers are also sensors that can – when specifically authorized by their users to do so – collect their position, speed, where they cluster at different times of the day and the environmental conditions around them [17].

When big data coming from everything in cities will be centralized, and specialized tools will help understand its meaning, with things and people all interconnected and aware of each other, theory predicts algorithms will come to rule the city, decide and predict how to direct the flows of people, energy, objects and waste. Then, we will be truly able to call our cities smart - since they will have (as Rio has pioneered) a sort of central nervous system similar to more evolved living things. A myriad of problems need to be addressed before we are even close to this goal (like the fragility of everything being connected into a network, privacy issues, or the fact that this scenario is painfully unattainable in many parts of the world). Until then, mapping flows and turning data into information, and information into knowledge are the first steps towards being smart about using every resource possible (like, in fact, the most successful of species in nature do) to learn from our environment and its users.

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Interactive Design: Designing Sensorial, Dialogical Spaces

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Abstract

In this short paper, we describe an ongoing research project which is mainly based on the realization of several installations using interaction design as an essential quality. In Arts, the digital art, which is part of the so called new media art, represents a topic of actuality together while raising issues regarding its curation. Interactive installations, mainly artistic endeavors with intriguing outcomes and some using artificial lighting as a tool, introduce a different kind of experience than artworks exhibited and forbidden to be touched. Thanks to their interactive aspects, the user becomes a participant either willingly or unwillingly and influences the overall scene. These immersive installations have the potential to challenge the notions and perception of space, as well as to enrich any activity within that space. The interactive space becomes a place with intriguing qualities, an icon of human interaction and one that has the ability to adapt to our needs, while at the same time shaping our experiences. This interaction is not only with the installation itself, but also between individuals, thus fulfilling the evolving individual and social demands or intentions.

Rezumat

În acest scurt articol descriem proiectul de cercetare în curs, bazat în principiu pe realizarea unor multiple instalaţii care utilizează "interaction design" ca şi caracteristică de bază.
În Arte, arta digitală parte a aşa numitei "new media art" reprezintă un subiect de actualitate alături de aspectele pe care le ridică în ceea ce priveşte aspectul curatorial. Instalaţiile interactive, in general încercări artistice cu remarcabile rezultate si unele utilizând iluminatul artificial ca instrument, introduc o experienţă diferită faţă de obiectele de artă expuse şi a căror atingere este interzisă. Datorită aspectului interactiv, utilizatorul devine participant atât voluntar cât şi involuntar şi are o influenţă asupra scenei globale. Captivante, aceste instalaţii au potenţialul de a provoca noţiunile şi percepţia de spaţiu, precum şi de a îmbogăţi orice activitate din acel spaţiu. Spaţiul interactiv devine un loc cu calităţi remarcabile, o pictogramă de interacţiune umană şi una care are capacitatea de a se adapta la nevoile noastre şi totodată formează experienţele noastre. Interacţiunea în cauză nu se referă doar la instalaţia în sine, cât şi între noi de asemenea, deci îndeplinind cereri sau intenţii individuale şi sociale.

Keywords: Interactive Design; Interaction Design; Intuitive Interaction; Sensorial; Installations.

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1. Introduction

The Sensorial Space installation is part of a research project which deals with interactive space as a concept. It dwells on the subject of Interactive Design rather than Interactive Architecture as Interactive Architecture is a larger domain also covering Interactive/Media Facades which is not the focus of our research. The underlying idea is that of dealing with space at a human scale and dealing with the interactive feature of a project's design phase which slowly seems to appear especially in media projects, education, health and arts. Though currently seen as a luxury, it is thus widely applicable. Architects seem to be interested in creating interactive installations because of the creative freedom it offers, such as in competitions. With the widespread of technologies, people tend to interact more virtually. The importance of media installations lies in the fact that they facilitate face-to-face social interactions. Also, do these technologies pollute or disturb our surroundings, rather than enhance them, or improve communication, social interaction? We think that when it is done well it can enhance the public space. It becomes an integral part of the surroundings and of the activities. It is also about creating something that people can remember.

Interactive installations are though a subcategory of installation art that appeared starting with the 1920s and they are most frequently created and exhibited since 1990s, when artists were particularly interested in using the participation of the audiences to trigger and disclose the meaning (message) of the installation. According to Bonnemaison and Ronit [3:description] an installation is "usually the end product for an artist, but for architects it can also be a preliminary step in an ongoing design process". They consider the critical role that installations will play in the practice of architecture, the role of them being of sharpening our understanding of the built environment. The installation is a "three-dimensional work of art that is site-specific" [3:14].

So the question is also what happens when an architect creates an installation and how this work is being different than the one made by an artist? One answer could be that it doesn't concern the work itself perhaps, but in what it offers to the field of architecture, mainly as mentioned before, the freedom to experiment, an opportunity like the competitions to explore ideas that can later be incorporated into built work. "For other firms, creating installations is a way to shift the focus from the built work to the design process." and as seen today "there is no doubt that installations have become a major mode of expression for the practice of architecture" [3:17:21].

The digital revolution and design represents an actual topic today. With a constant dynamic, always evolving and becoming of more and more interest because of the future technologies that are being developed like 3D printing, computational advancements and so on, it is the future of architecture, design, art and other fields. As Nicholas Negroponte, MIT Media Lab, wrote in 1998 "Yes, we are now in a digital age, to whatever degree our culture, infrastructure, and economy (in that order) allow us." [4:661].

Immersive interactive designs challenge the notions and perception of space, as well as enrich an activity within that space. The interactive space is a place with intriguing qualities, becoming an icon of human interaction.

People have more or less been expected to adapt to an environment rather than it adapting to their desires. Different levels of interaction and behavioral awareness can be achieved by the use of sometimes rather simple techniques, people becoming participants either willingly or unwillingly (for example the Interactive Video Installation by the students of the University of Michigan, USA,2010).

These designs change how people interact with their environment and each other, thus fulfilling evolving individual, social and environmental demands "The information revolution has changed the way we interact with everything..." [4:preface]. Consequently, as mentioned, a unique sense of space is created, that has the ability to adapt to our needs, while at the same time shape our experiences. "To designing for usability, utility, satisfaction, and communicative qualities, we should add a fifth imperative: designing for sociability." [4:foreword]

Throughout the process of creating these spaces, a better understanding of space, of different media represent the outcomes at the level of knowledge. The installations focus on dealing with the space and responding not only from an aesthetical point of view. This represents the strong point that transforms them from artistic realizations, "sculptures", into something that has a deeper value, understanding, transmitting and receiving at the same time knowledge. Knowledge is something that is in constant movement, the transfer of it can be realized in different ways. The production of new knowledge is important and transmitting it through installations, in a unique way, it is something envisioned.

2. Installation

Sensorial Space presented within ByDesignForDesign0 in Brussels, Belgium, April-June 2011, is an interactive installation part of the research project "Interactive Design: Designing Sensorial, Dialogical Spaces". ByDesignForDesign0 represented the last session of the Research Training Sessions, organized at an international level, and it consisted of designing a possible output of the research and then reverse engineer the potential research and the design processes leading up to such an output.

Sensorial Space was designed by the authors together with an IT engineer and researcher. It mainly transformed the computer's camera into a motion sensor through a software. When the camera was detecting movement there was a halftone or clear video recording of the activity within that space that was then projected onto a surface.
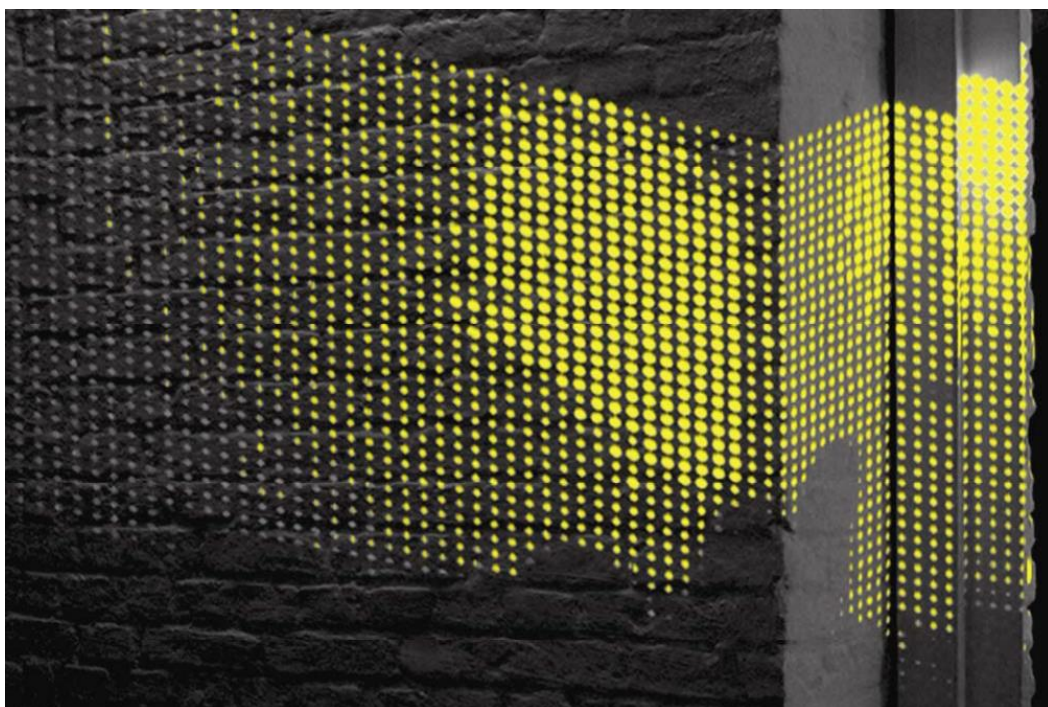

Figure 1. Halftone Pattern projection of the activity within the space.

The project uses the visual component as a main attribute; by the use of the halftone pattern the image becomes clearer as seen from the distance as well as having a distinction between the dark and lighted areas. No movement within the space would trigger an animation projected as well. The succession of the recordings and animation were creating a dynamic skin, of course by embedding the sensor and other components into the materials more advanced design could be created. The idea was that by the use of simple elements to create an interactive space, a space where the surrounding surfaces would react to the activity within and people's movement. Overall, the installation received an interest from the passersby and in general it had quite a positive impact upon the existing space.

The installation presented in Brussels in 2011 is perhaps considered to be at first sight common since more advanced examples exist out there. But the unique feature is that it tries to deal with the space, to transform it and dealing with the space it is at the core of architecture. The space becomes an intriguing one as seen from the reaction of the passersby. The space in architecture is uniquely seen by each architect and this is the beauty of architecture as well. Today, collaboration is the key to a better and much more interesting result, so in this case collaboration led to a faster result and an intriguing outcome. Architects working together with artists, designers, engineers, sociologists and so on seems to be today on a regular basis, or the intention is to further enhance and promote this aspect. Of course the language of communication remains still questionable, but the idea is of a transdisciplinary approach. Practice based research is also becoming more important and a recent topic today, where practice and theory fuse together and collaboration platforms are central.
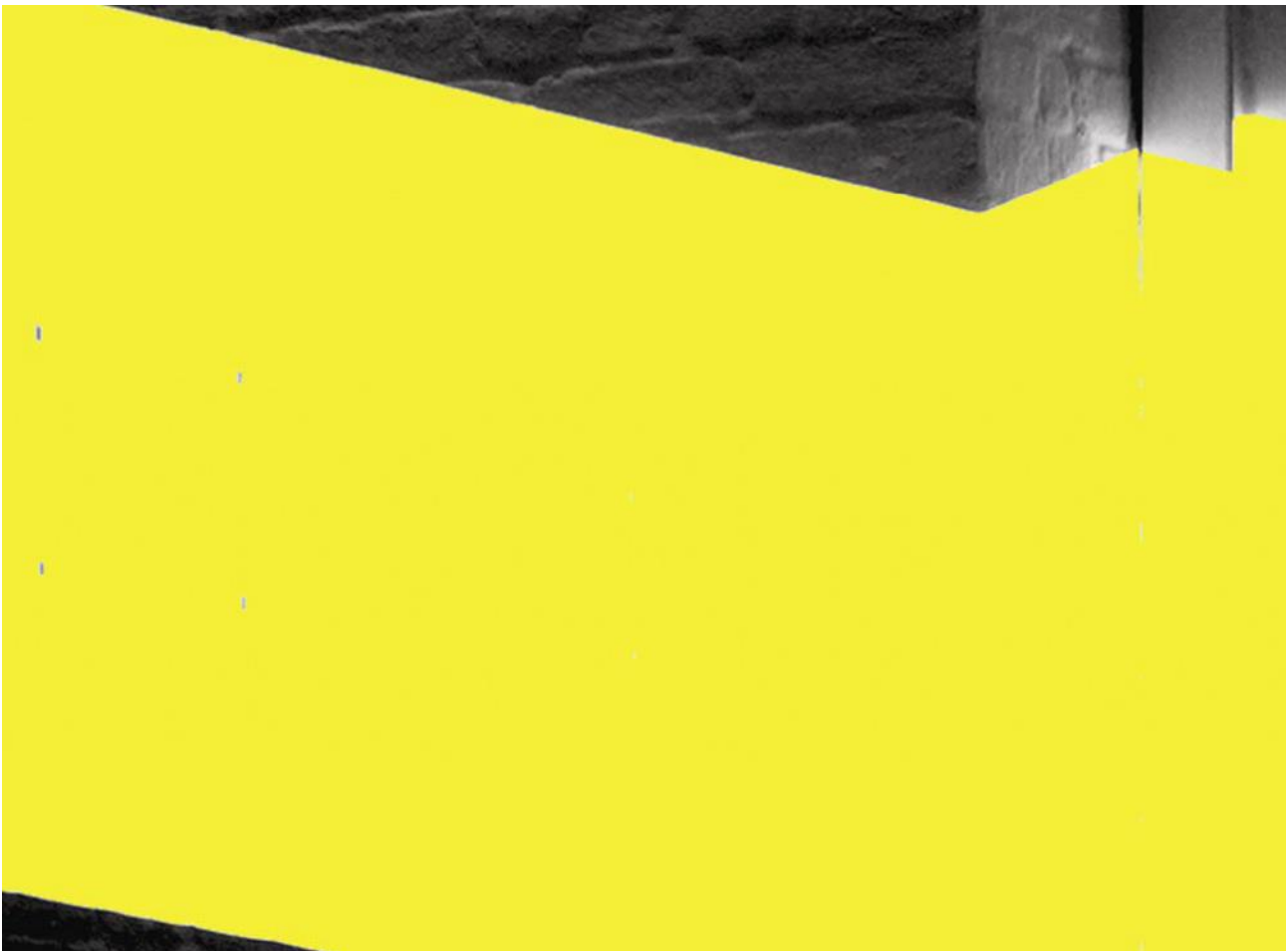

Figure 2. Projected animation indicating no activity within that space.

From a technological point of view, it tries to use the existing technologies, reinterpret them so the cost is very low. A further applicability would be to use the Kinect sensor that "stands out as an affordable, advanced and effective alternative." [5]. The setup of the installation was quite easy, not requiring special knowledge since it included a computer, a beamer and the software that was running on the computer.

The installation was considered more as a prototype in a way, testing out a concept, so of course future applicability is envisioned already (redeveloping the software, using the Kinect sensor, projecting on multiple surfaces and so on).

3. Feedback

When the installation was presented in 2011 in Brussels, no special questionnaire for the participants/passersby was used, only mere observation and from time to time feedback or interest received from them were sufficient to gain valuable insight. The interest seemed quite high, in wanting to know details, how it was functioning, what it represented testing it and so on. This shows in a way a positive feature of this sort of installations, in the idea that it transforms the space which becomes much more memorable, educative, interesting in today's Information Age that we live in. What it is important though is not to abuse with these sorts of installations, so an implication from architects, designers, artists and other fields involved making the best result in a way, thus not becoming means of advertising only as the case of most of the media facades.

Within the research project, the emphasis was put on the collaboration than in recordings/logs in a way. Using a transdisciplinary approach is prior not only for this installation but future ones as well. Regarding future interactive installations a recorded feedback from the passersby is intended, videos showing their reaction and not only photos as within this case.

The methodologies of creating installations are flexible. They are seen as environments open for exploration rather than finished works so participants become artistic collaborators, performers and part of the installation. So the question is what makes an installation engaging? The installation is a three-dimensional and relates to the space surrounding it evoking a spatial experience. Generally computer based and frequently relying on sensors, the dialogue between the participant and the installation is important Also a question is how effective interactive installations are when installed into mundane situations and how this promotes change?

The installations can be education based, informative or "just for fun", the later being less evident in a way. Engaging with the public, educating it in a new and exciting way, bringing people together, promoting team work, thought provoking are all prior and important within creating interactive installations. Another role of the installations is in sharpening our understanding of the built environment, being site-specific so contextual.

4. Evaluation

Overall, the importance of the interactive installations seemed to exist, considering the fact that the space was transformed and the passersby were intrigued to learn more about it. This can be considered as a rather positive outcome.

The weaknesses are perhaps the rather the superficial use of them, so the case where the dialogue is not evident, or the transmission of knowledge is low. That is why we believe that collaboration between architects, artists, designers, engineers and so on is prior. Without such practices the result

is inferior and even uninteresting.

Creating interactive spaces with a sense and the challenges are mainly related to funding these types of projects, that in certain cases are seen as being luxury or made "just for fun. However, this was not entirely the case. An important challenge in this case was the language of collaboration, being considered a multidisciplinary platform in a way, sometimes it may be seen as a downside rather than a positive one. The idea of the collaboration is now very obvious and implicit in a way. We envision these type of installations as means of improving our daily life and the spaces that we live/work in, so it's not mere a platform for advertising, but actually trying to help the user in some cases to discover something new, to emphasize the characteristics of s space by making it more secure.

The case of some passage ways in the city that are rather dangerous. Or the use in kindergartens, as means of learning and discovering for kids. Again, we would like to repeat that fact that these type of installations should not be seen as realized with no or reduced reason, or just to distract the user/passerby but as means to improve our daily lives and enhance our experiences in a positive way.

Considering the time and cost invested for achieving the intended result, overall the installation offers some unique features. The time for creating the special software, that was transforming the webcam of the laptop into a motion sensor, was relatively short, installing the required equipment, laptop and beamer, was feasible as well and the costs were significantly low. Of course there are much more sophisticated interactive installations out there, but the idea was that of using these simple elements and reducing the costs as much as possible, to simulate the interactivity, try to analyze the feedback from the passersby and use these experiences to develop a more solid project.

5. Future prospects

The envisioned installations will try to break new ground, involve the public and create intriguing spaces using interaction design, smart materials and new technology available today. Each concept will be unique and based on specific situations, contexts, the end result will illustrate a fusion between design, architecture and art.

Figure 3. Simulation including the Brussels urban context.

Regarding the interactive aspect, "the user on the other hand has two options how to relate to the

system: passive or active". "In the passive the system works in the background" the system being composed in general of different elements "sensors register the environment, controllers determine what kind of actions need to be taken, actuators make the desired change happen, and materials realize the physical part of the system." [1]. By the use of interactive/innovative materials, more advanced designs could be created, as well as further enhancements regarding a successful dialogue of the users with a space could be achieved. Composite materials are starting to be more and more developed and used. Lifting materials from their usual dependence on surfaces and utility will lead to redefining our physical boundaries. This characteristic is sometimes achieved without requiring any sensory equipment, motor functions or even operational energy input.

Figure 4. Another view of the simulation that includes the Brussels urban context.

The interaction can be realized on multiple levels, "the three different levels of interaction: reactive (reacts to the input given by the participant), pro-active (not only responsiveness to people's interaction but a contribution to present-time changes that take people by surprise) and dialogical (when the interaction between people with information and with themselves triggers social transformation)." [6]. The spaces created should rely on a bidirectional, cognitive and constructive information exchange that allow active participation rather than simple usage. It is important to be a cognitive and bidirectional information exchange and not just a use of space, creating artificially some dynamic surfaces, the case of the advertisement facades existing today. Used as huge displays, these types of examples are not the ones referred to, but more the small scale interventions existing and starting of being developed.

Exploring new levels of interactivity implies new technologies and testing several solutions available today. Due to the multitude of these solutions, new ones being developed as we speak, the idea of reinventing, redesigning a space becomes imminent. Also, the interactive feature should not be an afterthought but considered when designing the space. As considered by William Mitchell, "Architecture is no longer simply the play of masses in light. It now embraces the play of digital information in space.". The sense of space, spatial thinking is something that has been very present, in Oskar Hansen's view the color could be space, while James Turrell uses light to create new fascinating spaces or underline characteristics of existing ones like the case of the spiral shaped space of the Guggenheim Museum in New York.

Technological advancements sustain the feasibility of these interactive designs. There will

always be new technologies appearing and thus new ways of designing spaces, creating new designs which constantly respond to the growing needs of people.

6. Conclusions

In conclusion the interactive installation offered a unique space that has the possibility to transform the way people interact with each other and within the space. We consider that especially within the Art world where these installations first appeared, there is a new way to link it with technology that evolves in parallel and becomes much more present in our lives. In the future, we envision more sophisticated installations like iLIGHT for that offer much more to the passersby.

Figure 5. Conceptual model of the iLIGHT Interactive Installation.

Using new, ultra materials is also envisioned, since the material technology evolves as well and more and more complex and mixed materials appear (wire mesh with LED, fibre optic panels and concrete, LED film, glass with embedded LED, OLEDs and others).

This project is at its beginning, lots of ideas remaining to be discovered, tested and put into practice. Most of the projects realized so far are treating, reinventing the surfaces, what they are and what they can do, rather than spaces.

The main contribution is the interactive installations that represent a vehicle for developing the understanding, a unique way to communicate and respond to a public, overall an essential part in the knowledge production.

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CITY GATES: MALTA, A CASE STUDY

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ABSTRACT

Romania has oscillated in its modern history between synchronism and conservatorism/protocronism, the present time being one of synchronization with the international practice and reintegration into the West. In this context, our professional field is currently also interested in the issue of preserving the architectural heritage of fortifications. For us and for FAU/UTCN the interest lays in the aspiration of Cluj to become a European capital of culture with the rekindling of interest in enhancing the value of the Citadel and with the reality (uncomfortable perhaps) of potentially enhancing the architectural heritage through new construction work. The gate of any fortification had to solve the contradiction between the necessity of access and the fact that it represented, a priori, a vulnerable point. Through this, a gate comes close to a paradox: it brings together continuity with discontinuity; it is topological as well as urban and architectural. More than that, for us architects, it is also an attitudinal issue in solving an effective, conceptual and material challenge which cannot escape either the demands of the respective period or the judgment of the times to come. The international universe of cases is so vast that it borders on being encyclopedic, which is why we will treat Malta as a case study, which is suitable since it has the attributes of exemplarity, if only for the following reasons:

- *La Valletta has been designated as one of the European capitals of culture for the year 2018;*
- *The main gate of the city has had up to now a series of different architectural solutions.*
- *Paradoxically, over the course of its existence, the city has seen a lot of construction work bearing the particularities of the respective times.*
- *Currently there is a major intervention under way of one of the "tenors" of contemporary architecture – Renzo Piano*
- *This place has also tackled the issue of moats after their military rationale has vanished, examples of this being La Valletta and Medina-Rabat.*

REZUMAT

Romania a "pendulat" in istoria sa moderna intre sincronism si conservatorism/protocronism, momentul actual fiind cel al sincronizarii cu practica internationala si al reintegrarii in Occident.In acest context, domeniul nostru profesional este interesat, in momentul actual, si de problematica valorificarii patrimoniului architectural al cetatilor fortificate. Pentru noi si FAU/UTCN, interesul se constituie la concurenta aspiratiei municipiului Cluj-Napoca de a deveni capitala culturala europeana cu reaprinderea interesului pentru valorificarea Cetatuiei si cu

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realitatea (chiar daca incomoda) a potentialului valorificarii patrimoniului architectural prin constructie noua. Poarta oricarei cetati fortificate a trebuit sa rezolve contradictia dintre necesitatea accesului si faptul ca reprezenta, aprioric, un punct vulnerabil. Prin aceasta, ea frizeaza paradoxalul: intrunind continuitatea cu discontinuitatea, atat topologica cat si urbana si arhitecturala. Ba mai mult, pentru noi arhitectii este si o problema de atitudine in rezolvarea unei provocari effective, conceptionale si materiala, care nu poate scapa de imperativele timpului respective dar nici de judecata vremurilor care urmeaza. Cazuistica internationala este atat de vasta incat ar friza enciclopedicul si de aceea vom trata ca studiu de caz Malta, valabil si pentru noi, intrucat aceasta are atributele exemplaritatii - fie si numai din urmatoarele considerente:

- *La Valletta este desemnata capitala culturala europeana pentru anul 2018;*
- *Poarta principala a orasului a avut o succesiune de diferite rezolvari arhitecturale, pana in zilele noastre;*
- *Paradoxal, in oras s-au realizat, pe parcursul istoriei sale, multe constructii noi avand particularitatile epocilor respective;*
- *In momentul de fata acolo se realizeaza o interventie majora a unuia dintre "tenorii" arhitecturii contemporane – Renzo Piano;*
- *Aici s-a abordat, in timp, si problematica amenajarii santurilor de aparare dupa ce ratiunea militara a acestora a disparut, cu exemple atat in La Valletta cat si la Medina-Rabat.*

Keywords: Contemporary use of historic city gates and old fortifications, Maltese experience, Romanian European integration and competition for the status of European Capital of Culture.

1.Relevance of the approach

Over the course of its history, Romania has oscillated between periods of synchronization with the international context and periods of protocronism, the years after December 1989 (including the current period) falling in the first category due to a prolonged transition. This process has given rise to the current endeavours for gaining the title of European Capital of Culture for Romanian cities and for enhancing the value of the medieval citadels that have been preserved here.

When it comes to enhancing the value of medieval citadels, there are two architectural elements that first meet the eye upon sightseeing: the entrance gate and the defence ditches. Given that the best preserved citadels are of Vauban type, the gates and defense ditches (which are the most visible, due to the typology generated by the advent of the artillery) should be the first ones to be tackled during the enhancing effort. In this context, Cluj-Napoca has a double stake: firstly through the bid for the title of European Capital of Culture 2021 and secondly through the interest in enhancing the value of the Cetatuia Hill, which, through its location, potential and city dynamic is "hovering" over the city center.

Fig 1. Cetatuia Hill Cluj-Napoca   Fig 2.Sighisoara Citadel

[Source: Google Earth]   [Source: Google Earth]

Among the many citadels in Romania, it is worth mentioning: Sighisoara, inhabited, but which belongs to an earlier typology than that of the Vauban type and through the loss of its military rationale with the advent of the artillery has been "infected" by civil construction in some parts of its contour. Brasov, where the exterior citadel has been better preserved, its dimensions becoming irrelevant to the city development.

Fig 3. Brasov Citadel
[Source: Google Earth]

Fig 4. Sibiu Citadel
[Source: Google Earth]

Sibiu, already known to the public through its title of European Capital of Culture in 2007, but which has for the most part lost its fortification and especially the city gates. Alba Iulia, a towering citadel, has the best conservation of its Vauban elements and is the most advanced in the process of enhancing of the value.

Fig.5 Alba Iulia Citadel
[Source: Google Earth]

Fig 6. Oradea Citadel
[Source: Google Earth]

Oradea, in which the new constructions have come dangerously close to the fortification and most of the initiatives (including school projects) go in the same direction, being frequent propositions to step inside the precinct. Arad, which through the recently abandoned military purpose and the natural separation from the new town has the biggest potential for enhancing its value – if a proper methodology is put in place.

Fig 7. Arad Citadel
[Source: Google Earth]

Fig 8. Timisoara Citadel
[Source: Google Earth]

Timisoara, where it is obvious that due to the low terrain and the flatness of the pomerium no exterior perception can be enhanced, causing the interventions to be produced intra muros.

Fagaras, also discussed in a recent diploma project at the FAU-TUCN on the topic of historical heritage through new unobtrusive construction.

Fig 9 Fagaras Citadel
[Source: Google Earth]

2. Elements of morphology of military architecture

Citadels have always been an example of optimization primarily of the fortified area with the interior space. Due to the surroundings that needed to the protected, the high density of the interior buildings alternates with free spaces for refuges. The buildings could have been fortified entirely (with the option of including the central palace or on the perimeter) or to have a citadel adjacently (frequent in the case of occupied territories in which a garrison is left behind).

The perimeter was constituted from an alternation of walls and defense towers (the latter at distances that would allow the covering of the walls between them with cross fire – depending on the weapons of the age). The perimeter was secured through the placement on top of favorable natural elements, the interdiction to build inside the pomerium and defense ditches.

2.1 The defence ditch

The defence ditch was a characteristic of the defence architecture since its beginnings, its depth being added to the height of the walls. When possible, the ditch was filled with water in order to deter the digging of "mines" (which are not very spectacular in reconstructions but statistically they seemed to have contributed to the success of many sieges) and to delay the attack until the depletion of the water.

The ditch was given even more significance in Vauban fortifications through the blockhouses that could overflow in it and the bastions and platforms for artillery objects (possibly on more levels). Nowadays, ditches are empty spaces that stir the desires of the investors and the worries of citadel administrators. The advent of the artillery has promoted the Vauban configurations due to which the shooting was given some grassy embankments that protected the walls. The shooting becomes indirect and there is a proliferation of isometric perspectives and secret 3D models.

Viollet Le DUC, *HISTOIRE D'UNE FORTRESSE*, (Paris, J. Hetzel et C-ie) has tried a historical synthesis of the evolution and types of fortification close to our times. [1]
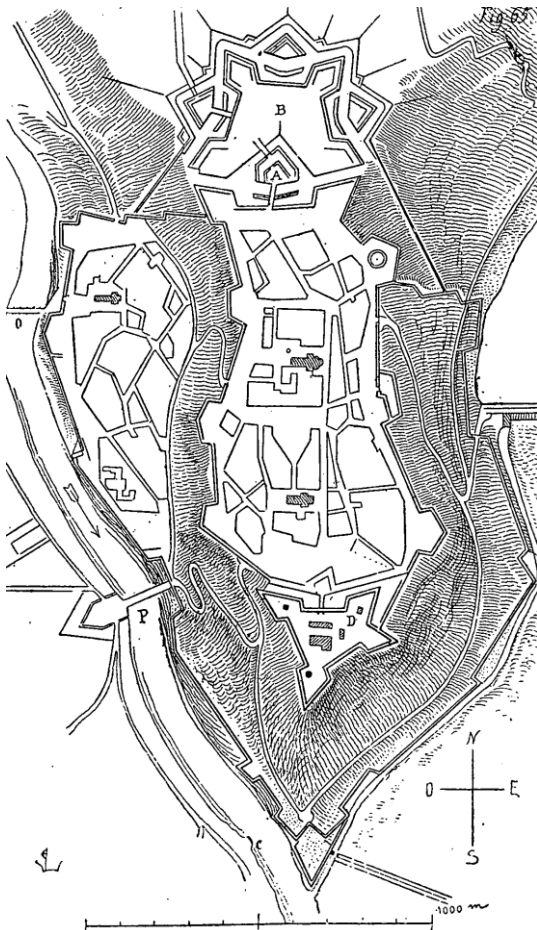

Fig 10. Plan - Defence ditch in the Vauban philosophy (after Viollet Le DUC, *HISTOIRE D'UNE FORTRESSE*, Paris, J. Hetzel et C-ie) [1]
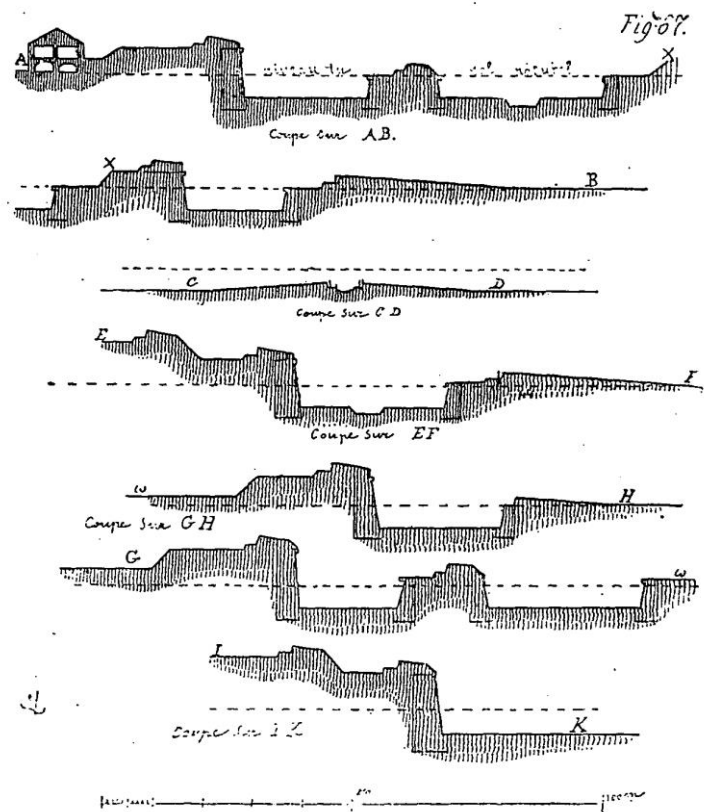
Fig 11. Section - Defence ditch in the Vauban philosophy (after Viollet Le DUC, *HISTOIRE D'UNE FORTRESSE*, Paris, J. Hetzel et C-ie) [1]

2.2. Citadel gate

In defence architecture, the gate was a "necessary evil," since the access could not be made like in the Robinson Crusoe novel by escalating the stockade on a ladder and moving the ladder on the other side of the compound for climbing down. Citadel gates have used various supplementary defence structures (pont-levis over the defence ditch, tower with "herse"(fr.), two towers on its sides, several successive gates with trap spaces between them, trap doors etc.) that would delay the enemy when getting close, including the barbican − an independent fortification that stood before the gate.
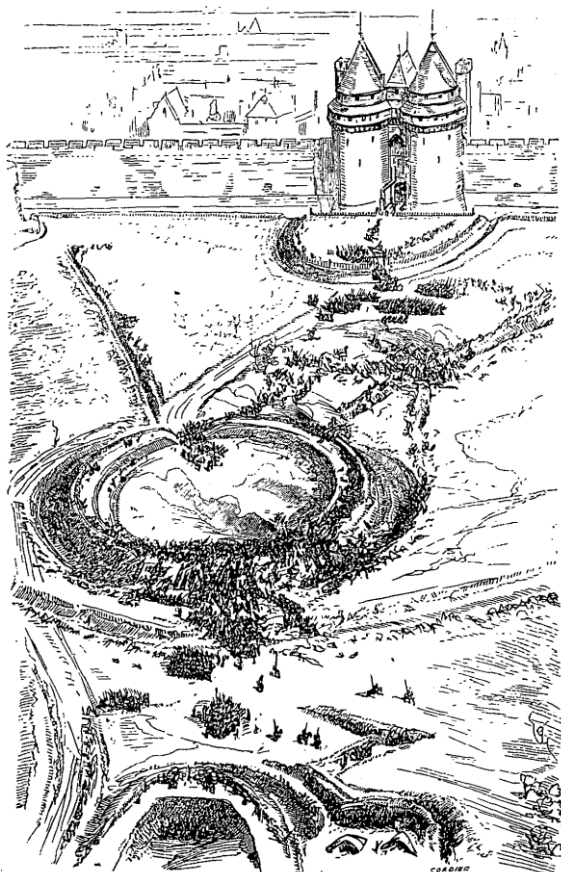
Fig. 12 advanced configurations for the defence of the citadel gate (după Viollet Le DUC, *HISTOIRE D'UNE FORTRESSE*, Paris, J. Hetzel et C-ie)[1]
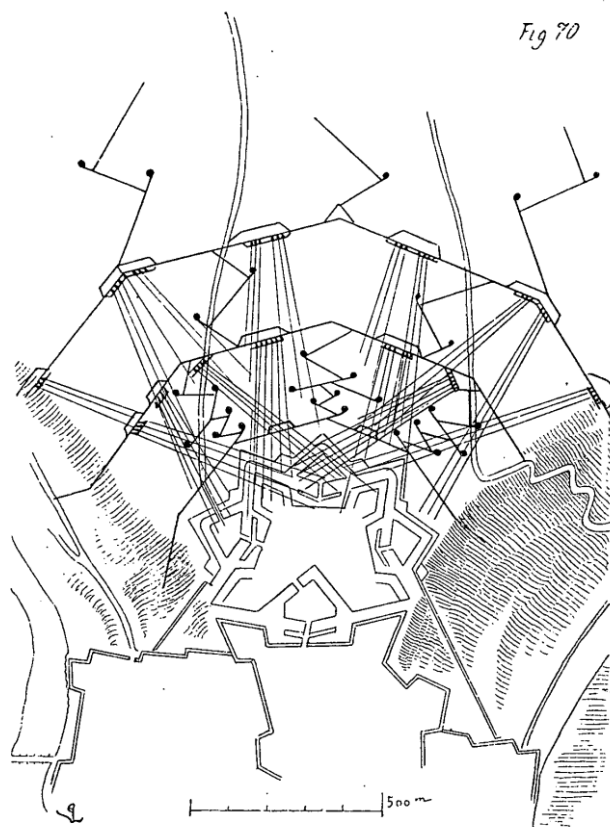

Fig. 13 Gate in the Vauban philosophy (after Viollet Le DUC, *HISTOIRE D'UNE FORTRESSE*, Paris, J. Hetzel et C-ie)[1]

With the Vauban configuration, bastions have appeared in front of the gates, including advanced forts.
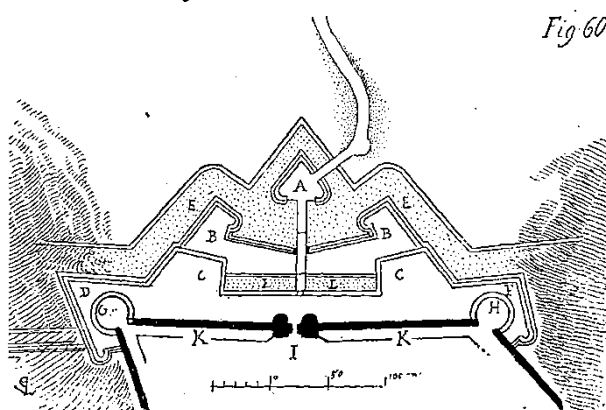

Fig 14 The plan for advanced configurations for the defence of the citadel gate (after Viollet Le DUC, *HISTOIRE D'UNE FORTRESSE*, Paris, J. Hetzel et C-ie)[1]

On the other hand, the citadel gates also had a powerful formal and symbolic meaning.

Fig. 15 Alba Iulia, famous gate – including through historical legacy [Source: http://claudiasofron.wordpress.com/2013/01/04/cetatea-alba-iulia-cea-mai-frumoasa-cetate-din-romania-i/alba_cetate/]

Fig 16. Arad – waiting for a new initiative enherance of the value [Source: http://blogaradean.files.wordpress.com/2013/04/rerere.jpg]
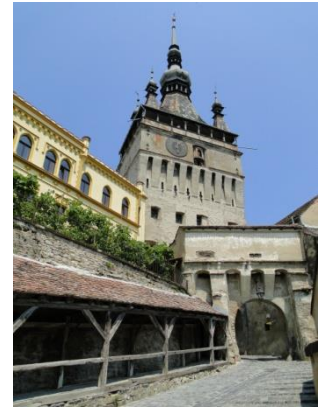
Fig 17 Sighisoara, ambivalent – especially through the show offered once the visitor is past the gate [Source: http://www.inromania.info/assets/images/sighisoara/turnul-ceas/turnul-cu-ceas-sighisoara.jpg]

3. Questions: Why Malta?

The question was a fundamental element, even from the Socratic dialogue, and has unquestionable rhetorical undertones. When looking for templates for synchronization, it is ideal to turn your attention to successful models and nobody can call in question the cultural and touristic success of Malta. In our case, it is worth remembering its by-name: Malta, the fortress island. Also, paradoxically for its dimensions, Malta offers a diversity, tradition and history brought up to the present of the enhancing the value of the historical architectural heritage, inclusively through new constructions.

Certain similarities can be seen also through the European community system: Malta was not kept inside Great Britain at the moment of its independence, but also it was not allowed to unite with Italy. Thus, it was forced to used Libian or East-Asian resources, nowadays finding its balance in the EU.We will point out two exemplary sites on the island: Mdina and La Valletta, the latter taking the former's place in 1556 as a capital city of the island.

Fig. 18 Malta[Source: Google Earth]

Fig. 19 Mdina rebuilt[Source: Google Earth]

3.1. Mdina

Is the oldest capital of the island, dated even from the Phoenician period. After the arrival and establishment in 1530 of the Ioanit Knights in La Valletta, Mdina stayed the center of the local nobility that was there prior to the arrival of the knights, but also of the Inquisition, and entered into a period of decline, expressed also through the name that it will receive in 1571: "Citta Vecchia."Currently, Mdina has around 300 permanent residents, has kept some of the palaces and residences from the XIV-XV century and is bustling with tourists that have at their disposal: thematic museums, souvenirs commerce, local foods and local historical shows.

Mdina was affected by the earthquake in 1693 and will be rebuilt after 1720, its current look being one of XV century.(fig. 19) Exemplary is the duality of the citadel with the neighbouring city – Rabat, from which it was separated through a defence ditch and fortified walls even from the IX century by the Arabs of the age (their presence was attested 836/870-1090, until the Normand conquest of the island). This pattern operated usually all over the world in the case of occupied territories, when the separate citadel was controlling the settlement. These two settlements are positioned on the highest part of the island.

Fig.20 The relationship between Mdina and Rabat in the background [Source: http://upload.wikimedia.org/wikipedia/commons/2/2d/Ruth_Malta_Mdina_A-G_11.07_edited-2.jpg]

Fig.21 Mdina – proposition for rebuilding the access around 1530 [souce: http://www.militaryarchitecture.com/Arx/arx1_4_2008.pdf]
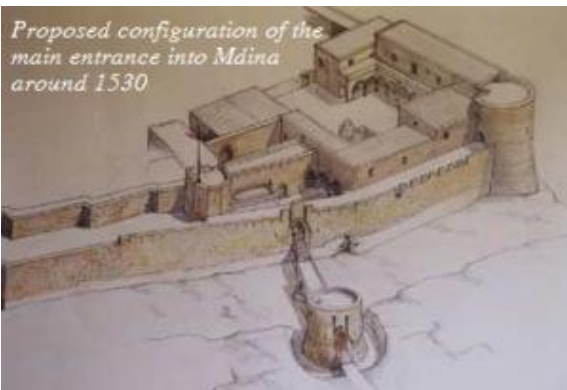

Fig. 22 Mdina after the devastating earthquake of1693 [Source: http://www.militaryarchitecture.com/Arx/arx1_4_2008.pdf]

Fig. 23 Mdina – the two access gates and the defence ditch [Source: http://www.militaryarchitecture.com/Arx/arx1_4_2008.pdf]

The access was ensured through the Main Gate (restored after 1724, with bridge over the defence pit) and the Greek's Gate (on its left and at the level of the ditch, due to the community coming from Rhodos, which followed the Ioanit Knights here).

Fig.24 The Main Gate (1724) și the access bridge to Mdina (that have replaced the old pont-levis from its side – currently cast in stone) [Source: http://www-xray.ast.cam.ac.uk/~jss/gallery/v/malta/Mdina/p5030005.jpg.html?g2_imageViewsIndex=1]

The defence ditches of medieval citadels are a challenge for our days, since they are a buffer zone between the monument and its surroundings. The way people have thought about them is diverse and no precise evolution of these views can be traced. In Romania, they have been seen as a protected and protection zone. Due to their potential, they have started being seen abroad also as an important reserve for the development of areas. Mdina is an intermediary stage in this process, here the choice having been made for a development that would combine in various percentages: solving the parking spaces, landscape and expositional architecture. As a question, we can confront the initial destination, when the attackers roamed in the ditches of the fortifications with the peaceful and more or less invasive occupation of the current development. The tendency is obviously stimulated by the "détente" offered towards the citadel where the exigency of optimizing the minimum perimeter has worked together with the maximum interior edification and will be seen in La Valletta.

Fig. 25 Mdina − landscape development of the defence ditch
[Source:
http://www.timesofmalta.com/articles/view/20130331/local/Ditch-works-continue-three-weeks-after-its-inauguration.463530]

Fig. 26 Mdina − development as a parking lot of the defence ditch
[Source:
http://walledtowns.com/towns/mdina/]

Fig.27 Mdina – development as an exhibition area of the defence ditch
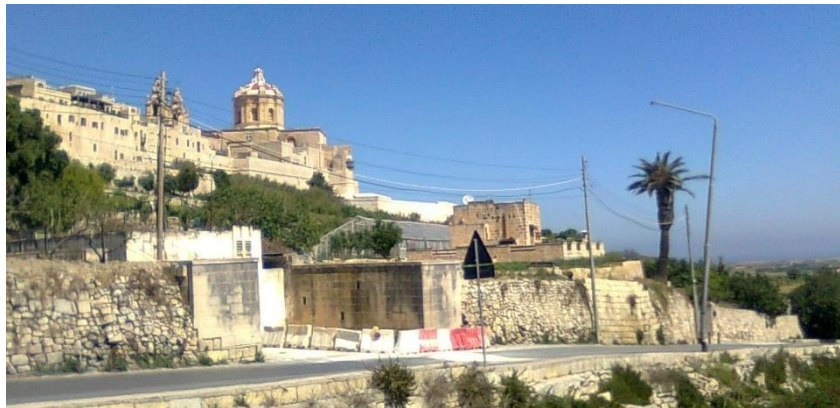[Source: http://www.epmsolutionsmalta.com/news/]

Fig. 28 Mdina, the view from the access road
[Source: picture taken by the author]

That is why in Mdina the tendency of the enherance of the value historical architectural heritage through new construction stops in the citadel ditch.

3.2. La Valetta

With 320 monuments of architecture concentrated in a perimeter of 55 ha (1 x 1,5 km), it is one of the most dense European protected historical areas. Located on the old Mount Sciberras, this has started to be fortified from the arrival of the Ioanit Knights of 1530. La Valetta asked for foreign military engineers from 1557, and Pope Pius 1530 sent here Laparelli after the Great Siege, whose conception will be continued by Gerolamo Cassar. The fortification and edification of the capital of the island ("unsinkable carrier" and "hospital of the Mediterranean" during the wars) has continued until the last World War. Carefully restored after the destruction suffered during the last World War, La Valetta was included in 1980 in the UNESCO World Heritage List and will be a European Capital of Culture in 2018.

The present paper is focused on the area of the Saint-Jacques bastion, which fortified the peninsula towards land – Floriana – and where the entrance of the city gate was. Solving this main access was made depending on the level and particularities of the military art at that time, and can be followed in the documents of the age.
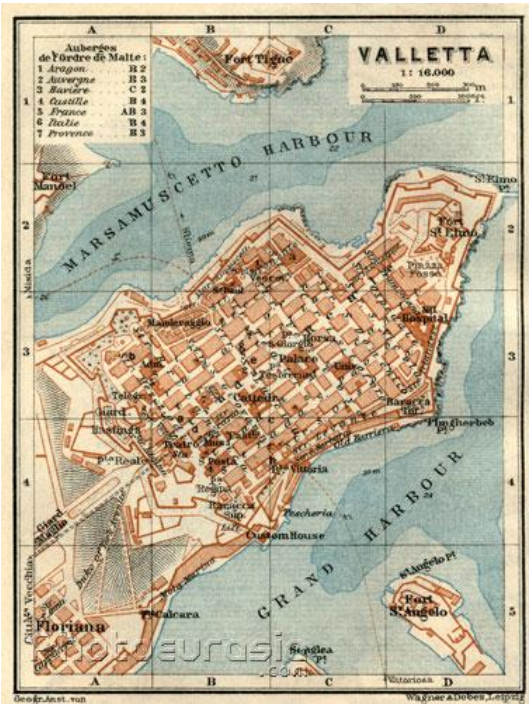
Fig. 29 La Valeta - Map1643
[Source:
http://www.discusmedia.com/authors.php?id=25644]

Fig. 30 La Valeta - Map, Amsterdam 1705
[Source:
http://vassallohistory.wordpress.com/valletta/]

3.2.1. The City Gates of La Valeta

The same criterion can be followed in the making of the successive gates of the settlement (*Putirjal*, *Bieb il-Belt*, *Door to the City*, *Porta Reale*, *City Gate*):

First Gate - *Porta San Giorgio:* Is the original gate built between 1566-1569 by the military engineer Francesco Laparelli de Carotona under the great master Jean Parisot de Valette.

Second Gate A second gate more adorned according to the accounts and designed in 1632 by Tommaso Dingli under the great master Antoine de Paule, is thusly described: a central arc, flanked by two smaller arcades and a wooden bridge over the city ditch.

The Third Gate – Kings Way: Completed in 1853 by the military engineer col. Thompson, to express the belonging to the British Empire, it presents: two central arcades, the symmetry being developed by flaking them with two other smaller arcades.

Fig 31 Decorations on Valletta's main entrance
[Source:
http://en.wikipedia.org/wiki/File:British_bieb.jpg.]

Fig32. Old Valletta City Gate from outside
[Source:
http://en.wikipedia.org/wiki/City_Gate_(Malta)]

The Fourth Gate: Was inaugurated in 1964, during a failed project of rebuilding the Opera house destroyed by the bombardments and of remodelling the area after the entrance in the historical city. The project, considered a sample of "Italian modernism" has given rise to controversies even from that time. The gate was still in place on the Christmas of 2006, being demolished in 2011 to give way to a new approach.
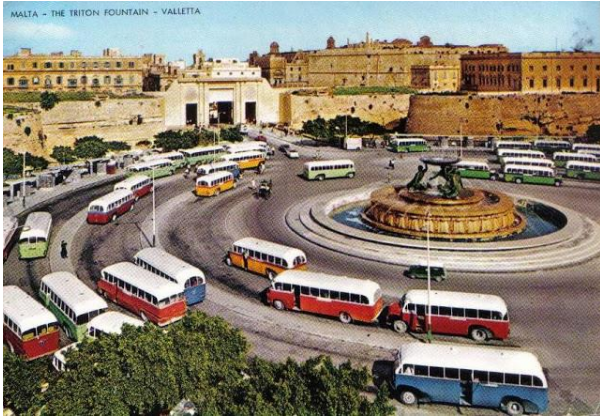
Fig. 33 The Kingsgate Terminus
[Source: http://thecitybreak.ro/wp-content/uploads/2012/04/Transport-in-comun.jpg]

Fig. 34 City Gates
[Source:
http://upload.wikimedia.org/wikipedia/commons/thumb/5/55/Valletta_City_Gate.jpg/1280px-Valletta_City_Gate.jpg]

The Fifth Gate – Renzo Piano The years after 2000 have seen a rise in the civic interest for solving the issue of the entrance in the historical city. This got materialized in an architecture competition which faced the "tenor" of Maltese architecture Richard England (who has worked on previous projects in the area) and the international star Renzo Piano - who ultimately won the competition. Paradoxically the results of the competition did not stir a high popular interest. [2][3]

Fig. 35- 37 The initial situation
[Source Fig.37 http://www.phoeniciamalta.com/about-us/hotel-location]
[Source Fig.38 http://img.photobucket.com/albums/v466/ozfille/Malta/VallettaCityGate.jpg]
[Source Fig.39 http://www.mepa.org.mt/newslet27-article21]

Fig. 38-40 Pictures showing the development of the demolition of the fourth gate
[Source fig 38
http://www.maltashipphotos.com/showproductdetails.asp?PRODUCTCAT1=Maltese%20Islands]
[Source fig. 39 http://www.bettina-hutschek.com/neu/en/index.php?/video/-city-gate---a-diary-of-demolition/]
[Source fig. 40 http://www.circusmalta.com/renzo-piano-valletta-project-2011/]
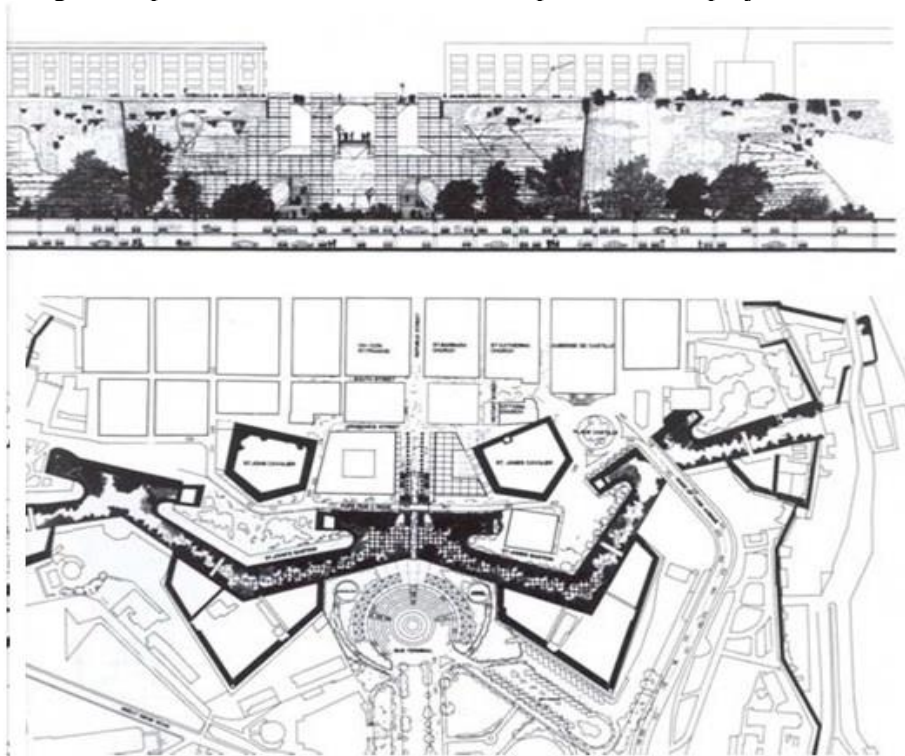
Fig. 41 Renzo Piano – project for the La Valletta Gate (1986)
[Source: http://ivanmconsiglio.wordpress.com/page/13/]
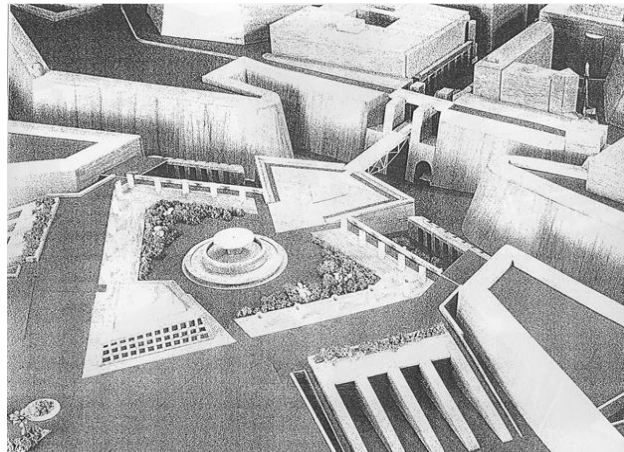
Fig. 42. Richard England – project for the bus terminal from the La Valletta Gate, correlated with the Piano Project (1999) [5] [Source: http://ivanmconsiglio.wordpress.com/page/13/]
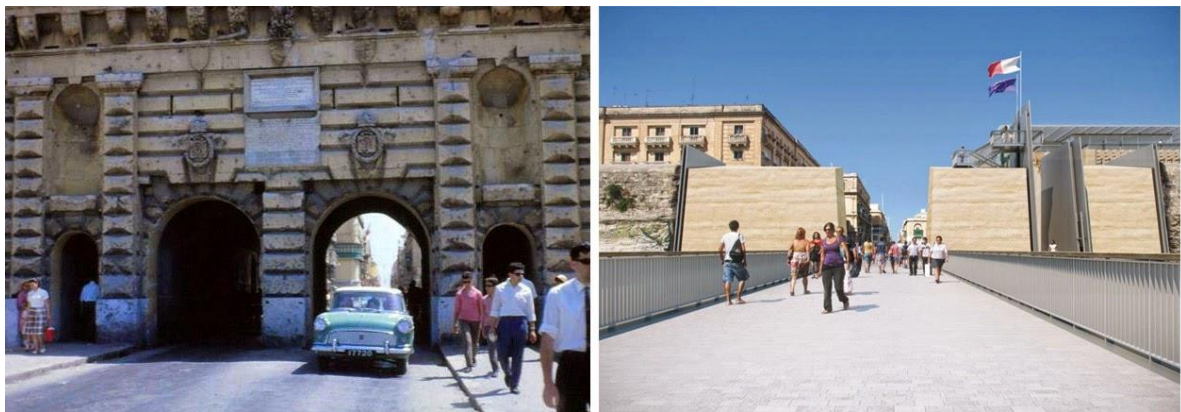
Fig. 43 The fifth gate – the Renzo Piano`s Project
[Source: http://ivanmconsiglio.wordpress.com/page/13/]

Significantly for the condition of architecture and of the architect, Piano elaborated two projects:

First project – 1989

Fig. 44-47 The First Project for La Valletta Gate by Renzo Piano
[Source:Fig. 44-47 : https://www.youtube.com/watch?v=3P_ulktvlsY]

Second project
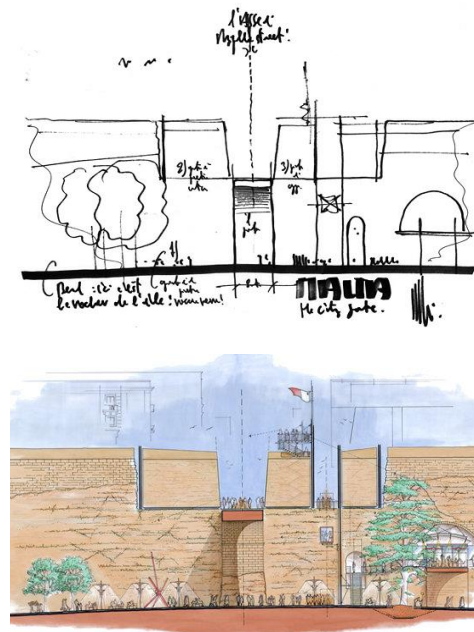
Fig. 48-50 The Second Proposal for City Gate
[Source Fig. 48 http://www.designboom.com/architecture/renzo-piano-valletta-city-gate-and-parliament-well-underway/]
[Source Fig 49 http://www.cityofvalletta.org/common/file_provider.aspx?id=634078878934360000]
[Source Fig. 50 http://www.cityofvalletta.org/common/file_provider.aspx?id=634078878934360000]
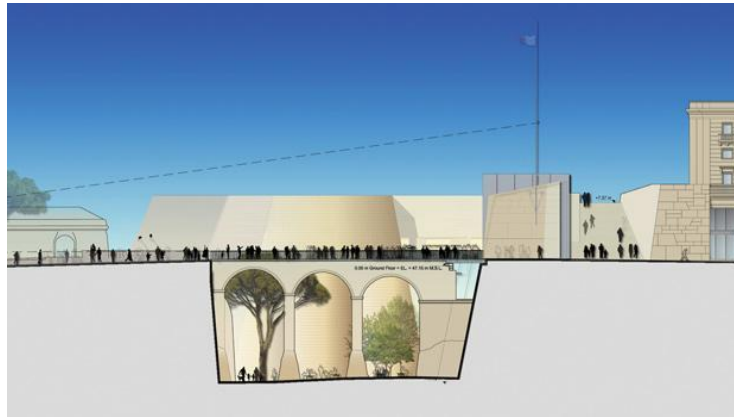
Fig, 51, 52 Section through the proposal
[Source Fig. 51 http://www.etoood.com/NewsShow.aspx?nw=36]
[Source Fig. 52 http://www.timesofmalta.com/articles/view/20130512/local/Piazza-outside-City-Gate-proposed.469364]

Fig.53, 54 3d model of the second proposal
[Source Fig. 53 http://www.rpbw.com/project/86/valletta-city-gate/]
[Source Fig. 54 http://www.chevron.co.uk/131108]

3.2.2.The Royal Opera House

The Royal Opera House, destroyed by the bombardments of the last World War has stayed as an open wound until the last years, with successive plans of a historic reconstruction or an openly post-modern approach promoted by England. In the end the minimalist configuration promoted by Piano was decided upon, after the focal point of the area reconfiguration will become the new parliament.

Fig. 55, 56 The Royal Opera House and the restoration project
[Source Fig 55 http://vassallohistory.files.wordpress.com/2014/06/royal-opera-house.jpg?w=645

[Source Fig 56 http://www.andrewcusack.com/net/wp-content/uploads/valpian10.jpg]

Fig. 57 The Richard England Project
[Source http://www.independent.com.mt/uploads/media/NewspaperArticleImage-MediaItem/Large/1699643408-Theatre-on-old-Opera-House-site-Valletta-Malta-Richard-Engl.jpg]

Fig. 58, 59 The Piano-England Project and the construction site
[Source Fig 58 http://www.timesofmalta.com/articles/view/20090630/letters/voices-of-the-people-on-the-opera-house-1.263023]
[SourceFig 59 http://modulo.net/it-it/realizzazioni/opera-house-a-la-valletta]
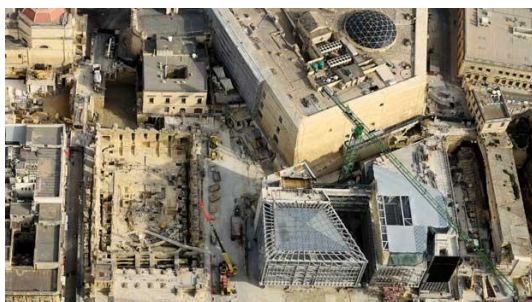
Fig. 60, 61 The Opera House construction site and the current state of the works
[Source: Fig 60 http://www.descubremalta.com/wp-content/uploads/local_31_temp-1335251093-4f965095-620x348-610x342.jpg]
[Source Fig 61 picture taken by the author]

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3.2.3.The New La Valetta Gate

Is a pretty drastic turning point from the project that has initially won the architecture competition, the project theme being modified over the course of the last years. More shocking was the change in architectural expression, the abandonment of the post-modern initial expression, the promotion of a tectonic of Vauban type, the search for an architectural illusion of "fullness" but which would ensure the necessary glazing. [4]

Fig . 62, 63 The construction site – April 2014
[Source Fig 62 and Fig 63: pictures taken by the author]

In our opinion, interesting are the lateral pockets that evoke the defence configurations possible for the first two gates of the citadel (from which only few iconographic testimonies have remained).

The legislative and governmental changes implied the restarting of the building process several times but the only result was to delay it, a current issue for long term investments (as exceeding initial estimates).
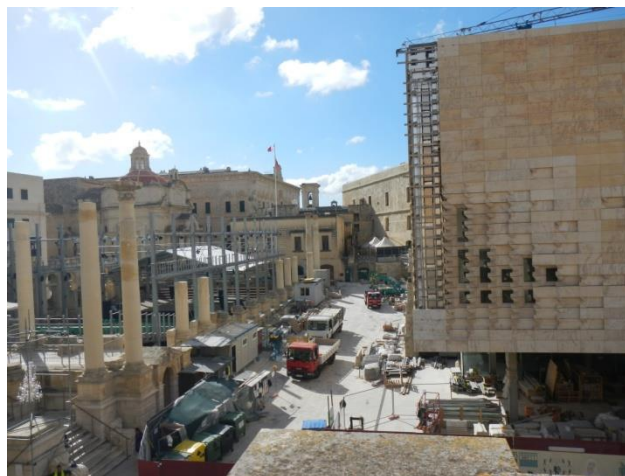
Fig. 64 The construction site of the Parliament - April 2014
[Source : picture taken by the author]

An interesting moment, in the context of some contestations (which however did not reach the levels of Romania) was the visit from the international bodies in charge of historical heritage and

their threats of withdrawing the city's bid for European Capital of Culture. Finally the things were settled and the construction site has become a continuous presence for years.

3.2.4.The Defence Ditch

Fig 65, 66 La Valletta`s Defence Ditch
[Source Fig 65 http://www.timesofmalta.com/articles/view/20140224/local/government-considers-new-piano-plan-for-valletta-ditch-garden.508042]
[Source Fig 66 http://transitproject.tumblr.com/citygateproject]

Unlike Mdina, the defence ditches of La Valetta are gigantic and, according to the Vauban configurations, accessible to more levels, hence their more numerous development projects over the years (some recent) and specific instructions for the project that is being undertaken. For a long time, they have not been filled by sea water and offer some obvious spaces of leisure and development in front of the city.

The disappearance of the military rationale resulted in the fact that the access to the city could be made on more ways (especially utilitarian and auto), on the sides of the city gates. The Piano project would include major landscape development estimated at millions of Euro, successively taken off and subsequently revived. The fundamental problem would remain, in our view, the tension between the memory of the place and the new lucrative purposes. [5]
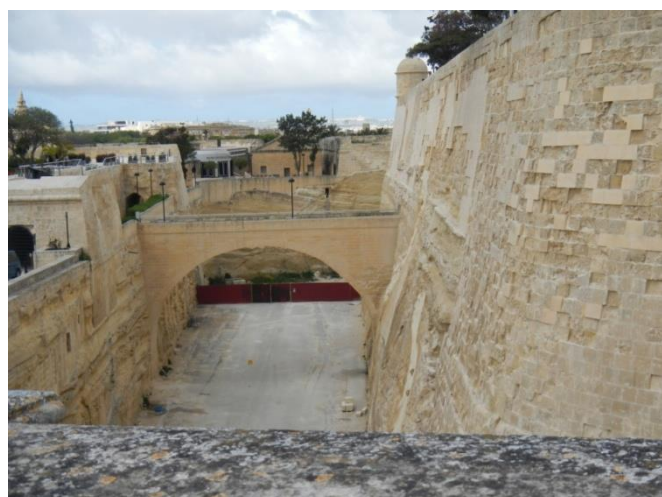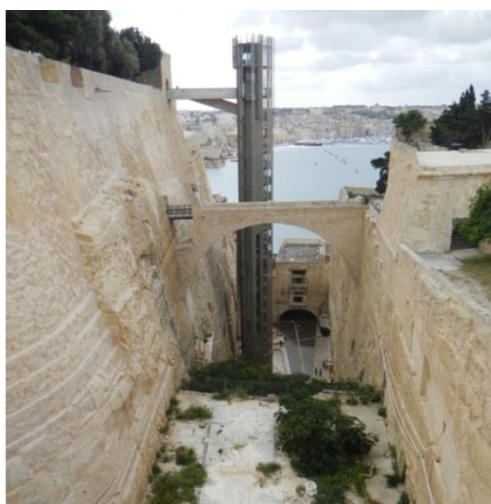
Fig. 67, 68 Defense Ditch – April 2014
[Source Fig 67 and Fig 68: pictures taken by the author]

3.2.5. **Other new buildings in the new fortifications of La Valetta**

The temptation of building inside the citadel and of ensuring high class services cannot be evaded and was present all the time since its beginnings. The information on the social reconstruction program after the world are not accessible first hand, maybe for the better, for the keeping of the appearances – so long as those do not become aggressive. Like in most things, the results are contingent on the gift of the author, the spirit of the time and the dominant taste at the time of perception. In what follows, we will make a presentation, inevitable not exhaustive:

3.2.5.1 The center of artistic creation

Fig. 69, 70 The center of artistic creation in the old tanker in Saint James fort
cca. 2000 – Arch. Richard England
[Source Fig 69 and Fig 70 http://scattergood.me/post/34978784930/center-for-creativity-valetta-malta]

3.2.5.2 The new elevator on the Southern front of La Valetta - Architecture Project (AP)
2009-2013 (cca. 2 million Euro)

Fig. 71 The new elevator on the Southern front of La Valetta – Project
[Source Fig 71 http://ego-magazine.com/projekat-liftova-barrakka/]
[Source Fig 72 http://waaaat.welovead.com/en/top/detail/019ElpwA.html]

3.2.5.3. The Central Bank of Malta - La Valetta
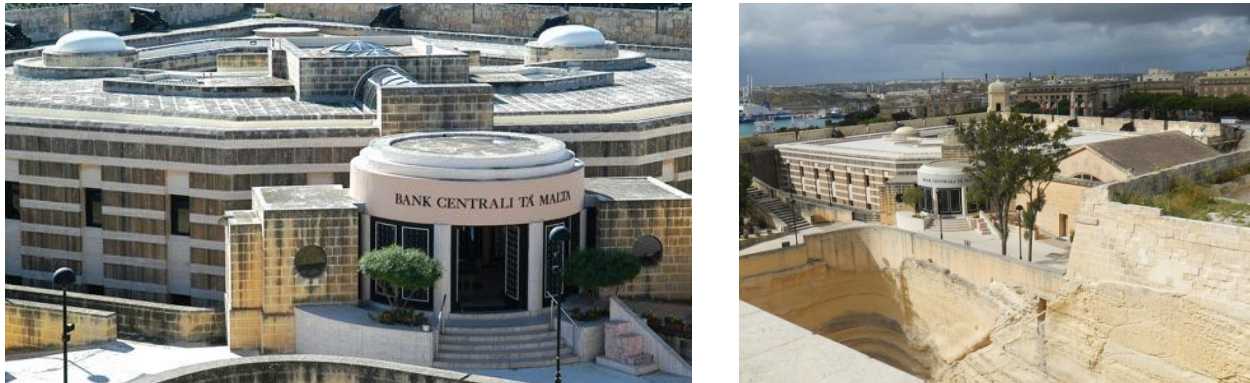
Fig. 73, 74 The entrance of Central Bank of Malta - April 2014
[Source pictures taken by the author]

4. Conclusions or questions?

An alive and powerful organism, La Valetta continues to charm and fascinate us at each visit. The new interventions on the citadel only illustrate the recent changes in the status of architecture, from a resource consuming endeavor into a resource itself, already discussed in the context of cultural anthropology and the seduction through culture exercised in the globalized world. For us, who are still aspiring to the success of the cultural tourism of other countries, this is food for thought. Of course that, as in case of medicine, where it is said that there are no diseases, only different patients, also in the case of enhancing the value of city gates and ditches, there are only a host of particular cases with specific solutions for each and with a host of parameters. On the other hand, for some of the citadels in Romania the time of the renovation has come and an efficient succession of steps should be undertaken: documentation, analysis, proposal development, critique and feedback, verification, start-up and realization.
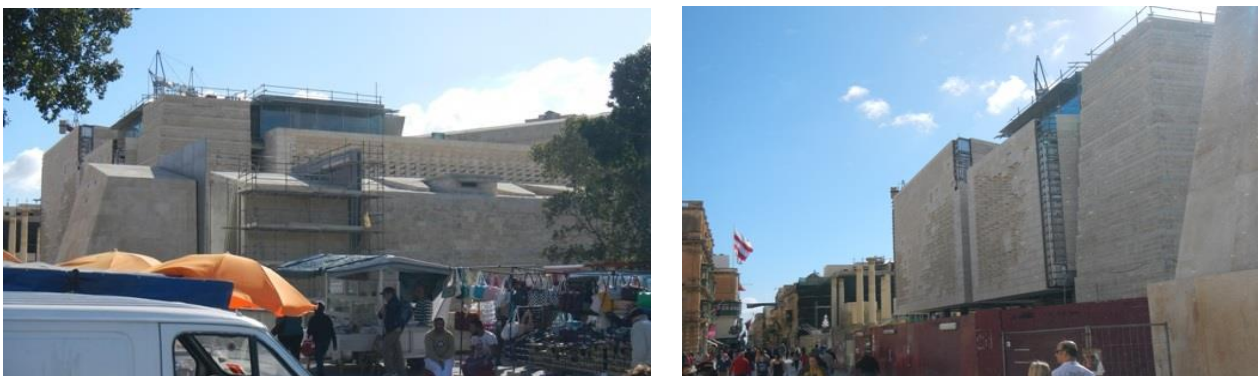
Fig. 75, 76 The New Insertion - April 2014
[Source pictures taken by the author]

References:
[1] Viollet Le DUC, *Histoire d`une forteresse*, Paris, J. Hetzel et C-ie, imprimerie A. Lahure 1878
[2] Lyanne Mifsud, *Considering a city`s nostalgia*, ed. Domus , 27 June 2012.
[3] Malcolm Borg B.A., M.A. ,*Valletta - Integrated Conservation and the Rehabilitation of Housing Stock,* (http://www.arcchip.cz/w03/w03_borg.pdf), April 2009
[4] Cat Garcia Menocal, *Renzo Piano: Valletta city gate and parliament well underway*, (http://www.designboom.com/architecture/renzo-piano-valletta-city-gate-and-parliament-well-underway/) *August* 2013
[5]Vittorio Magnago Lampugnani, *Renzo Piano – Progetti e architetture 1987-1994*, Electa 1994. Pg.66

Joint Space Formulas-The Portico as a Tool for Urban Continuity

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Abstract

It is commonly known that the urban space is a play of limits. The present limits are in constant motion, the boundaries between public and private space are in a constant redefinition. In an article titled Dislocation [1], French philosopher Benoît Goetz emphasizes the idea that the specificity of architecture lies in the act of creating a space, the clear separation between the outer and the inner space. At the same time, the main feature of architecture is the division of space. Therefore, the public – private dualism defines a self-evident feature of the urban space. It is known, however, that in the general frame of dualities, we can speak about an element of mediation/passage (Dante's Purgatorio, the angels as mediators between the man and the divinity, the parergon of Jacques Derrida and the list of examples may continue). Starting from this premise, if we consider the urban space, which would be the space formulas to mediate the public and the private domain, the exterior and the interior? The answer opens a very extensive range of space formulas – inner courtyards, porticos, loggias, gangways, galleries, niches and others. This article, however, only explores the portico as an important tool in the context of urban continuity. The approach is based on the analysis and the comparison of several case studies. The conclusions of the study emphasize the typologies of this type of joint and ordering space formula (in the context of urban space) and its role in the achievement of urban continuity.

Rezumat

Abordarea spațiului urban precum un joc al limitelor constituie un aspect deja cunoscut. Limitele actuale sunt însă într-o schimbare continuă, cele între spațiul public și cel privat sunt într-o continuă redefinire. În articolul „Dislocarea" [1], filosoful francez Benoît Goetz subliniază ideea că specificul arhitecturii este acela de a institui un spațiu, o delimitare clară între exterior și interior. În același timp, principala caracteristică a arhitecturii este aceea de împărțire a spațiului. Așadar dualitatea public-privat definește o caracteristică de la sine înțeleasă a spațiului urban. Se cunoaște însă că în paleta generală a dualităților se interpune elementul de mediere (Purgatoriul lui Dante, îngerii ca formulă de mediere a relației om-divinitate, parergonul lui Jacques Derrida, iar lista poate continua). Pornind de la această premiză, în ceea ce privește spațiul urban, care ar fi acele formule de mediere între exterior și interior, între domeniul public și cel privat? Răspunsul deschide o paletă foarte extinsă a tipologiilor de spații – curți interioare, porticuri, logii, ganguri, galerii, nișe și multe altele. Acest articol însă pune în discuție porticul ca element important în contextul continuității urbane. Studiul se bazează pe analiza și compararea mai multor studii de caz. Concluziile sale subliniază tipologiile acestei formule spațiale de articulare și ordonare (în

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contextul spațiului urban) precum și rolul ei în crearea continuității urbane.

Keywords: Public Space, Private Space, Urban Space, Portico, Continuity

1. Introduction

In the general context of urban boundaries, an intermediary space that connects outdoor spaces to the indoor creates interacting areas between the space surrounding the urban context and the building itself. In order to improve environmental quality of people`s relation to the city, these spaces of mediation become playful areas which can be temporary assumed as *places* and have the capacity to adapt the urban context to its visitors. A dialogue like relation is created between the building, the urban context and people around. From the extensive range of this type of space formulas: inner courtyards, porticos, loggias, gangways, galleries, niches and others, this article, however, explores the portico as an important tool in the context of achieving urban continuity. The approach is based on the analysis and the comparison of several case studies, divided in two parts: a first part which points out the main historical references and a second one which reveals the portico's transformations regarding its configuration and role during the 20th century and the contemporary architecture. And so, the questions to which the article tries to answer are: which are the portico's main features, how it developed, how it transformed during its continuous revival and which is the portico's main role in order to achieve the urban continuity?

2. Historical References

In order to reveal the portico's main role within the urban context, a first historical reference in the Ancient Greece must be made. The Greeks are the creators of a first architectural program dedicated to public and social life. They can be credited not only with the development of public life but also with the creation of an architectural setting dedicated to public discourse − the *stoa*. Here the portico acts as (a) a shelter from sun, (b) a place for gathering, some were used for commercial activities and some were used for teaching. Another aspect is (c) the representative one: the portico marks a public, a civic space. This key-aspect is emphasized in this article − the portico as a tool in creating urban continuity. Furthermore porticos are used to mark centrality in the compositions and entrances, as in the case of the South *Stoa* at Olympia (Fig.1). Porticoes were usually placed in central or prominent locations and therefore helped to give focus to the centre of a city.
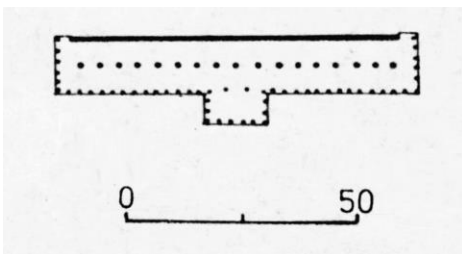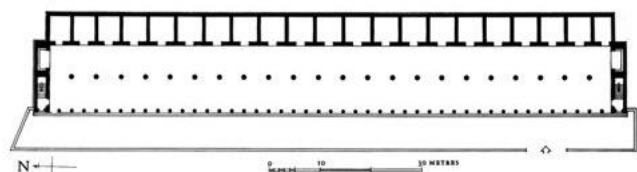
Figure 1. The South Stoa, Olympia   Figure 2. The Stoa of Attalos, Athens

From a morphological perspective the portico describes a rather narrow and long spatial structure between a wall and an external colonnade (Fig.2). This name is sometimes used even in the case of ancient temples, instead of *pteroma,* the external colonnade on all four sides of a *peripteral* temple [2]. This permanent architectural motif that extended in the ancient Roman world too, became widely known because of its intense use in the configuration of pediment surmounting columns

which came to distinguish and emphasize the temple form.

The initial typology of this structure gathers three main types of porticoes which distinguished from the beginning: (a) the long narrow structure which emphasizes the public relationship of the building with its surroundings; (b) the rather punctual portico marking the entrance, the symmetry and centrality and the perimetric portico. This third type (c) has a rather representative role – the temple's *pteroma* (c1) (when it's used in the outside) / and the *peristyle* (c2) in the inside. This latter type evolved into cloisters, but because its configuration around inner courtyards, this article will not further relate to it.

During the Middle Ages, during the Gothic and Romanesque and along with the development of the commerce and the specific urban housing, the portico acquires new functional aspects. It now marks the commercial specific of the ground floors of the urban houses. This architectural configuration reflects the functionality and the capacity of urban structure to relate to this dynamic social change. The Sugălete Assembly in Bistrița is such a type of urban configuration. This type of urban image is characteristic to medieval squares such as the Old Town Square in Prague. From a morphologic point of view – this portico doesn't have the continuity of the antique portico – it is rather a sequence of buildings that bear porticoes. The rhythm and proportions are different from one building to another.

The great and most significant revival of the portico takes place in Renaissance and Baroque when it is intensively used as a special element which organizes and gives unity to the new architecture and the new urban spaces. So, the medieval tissues are regularized by means of global operations and seek to create unitary spaces, articulated by elements which are easy to understand. The portico becomes an element with an important role in modulation of the urban space. Its physical aspect relates rather to the ancient portico, to its unity and continuous rhythm. Such type of portico is the Portico del Pavaglione in Bologna (built in the 16th century) which links the Piazza Maggiore to the Archiginnasio building, one of the most important buildings in the city once the main building of the University of Bologna. Its role in the configuration of the piazza is not only to create a unified front, it is rather to mark an urban connection between two landmarks of the city. In terms of urban articulation and continuity, probably the most significant case study is the Loggia dei Lanzi in Florence (Fig.3). From a functional perspective it is an open-air exhibition space within a portico, but from an urban perspective, it creates an articulation between the Piazza della Signoria and the passage of the Uffizi Museum. It marks the corner and creates a place. It attracts people, and gently connects two different urban spaces of different human scale. This aspect, as Jan Gehl emphasized [2], can generate an interesting urban perception: the two types of perspective. The portico is a type of space which can offer a detailed perspective (of the inside of the portico) and a large perspective (towards the exterior, the street or the piazza).
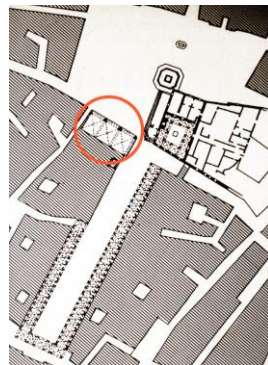

Figure 3. Loggia dei Lanzi, Piazza della Signoria, Florence

Other two examples in Florence present a rather new aspect of the portico: The Loggia del Mercato Nuovo build around the middle of the 16th century and the Loggia del Pesce (rebuilt) are two examples of the portico used as a stand alone element. These both porticoes dedicated to the commercial activities in Florence consist as a materialization of a specific urban program.

As mentioned earlier, one of the ancient porticoes features is to create a representative character of the building, of the architectural program. This feature is mainly emphasized in the Baroque urban transformations. The example of Bernini in Rome, the Piazza San Pietro is such an example of an external colonnade, a monumental portico which emphasizes the power of the Catholic Church. The portico becomes a demonstration of its authority. And so, the portico, from a shelter from sun and rain becomes a key element, an interface of the Renaissance and Baroque used to make order inside the medieval tissue.

The portico provides not only a focal point in the urban landscape; it establishes a point of reference and dominates the layout of some specific urban space. As a focal point of any building and any architectural program, the portico acts as a powerful interface and has a key role to approach the visitor successively and draw his attention to the main entrance.

Up to 19th century, the portico became a favorite architectural symbol of a powerful class or religion. Therefore it evolved into the most widely used and fashionable expression of opulence when it was revived again in the neo-styles during the 18th and 19th century. Such examples can be observed in the neoclassical toll barriers design by the architect Claude Nicolas Ledoux in the 18th century. We can conclude that, regardless the political and social changes, the portico has been regarded as a symbol of the authority. In several urban contexts, piazzas or streets, the porticos are used to display commercial activities, to mark pedestrian paths and some to proclaim civic pride. By the end of the 19th century, because of its intense use, some might say it became an architectural cliché.

3. Urban Aspects

As Jan Gehl mentioned in his book *Life Between Buildings* [3] details represent key-aspects for the social success of an exterior space. The attention accorded to the details of the ground areas can affect how often people use and enjoy that public space. Details tend to encourage people to spend time and activities in the common areas. The portico, because of its human scale details can act as a focal point within the public space. The author also emphasizes that people tend to gather around points of interest, around urban spaces which are close to the human scale. He actually defines the notion of "frontier areas", the areas in-between, those spaces where people can stay and enjoy multiple perspectives from a safe area close to them (Fig.4). From those spaces people can see others without being to much exposed.

Figure 4. People's presence in "*frontier areas*"*,* Piazza del Campo, Siena

Jan Gehl also points out the importance of limits and urban borders, especially those from the lower levels of the buildings. These levels are those to which people relate to. They interact in the proximity of an entrance, they go inside and outside. These areas besides a building, the street's front are those areas which are the most attractive; these are the places that serve as an active dialogue between the buildings, the people and the city's life. Therefore, details of the ground level play a great role in the movement of people and the attractiveness of an urban space. Porticoes can generate these interactions between people and the city. Their specificity is also exploited in contemporary urban spaces too.

4. The Portico within the 20th Century and Contemporary Architecture

In contemporary urban landscapes and architectural interventions porticoes are often use for their historical reference and also for their capacity to mediate space formulas with different morphologies and functionalities. Within the modern and contemporary architecture porticoes have received a new role: the expression of a certain dematerialization of the building. This is the case of the Neue Nationalgalerie in Berlin or the Farnsworth House in Chicago. In both of these examples of L. Mies van der Rohe the portico, the continuous structure of the building towards the exterior creates a certain fluidity of the space, an uninterrupted connection between the interior and the exterior.

During Deconstructivism the portico suffers some massive changes. In the case of the "*cardboard houses*" [4] Peter Eisenman develops the concept of *layering* as an architectural method of creating a space. The portico of the House no.II, for example, is the result of the interpenetration of two layers of structure, these layers are shifted along a diagonal line, both horizontally and vertically. The portico can be read as an extension of both layers, a portico formed by the *layering* design technique. In the first two images of the Figure 5, the two layers of structure and their shifting along a diagonal line are emphasized. In the third (ground floor plan) and fourth (first level plan) images, the exterior spaces are emphasized. The two levels portico (Fig. 6) is an expression of the movement, the concept that generates the configuration of the house. Furthermore, this portico is an expression of *"pictorial ambiguity"*. Eisenman borrows this term from Colin Rowe and Robert Slutzky when describing the relationship between physical forms and conceptual forms [5]. The portico is perceived simultaneous as both a linear structure and a surface structure, it is a materialization of this layering ambiguity, as in Cubist paintings [5] (Fig. 7).

Figure 5. House no.II, Peter Eisenman (plan)
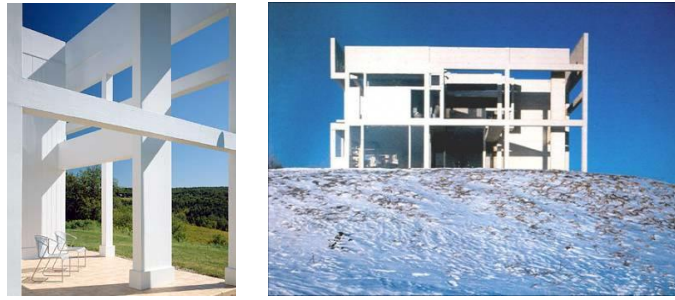
Figure 6. House no.II (the corner portico)   Figure 7. House no.II (the main perspective)

The architect plays with the movement of structure within the Wexner Center for Visual Arts also. Here, the portico, the transition space becomes a three-dimensional grid. The grid, with its rotated angle, represents an urban extension of the city's street configuration into the campus` configuration. Furthermore, the grid articulates the main volumes and this temporary-like structure becomes the identity image of the Center and the Deconstructivist movement. This portico-like structure achieves a new role, it becomes a symbol.

In the framework of contemporary architects, David Chipperfield Architects is an architectural office with a great affinity towards the classical elements [6]. In the Museum of Modern Literature from Marbach am Neckar (Fig.8), the portico relates to the landscape around. Even though it can be said it has a monumental appearance, the portico generates a subtle diffusion of light. In the example of the Museum of Fine Arts in Reims (Fig.9) the portico relates to the existing fortification, to its rhythm and proportions. It also blends in the facade and marks the entrance, but, in this case, in a more subtle manner. In other cases the portico is used as an articulation, such as in the case of the Museum Folkwang in Essen (Fig.10). In this example, the portico articulates different parts of the building.

Figure 8. Museum of Modern Literature,   Figure 9. Museum of Fine Arts,
    David Chipperfield Architects   David Chipperfield Architects (the entrance)

Figure 10. Museum Folkwang, David Chipperfield Architects

Even thought in some cases the morphological aspect is very different from the historical type, in the project for Caixa Forum in Madrid, the architects Herzog and de Meuron generated a transition space similar to a portico, an absent portico. The entrance is emphasized by the sheltered space under the building. This absent portico represents a reference image of the building. This space has similar characteristics to the porticoes, has a strong visual effect which makes the building seem to float above the street level, and in the mean time attracts visitors. An interesting aspect in the development of the portico is its relationship to the surrounding urban areas. In the competition for the Redevelopment of the Historic Complex "Portico del Pavaglione" in Lugo, Italy [7], it is interesting to observe the relationship of the planning solutions to the surrounding portico of a former 19th century covered market. Some proposals maintained a rather simple and neutral approach, the relationship with the portico is a very subtle one, the authors created a space from which to observe the continuity and the rhythm of the facades. Other approaches took into consideration a dialogue between several pavilions and the existing portico or doubled the existing rhythm with another one formed by a line of trees.

5. Conclusions

To conclude the analysis, the portico, as a form of mediation area between the interior and the exterior, stands out as a versatile architectural configuration. Its versatility emerges from its ability to articulate various urban spaces and its continuous presence in architecture and urban planning, across the centuries. From a shelter configuration, a public, a civic space, it develops as an accent of symmetry and centrality, a symbol of the representative and monumental character of a building. It becomes a tool to articulate urban spaces and a capable architectural element to mediate a relation of the inside of the building to its surrounding urban context. In the last century it embodied new urban and architectural features. As an architectural element, it is a mark of the dematerialization of a building, it articulates volumes, it can imply movement as a form of composition, it becomes a form of architectural manifest. From an urban perspective, the portico can be used as a tool to design a form of blending in the landscape and it maintains its ability to articulate spaces. Probably one of its main features is that it creates detailed, closed to the human scale links within the city. In the context of survival and revival, the persistence and reappearance of this particular architectural element testifies its continuous significance, its meanings and value.

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The Importance of Creativity in Architecture as a Solution to Urban Landscape Disfunctionalities

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Abstract

Overcrowding, first among modern man's capital sins according to Konrad Lorenz[1], is more of a social problem but it can only be addressed through interdisciplinary studies. For example, architects and urban planners are expected to solve the issue of housing evermore city immigrants as cheaply and efficiently as possible. Which, in term, leads to a second major urban problem – monotony, which seems to affect most of its newly built neighborhoods. Architectural creativity is thus crucial and can take many forms, from project aspects meant to personalize them to certain features that mean to "repair" and "beautify" some less than perfect existing architectural objects or public spaces. It can be as diverse as synthesizing a new approach on traditional and local aesthetics or it can be found in performative spaces or even in architectural humor. But what is in fact architectural creativity? Glancing through the new approaches in defining project creativity, one can find that it differs from other forms of creativity because the creative product comes from the process of design, it must fulfill certain criteria like originality and aesthetics but also utility, functionality and valor. Thus discerning the level of creativity is a complex process made in one of several ways, one most often adopted being to set some criteria based on the creative product itself. Promoting creativity in architectural learning can thus be achieved through individual vocational tactics focused on the creative behavior or through introducing more disciplines that study psychological aspects of creativity or try to better define it and also describe elements that inhibit creativity.

Rezumat

Supra-aglomerarea, primul dintre păcatele capitale ale omenirii moderne după Konrad Lorenz[1] este, în principiu, o problemă de ordin social, dar ea nu poate fi atacată decât printr-un studiu interdisciplinar. De exemplu, rezolvarea acesteia cade şi în sarcina arhitecţilor şi urbaniştilor de la care se aşteaptă găsirea unei soluţii cât mai ieftine şi eficiente pentru acomodarea în oraş a numărului tot mai mare de locuitori. Ceea ce naşte o a doua mare problemă a oraşului, şi anume monotonia tot mai acută a ţesutului său, derivată din repetarea la infinit a aceleiaşi soluţii

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arhitecturale, care, implicit, duce la o lipsă de identitate în cartierele sale noi. Creativitatea arhitecturală este astfel importantă şi poate purta diferite forme, de la manifestarea în cadrul proiectului pentru a-l personaliza şi apropria locului până la „repararea" unor sincope prin „cosmetizarea" obiectului de arhitectură deja existent sau a spaţiului care suferă de o lipsă de coeziune. Formele sale sunt diverse, de la interpretări ale esteticii tradiţional-locale până la crearea spaţiilor de tip spectacol, sezoniere sau fixe şi chiar până la umor arhitectural.Dar ce este în fond creativitatea în arhitectură? Privind abordările noi în legătură cu definirea creativităţii în proiectare, aceasta se diferenţiază de cele realizate în alte domenii, deoarece produsul creativ rezultă dintr-o proiectare, trebuie să îndeplinească mai multe criterii. Aceste criterii sunt: originalitatea şi estetica, dar şi utilitatea, funcţionalitatea şi valoarea. Stabilirea nivelului de creativitate în literatura specifică se face în mai multe moduri, dintre care unul ar fi dezvoltarea unor criterii pentru evaluarea acestui fenomen complex pe baza produsului creativ. Promovarea creativităţii în didactica arhitecturii ar fi realizabilă prin tehnici vocaţionale individuale focalizate asupra comportamentului creativ sau prin introducerea unei materii care vizează factori psihologici ai creativităţii, sau încearcă o definire exactă a creativităţii şi nu în ultimul rând descriu elementele care inhibă dezvoltarea creativităţii.

Keywords: creativity, architecture, psychology, design, urban planning

To increase density in a rat population and maintain healthy specimens, put them in boxes so they can't see each other, clean their cages, and give them enough to eat. You can pile the boxes up as many stories as you wish. Unfortunately, caged animals become stupid, which is a very heavy price to pay for a super filling system! **E. T. Hall, *The Hidden Dimension***
[2:167,168]

We shape our buildings; thereafter they shape us.
Winston Churchill

1. Creativity - a possible solution to monotony as one of modern cities' major faults

Ever since the beginning of the 20th century, urban populations began to increase drastically. Coupled with the destruction from the two World Wars, this meant that more and more people needed housing as cheaply and "efficiently" as possible. Modernist architecture came to fulfil these needs with its functionality and repetition. It was considered a great, hygienist, solution at the time but times have changed and the alienation of modernist urban landscape cannot be contested or ignored anymore.

As such, it has been discovered that many of the physical and psychological problems of city dwellers come from the city they inhabit and its dis-functionalities, agoraphobia, the phobia of monotony and sedentarism being just three of these. Also there has been the problem of public or semi-public spaces that fail to give the sense of identity to their inhabitants and are therefore not used or used only when absolutely necessary. It was around the sixties that the graffiti phenomenon began to appear, not meant to vandalize but to personalize a very monotonous and lifeless space.

These problems have been debated for many decades now but there has been no great change in the way we build our cities so far. It is simpler (and cheaper) to stick to the old ways than to think of

the needs of the individuals as a way to improve the quality of neighbourhoods. But efficiency as understood when building mass produced cars is not viable when building houses for people.

There have been studies that confirm the role architecture and urban planning have on the wellbeing and health of the inhabitants [3:526-530] [4:111-115]. Activities that take place in a well designed public space tend to be more varied and last longer, which in turn leads to more social contacts and a better appreciation of the city as a whole by its citizens [4:148-161].

Fig. 1, 2. Monotonous vs. creative public spaces as appreciated by the inhabitants.

Creativity, flexibility and accessibility have been associated in all instances with the quality of urban space. Of these three, creativity is probably the most complex and most important. A space that intrigues us is more likely to be a social coagulant, a ground for social interactivity. It is not enough to have a high density of people in order to have social contact. A poor quality space will most often deter social interaction and thus create a sensation of overcrowding and stress instead.

Creativity in architecture has been proved to save certain cities from ruin: the Guggenheim Museum in Bilbao, for example, a manifest of creativity in form, is responsible for an eightfold increase in the number of tourists to the city [5],[6:50] which later became a hub for contemporary architecture and a pilgrimage site for amateurs of architecture. Thus, in this case at least, it can be easily argued that employing creativity in architecture more than paid off since the venues of the municipality increased proportionately to the number of tourists attracted.

Obviously, architecture is different from the other arts because it always has to answer the issue of finality. So architectural creativity will most likely be the original answer to a set of predefined problems. According to G. Goldschmidt, "the two major aspects that guide the design of any building are function and form. Every building must serve the purpose for which it is being built, and it must have a physical form, which impacts upon both its users and those who perceive it from the outside as part of the environment. The evaluation of form and function is well aligned with the two most prominent measures of creativity: originality and practicality. In the behavioral sciences creativity is often measured as the sum of originality (novelty) and practicality (usefulness) of the outcome of a design undertaking."[6:46].

But how does one define and measure creativity in architecture? Studies show that creativity, especially in architecture, is not always understood in the same way by those that come in contact with it. Therefore a team of researchers from The University of Newcastle, Australia identified

three major problems concerning architectural creativity: "firstly, there is a lack of understanding of the pedagogical dimensions of creativity in architecture and design; secondly, there is a lack of appropriate strategies to understand where different levels of creativity occur and how they should be assessed; and, thirdly, there is a lack of appropriate models or tools to support the assessment of the creative component of design" [7]. Also, according to Anne Fitchett, "architectural theory is regarded as the driving force in creative design, but in general, this theory is derived from disciplines outside its field, and tends to the philosophical and esoteric. Thus, 'creativity' is measured by an often formalist response to a verbal discourse." [8:272].

Furthermore, one must understand creativity as related to its three primary elements, namely the creative person, the creative process and the creative product [9:263], sometimes adding the creative press or environment to the scheme. Whereas the creative product is most easily ascertainable of the four, especially in architecture, all are equally important.

Due to the limitations of this article, the study focuses more on the object of architecture as both the creative product and the environment where creativity is or should be fostered.

2. Forms of creativity in architecture and urban planning

When talking about the creative product, the problem of creativity in architecture only gets deeper as we try to discern between the various forms it takes in current architectural practice. Thus we can firstly differentiate between creativity in form and structure as opposed to creativity in function. Whereas the first is more obvious and, most of the time, more glamorous, the latter is by no means inferior in effect.

For example many works of iconic architecture tend to fall in the first category. Being the attribute of most "starchitects" as G. Goldschmidt names them [6:50], these objects are built more out of the need of a status symbol than the simple need to satisfy a functional role. In fact many of these status symbols simply overlook functional and financial issues and tend to be looked over more leniently when it comes to fulfilling their actual purpose. The Guggenheim Museum is a perfect example of this type of status symbol for Bilbao where most visitors come to look at the museum itself rather than the exhibits it houses. The extravagant exterior plumbing at Beaubourg is also likely to cause great functional problems in the cold season but was chosen nonetheless for other reasons than practicality.

But not less creative are some objects that chose to follow function and logic. As such, most adaptive reuses focus their efforts on reconverting an otherwise doomed to be demolished space into something that suits a new purpose, sometimes better than the one it was actually designed for in the first place. For example the Tate Gallery for Contemporary Art in London is housed in the former Bankside Power Station and it fits the job perfectly, just as the former railway station of Orsay is now converted in the homonymous museum in Paris. Creativity in these cases, although more subtle at first, is undeniable as it solves the economic problem of demolishing and rebuilding something else while preserving the historic landmark and atmosphere altogether.

Perhaps even more creative are the small architectural interventions that proved vital to a community or the city as a whole. Small yet vital, these are, as Jaime Lerner names them, measures of "urban acupuncture". In his view, creativity comes when you "cut a zero off your budget. If you want sustainability, cut off two."[10]. His revolutionary design for a "tube station" for Curitiba's BRT (Bus Rapid Transit) is one such example. This is one of the few common transport systems in

Fig. 3, 4. Types of creativity: creative reconversions as seen at Vienna's Gasometers or a creative solution to traffic problems - Victoria escalator in Hong Kong made the neighborhood more alive.

the world that pays for itself. Lerner had another creative answer when he decided to leave the floodable areas of Curitiba as parks and natural green areas, thus making the Brazilian city one of the greenest and more sustainable cities in South America. The vast grassy areas are now maintained cheaply and ecologically by urban shepherds, again an original solution.

Another such example is the Victoria Escalator in Hong Kong, the longest covered escalator in the World so far. It connects the upper residential area with the lower business district over 800 metres distance and 135 m elevation difference. As such it has become a bustling location, and, not only it managed to replace successfully the need for commuter cars in the area but has also revitalized the slopes of Victoria Peak that have increased in land value and opportunity, with new shops and services [11]. While arguably not an iconic architectural achievement, the escalator is an urban intervention of success, meant to bring more life to the neighbourhood and bound to be repeated in the near future in other congested areas of Hong Kong.

3. Creative architecture and creativity derived from architecture

Though creativity in architecture is important and can improve our lives considerably, another aspect that connects architecture and creativity is equally important: the way architecture enhances creativity in its users. Perhaps an interactive museum where children can learn while interacting not simply viewing items is the first example that comes to mind. But buildings that enhance creativity are very different throughout the ages and tend to have very little in common.

For example the Ancient Greek Agora, 18th Century British teahouses, early 20th century Parisian cafés and the MIT Building no. 20 have very few architectural traits in common. While being the places where some of the most creative ideas took form, most of them where not designed for such purpose while others (MIT's Building 20 in particular) had many functional faults and were plain ugly [12].

Taking the last example as one of the most interesting for our purpose it would seem that architecture has, in fact, very little to do with bolstering creativity. This would be a counterintuitive conclusion and very pessimistic indeed. The MIT Building 20 was a timber structure that even failed fire-fighter requirements. It had many problems with plumbing, heating and was a nightmare when it came to orientation along its narrow and dark corridors. It was exactly how we tell our students not to design a building. It was only accepted as temporary (for the duration of WWII) and therefore the military deemed it fit for the purpose.

But surprisingly it lasted for more than five decades until finally being demolished in 1998 and it

fostered some of the most important breakthroughs in science and technology so the question arises as to how can this be possible? The answer is quite surprising: because it was improvised, it failed to separate researchers from very different domains like engineering and social sciences. Being hurled together and having to find their way when lost, they had to interact if only to ask for directions. It is this interaction that proved vital to interdisciplinary communication.

Moreover, because it was deemed temporary, people had no problem in altering the building as they saw fit for their needs. One such instance describes a scientist cutting through the ceiling of two consecutive floors so as to accommodate his vertical contraption on multiple storeys [12]. When we architects intend a building to freeze in time once we finish our work we actually impose the way users live inside and that limits a lot of their creative behaviour.

So it seems that despite its faults, Building 20 proved that in fact architecture has a great role to play on the creativity of its inhabitants. Some aspects that have been synthesized and copied in other office environments with success include:

a. the horizontal disposition of the building - most interdisciplinary interactions take place on hallways and despite being "less efficient" than a vertical building with elevators the time spent to circulate is far from being less productive. It is the reason that Steve Jobs decided to put the restrooms in the middle of the floor so as people would meet there more often

b. flexibility - when people find it easier to personalize their work environment, they tend to enhance their creativity by themselves. Google offices have always been known to adopt this policy for their employees.

c. combining work with pleasure - while this was generally avoided it is common sense that stimulating interior motivators and passion is bound to have a good effect on creativity as opposed to compliant behaviour. This has also been a motto for Google and if we remember that "school" actually comes from "leisure" in ancient Greek we might give this idea more credit.

Fig. 5. MIT Building no. 20 - a surprising example of how a building can enhance creativity without being a creative object.

To sum up a building should try to enhance creativity by simply bringing people together. Group creativity is thus more important than individual creativity. Also, "instead of trying to explicitly teach creativity, the learning environment itself must be designed to support creative thinking" [13:11].

4. Conclusions

Therefore, the need to support creativity in higher education is a growing phenomenon. Creative self – efficacy and self-awareness could be good predictors of creative performance among students in architecture. In order to improve their knowledge about creativity and its influencing factors, it would be useful for students to get individual feedbacks from the professors regarding their performance. This evaluative feedback should not be just one mark or value it should be a detailed description about creative factors of student's performance.

The development of creativity in architectural learning can be achieved through individual vocational tactics focused on the creative behaviour or through introducing more disciplines

focused on psychological aspects of creativity. It would be useful also to present studies which describe elements that inhibit creativity. One of the most important aspects would be the ensuring of suitable context for development of creative processes in higher education.

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Three Approaches in Defining the Space-Place Relationship

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Abstract

Each person has a different perception of the reality surrounding them. The same group of objects, the same spaces are judged according to different reference systems, they are connected differently, they have different meanings. Each person re-creates their own world, by collating different bits of objective reality into a personal space *- or a* place*. Thus, before discussing the qualities of private versus public space, there is a fundamental aspect worth discussing, and this is the concept of* space itself*. Space - which is considered to be a homogenous and unorganised entity, as it will be shown - has the ability to become a* place *- a meaningful, organised and well defined entity. Therefore, a large variety of theories has been issued, in order to explain this shift in* quality*, which defines the process of turning a* space *into a* place*.*

Following the same chain of thoughts, this paper proposes an analysis which will try to match three different interpretations of the abovementioned process - Yi-Fu Tuan's interpretation of space as movement and place as repose, Edward Soja's Thirdspace *theory, and Doreen Massey's understanding of space as a process - to a matching number of spatial - artistic or architectural - experiments. The aim of this exercise is to discuss how these three particular theories can be applied or translated into actual projects and how can the projects themselves alter or recalibrate the perception of* the space-place relationship *itself - be it a public or private one. After all, each theory should find its echo in a practical endeavour.*

Rezumat

Fiecare persoană are o percepție diferită asupra realității. Același grup de obiecte, aceleași spații sunt judecate diferit, în funcție de variile sisteme de referință, legăturile ce se stabilesc sunt diferite, semnificațiile sunt, și ele, altele. Fiecare persoană își re-creează propria lume colând diferite fragmente de realitate obiectivă sub forma unui spațiu personal *- sau a unui* loc*. Astfel, înainte de a aduce în discuție calitățile spațiului privat față de cele ale unuia public, există un aspect fundamental care merită atins, iar acesta este însuși conceptul de* spațiu*. Spațiul - considerat a fi o entitate omogenă și neorganizată, după cum vom vedea - are capacitatea de a deveni* loc *- o entitate bine definită, organizată și cu semnificație. Așadar, pentru a explica această schimbare* calitativă*, au fost enunțate o serie de teorii, ce definesc acest proces de transformare a* spațiului în loc*. Urmând un parcurs logic similar, lucrarea își propune o analiză care va încerca să alăture trei interpretări diferite ale acestui proces - interpretarea lui Yi-Fu Tuan a spațiului ca fiind mișcare și a locului ca fiind repaus, teoria despre* Altreileaspațiu *a lui Edward Soja și definirea spațiului dată de Doreen Massey ca fiind proces - unui număr egal de experimente spațiale - artistice sau arhitecturale. Scopul acestui exercițiu este de a analiza modul în care aceste trei teorii pot fi aplicate sau*

transpuse efectiv în proiecte şi, apoi, modul în care aceste proiecte pot transforma sau recalibra percepţia relaţiei spaţiu-loc - *fie acesta public sau privat. La urma urmei, orice teorie ar trebui să îşi găsească finalitatea într-o încercare practică.*

Keywords: *space perception, space, place, Yi-Fu Tuan, Edward Soja, Doreen Massey.*

1. Argument

This analysis is based on the observation of the fact that architectural theory, as a field, has been greatly influenced by the numerous discussions concerning the concepts of *space* and *place*. These concepts have been used for the first time in connection with a phenomenological perspective upon society. However, since the 1980s anthropologists, philosophers, architects and geographers have written an increasing number of texts on this topic. Thus, postmodern theorists have been trying to adapt these two concepts so that they can reflect more accurately the needs, movements and flexibility of today's society. Consequently, three points of view have been selected, all belonging to writers who were formed as geographers. Through this analysis it will be shown how points of view shift, adapt and, most importantly, how they can be identified in different spatial exercises conducted by artists or architects. Spatial exercises - be they written texts or real life projects - have one common outcome: they can influence perceptions, ways in which one understands, interacts or relates to their given environment. Thus, working with space can be interpreted as being the core activity of architecture as a field - be it written or designed.

2. Space is Movement - Place is Repose (Yi-Fu Tuan)

Yi-Fu Tuan is a geographer who has been active since the 1960s and who wrote several texts concerning the space-place relationship. Probably his most influential texts are "*Topophilia - A Study of Environmental Perception, Attitudes, and Values*" [2] and "*Space and Place - The Perspective of Experience*" [3]. In these texts, the author crystallises a unique approach towards this subject based on a cultural and philosophical analysis of several groups. However, establishing a twofold relationship is not a new concept in space related theories. Before Tuan, Henri Lefebvre coined his subjective space-objective space relationship. [1] Thus, one could interpret Tuan's twofold theory as being spiritually linked to Lefebvre's relationship. Even at a quick glance, Tuan's distinction between the two extremes resembles Lefebvre's. Tuan states the fact that space is linked to movement, while place is linked to reposes, to stops along the way: "*What begins as undifferentiated space becomes place as we get to know it better and endow it with value. [...] The ideas 'space' and 'place' require each other for definition. From the security and stability of place we are aware of the openness, freedom, and threat of space, and vice versa. Furthermore, if we think of space as that which allows movement, then place is pause; each pause in movement makes it possible for location to be transformed into place.*" [3]

However, Tuan's view has a much more phenomenological connotation, closer to Christian Norberg-Schulz's or Martin Heidegger's philosophy, for whom the notion of place is related and linked to the act of dwelling or inhabiting - namely the act of assimilating and identifying oneself with a certain place. In Tuan's view, the place is still linked with the act of the everyday dwelling, however, at the same time, this act remains a *personal experience*. Dwelling is seen as understanding and assuming a place, and as assigning meaning to it, as well. Thus, a two-way process is being established: *giving* and *receiving* at the same time. Norberg-Schulz [4] writes about the spirit of the place or *genius loci*, namely the precise moment when one resonates with a certain space, thus transforming it into a place. Heidegger [5] defines the role of architecture as being the one of turning a site into a place and of discovering its potential meanings. Similarly, Tuan's theory

relates the concept of place with a feeling of security and stability, namely putting down roots and identifying oneself with a place - in essence the act of *concretising values*, while *space* is associated with the freedom of movement. [3]

From a different point of view, space is no longer the background of a *social space*, as it is seen by Lefebvre, - a notion which resembles, although not perfectly, with the concept of place - but rather: "*[s]pace, we have noted, is given by the ability to move. Movements are often directed toward, or repulsed by, objects and places. Hence space can be variously experienced as the relative location of objects or places, as the distances and expanses that separate or link places, and - more abstractly - as the area defined by a network of places*." [3]

For Tuan, space is what is left behind after delineating all places, but not reaching the level where it opposes the place on a conceptual level - as is the case of the *non-place* defined by Marc Augé [6]. Space itself is structured, organised, based on a network which enables orientation - unlike Lefebvre's objective space, which is abstract, thus it cannot exist in a material world without becoming a subjective space, namely a social one. In Tuan's writings, the difference between space and place is reduced to the presence or absence of movement. The lack of movement automatically presupposes a repose, namely an interruption of movement and understanding of the space - or of dwelling it, using the Heideggerian terminology.

In this context, losing oneself, as Tuan puts it [3], does not mean that space ceases to be oriented. Space, in itself, is still organised, if one were to relate it to their body parts. "In front", "behind", "left, and "right" still exist. What one lost is a link with an origin outside of one's body. Suddenly front and back, left and right become arbitrary when related to the direction of movement. In the eventuality in which one reaches a light - an external origin -, although one is still lost, space suddenly becomes organised. This simple exercise explains the qualitative difference between *space* and *place* as it catches the precise moment when space *is being transformed* into a place - thus becoming organised.

When ironically speaking about *place*, Tim Cresswell [7] says that it is neither like toothpaste - it is not a notion which did not exist in the past and which could become redundant in the future - nor like gravity - a notion independent of human will and existence. Cresswell states that place is a *human necessity*: our existence, as a species, depends on the presence of *place* and places - an idea which is almost the same as Tuan's concept, who was actually Cresswell's mentor. However, these too depend on our existence - because before humanity there was no place, and "*[a] future without place is simply inconceivable (unlike a future without toothpaste)*" [7]. Such a context was the one to give birth to Tuan's term of *topophilia*, which characterises the affectional link between people and places. This relationship, together with the feeling of attachment which it generates, become fundamental for the idea of place - place seen as one's territory and also as a territory to which one belongs to.

Luigi Moretti [8], based on the articles he has published during the early1950s, has adopted a unique manner of studying space. He borrows different research methods from sculpture, painting, film or theatre in order to analyse space. The architect is focusing precisely on the moment in which the subject's movement is interrupted and the process of observation and understanding transforms a space into *a place*. Preoccupied with the study of structures and sequences of space, Moretti creates models of the volumes of interior spaces - of subjective and affective spatialities. The architect uses terms such as plasticity, material density and *chiaroscuro*, in order to characterise the "*intellectual aspects of material in its concrete physicality*" [8]. Thus, the sequences of architectural spatiality - void, solid, narrow, broad - are understood in the sense of applying pressure upon the subject - at this moment, space transforming itself into place. Analysing space in terms of pressure is a unique manner of describing the emotional reactions experienced by visitors: if one walks through large, well light spaces, the pressure is very reduced; similarly, if one walks through narrow, dark spaces, the pressure is high, thus the visitor experiences fear or discomfort.

Consequently, Moretti's models show how different buildings alternate spaces of varying pressures, oscillating feelings of liberation or oppression. In Moretti's view, spatiality has its own existence, independent of the solid behind it, this *"rarefied substance"* communicating on a perceptual level with the receiver. Moretti, by modelling the immateriality of space, is able to determine a way of identifying a reference, conservation and analysis system established between space and subject - an affective link - which was named by Tuan *topophilia* or the love of place.[1]

3. Thirdspace (Edward Soja)

Human geography distinguished itself, during the 1970s and 1980s, among other fields as being particularly effervescent in theorising the concept of *place*, thus establishing a new domain which has been producing reference texts ever since. However, postmodern literature has decomposed the concept once more, looking at it critically, from a point of view heavily influenced by the effects of the *time-space compression*, by the effects of the global upon the local, attempting even to integrate it in broader, interdisciplinary discussions, relating space to its social [9, 10], political [11, 1] context, to the poetics of space [12] or simply to the everyday [13, 2, 3, 14, 15], including, consequently, racial or gender related issues [16]. Such endeavours have generated ample studies, which improved the permeability of this field, bringing it closer and anchoring it much more veridical in the everyday.

One of the most interesting contribution brought to this field and to the concept of place, belongs to Edward Soja [14]. Soja - similar to Lefebvre - considers that the duality of imagined space and real space or that of *practicing space* and *representing space* is a reductionist point of view. Although this practice is actually part of a long chain of dichotomies, which became references for our (contemporary) way of thinking - for example abstract-concrete, real-imaginary, local-global, micro-macro, natural-cultural, centre-periphery, male-female, bourgeois-proletarian, capitalist-socialist - Soja, together with Lefebvre, considers that this direction is lacking precisely the complexity of *truly experimenting the inhabited space* - arguing that there will always be a third possibility or *an-Other term*, which cannot be included in neither one of the two trenchant categories of "either-or". Thus, what Soja proposes is a third category - inspired by Lefebvre's theory (*une dialectique triplicité*) and also tangent to Michel Foucault's *heterotopia* [13] - much more flexible, a category of inclusions of *both-and-also*. It is an inclusive theory, postmodern in character, very similar to Robert Venturi's [17] concept of *both-and.* This layering and inclusion of as many meanings as possible, which tends towards including *all* meanings, presupposes a broader acceptance and tolerance of "other spaces", of *heterotopias*.

In consequence, when talking about space, Soja sees it as being made of three consecutive layers. *Firstspace* - or the empirical, measurable and mappable space - is the actual, physical reality. *Secondspace* is the result of a social process. Namely a space which becomes subjective - abstract space, conceptual space, imagined space - which is no longer three-dimensional, taking the shape of spatial representations and mental images. This space is felt, assumed and it has very clearly defined meanings, being in fact a *perceived* space or, in other words, *a place*. It is the same kind of place phenomenologists like Norberg-Schulz talk about.

Thirdspace is, according to Soja, a space which is *lived*. A space of action, related to verbs, a space for interactions with the physical dimension: "*Thirdspace as Lived Space is portrayed as multi-sided and contradictory, oppressive and liberating, passionate and routine, knowable and unknowable. It is a space of radical openness, a site of resistance and struggle, a space of multiplicitous representations, investigatable through its binarized oppositions but also where* il y a toujours l'Autre*, where there are always 'other' spaces, heterotopologies, paradoxical geographies to be explored. It is a meeting ground, a site of hybridity and* mestizaje *and moving beyond entrenched boundaries, a margin or edge where ties can be served and also where new ties can be forged. It*

can be mapped but never captured in conventional cartographies; it can be creatively imagined but obtains meaning only when practised and fully lived. *[…] In this coalition building, it is a* shared spatial consciousness *and a collective determination to take greater control over the* production of our lived spaces *that provide the primary foundation - the long-missing 'glue' - for solidarity and political praxis.*" [14]

As a concept, *Thirdspace* becomes a radically inclusive notion. If so far space, and especially place, have been defined through *exclusions*, which identify, select and delineate a space of a particular quality, the postmodern moment becomes increasingly lax and permissive. Thus, Soja's theoretical construct reaches an extreme where *everything* is included in this third spatial dimension - a dimension of *the other*.

When comparing Soja's *Thirdspace* to Tuan's "space is movement-place is repose" theory one has to be aware of the theoretical shift which is presented. While Tuan is still very much linked to a phenomenological point of view, Soja eases into a postmodern context, which focuses much more on the individual, on each person's individuality, on *personal* experiences, which create unique experiences and thus unique spatial experiences and spatialities. Therefore, Soja's postmodern interpretation is somewhat more tangible, more linked to the everyday, a theory based more on observations than on theoretical constructs. Thus, Soja's theory is important because it represents a shift from a more abstract chain of theories to a more relaxed and down-to-earth path.

A different space, an invisible space, but which is clearly perceptible is what Bernhard Leitner proposes through his spatial experiments. Leitner the architect, artist or musician - in any of these instances - has been experimenting a personal space, a *lived space*, which finds itself at the limit between architectural space and sound. For Leitner the sound is the creator that generates space. Using the fact that sound travels at different speeds, it resonates, it collides with surfaces and then returns, Leitner generates different spatialities inside the physical boundaries of space. Practically these spatial geometries are invisible to the eye, being only felt throughout the body when the subject is immersed inside these - inside the "sound space objects". [18]

Leitner creates sound cubes, corridors, fields or tubes in order to analyse the impact of different body positions upon acoustic perception. The sound becomes itself a material which creates space - which does not (necessarily) flood an existing space. Each sound generates its own space in which the subject has to enter. Thus, the space created by the architect is truly a space of interaction - between sound and subject - a (possible) experimental materialisation of Soja's *Thridspace* concept. Each subject, each visitor, depending on their height, volume and stature exhibits sounds differently, consequently each person perceives the "sound space object" differently. Space is felt: *a lived* experience in which the subject acts, interacts with sounds and a perceived, invisible, yet very real space - a truly life-size *Thirdspace*.[2]

4. Space as Process (Doreen Massey)

Doreen Massey [19] is one of the geographers who managed not only to provoke a theoretical shift, but also to actually re-conceptualise the concept of place. The author pertinently states that throughout the pages of the current literature, one comes more and more often across terms like *acceleration*, *global village*, *overcoming the space limits*, a fact that gives substance to the *time-space compression* phenomenon, which reaches a high peak - actually what could be called a new phase of what Marx theorised as *the annihilation of space by time*. [19] Another visible effect of this phenomenon, is an alteration or transformation of the concept of *place* and the manner in which one relates to it. Thus, in this context, can one still argue the particularity of being local? Massey draws a clear distinction between what she calls an idealised notion - namely understanding place

as the space of a homogenous and coherent community - and the everyday fragmentation and disintegration. Massey states that precisely the fact that there is a coherent wish, an idealisation of the notion of place - which actually coincides with the one of community - proves the fact that, actually, the reality is composed of *fragmented spatialities*. Of course that occasionally there might by some defensive reactions which manifest themselves in different types and shapes of nationalism, reactions of exclusion towards the "newcomers", "intruders" or "unfit" or - with a certain sentimentalism - towards "sanitized 'heritages'" [19].

In this context, the concept of place, the feeling of being linked, of being connected is felt very differently among various social groups - and even among various individuals. The difference consists in the ability of *movement* possessed by each individual. Thus, Massey's theoretical construct is based on Tuan's distinction between space and place, the difference being that Massey goes one step further stating that, actually, the concept of place itself is influenced by one's ability to move in space - thus the author pleads against essentialised or static interpretations of the notion. Further on, the concept of space, observes the author, is affected by the influence one is capable to exercise upon the flow of movement. *"Different social groups have distinct relationships to this anyway differentiated mobility: some people are more in charge of it than others; some initiate flows and movement, others don't; some are more on the receiving-end of it than others; some are effectively imprisoned by it."* [19]

Thus, starting from the hypothesis that humans are able to possess multiple identities, Massey extrapolates this concept, stating that a place can have multiple identities, as well. The issue raised, in this case, is if one can see this as source of conflict or as a *re*source, or even both! Massey insists upon the fact that it is wrong to identify the concept of *place* with that of the *community*. From a point of view equally inclusive as Soja's, the author succeeds to see the concept of place in a totally different light, namely as being *non-static*, thus the place ceases to be a noun, as it used to be for Norberg-Schulz [4]. In the end, communities can exist even without living in the same place, being linked as a network - the family, the group of friends, the congregation, etc. On the other hand, there are very few situations in which a place hosts a single community - namely a homogenous social group - this circumstances being artificially brought into existence as *reservations*. As a conclusion, Massey defines four characteristics of the concept of place, as she understands it:

1. the place is rather *a process*, namely it depends upon spatial interactions - a phenomenon which is in itself active;
2. places have no boundaries, they lack an irrevocable division which encloses, *de*limits them; boundaries are only necessary as a theoretical construct, as a means of study; the absence of boundaries dilutes the association of a place with notions like *permeability* and *vulnerability* - notions which give boundaries a negative connotation, thus linking them to concepts like *threat* and *the invasion of newcomers*;
3. a place clearly cannot possess a single identity;
4. none of the abovementioned characteristics deny the initial concept of place or the importance of its *uniqueness* - place specificity is not linked to an *internal* history, but rather to the social relationships which evolve, on a global or local scale, and are associated with the geographical uniqueness of the space and its bond to a historical *layering*, related, in its turn, on a local and on a global scale, as well. [19]

One has to remark that, in today's postmodernist context, defining the concept of *place* as being *"open and hybrid - a product of interconnecting flows - of routes rather then roots"* [7] is better suited for one's everyday experience. *The place* becomes a concept with a higher degree of permeability, inclusion and flexibility, thus being able to empathise with real life situation, which grow to be increasingly complex. However, Massey's construct vibrates with an unreal optimism, according to which social issues, responsible for instituting boundaries, limits and closed-circle communications, can be simply erased together with the dissolution of spatial (and

ideological) boundaries.

However, Massy's definition remains one of the most important contemporary theories regarding the concept of *place*, especially because it succeeded in critically counterbalancing the notion of *erosion of the concept of place*. The theory of erosion sets in a negative light precisely these (contemporary) characteristics of space, which Massey attributes to a place seen as a process: mass communication, facilitating an increased level of mobility, and practically any other attribute linked to a consumerist society.

From this point of view, the installation "Line, Surface, Space", proposed by Kawahara Krause Architects, [20] can be interpreted as an excellent interpretation of the notion of place - as defined by Massey. Kawahara Krause Architects was founded in 2007 by Tatsuya Kawahara and Ellen Kristina Krause in Tokyo, Japan, only to move in 2009 to Hamburg, Germany. With this particular installation, the young architects managed to raise the issue of materialising *a place* which seems rather to be the outcome of a process than a well-defined enclosure. Kawahara Krause Architects propose a succession of three concentric spaces - three cubes -, each slightly rotated compared to the previous one. The boundaries of each cube are more and more diffuse, being made of a very elegant texture drawn by threads anchored in the two horizontal plans - the floor and the ceiling. Thus, the architects test the material limits of delimiting a space. The threads - the lines - of the exterior square suggest the edges of a scarcely enclosed space. The interior threads, placed closer together, seem to generate surfaces. This fragile structure is barely perceptible, the surfaces and the enclosed space being materialised only when the visitor is moving around them, thus perceiving the surfaces, the volumes generated by delicate threads.

Space and the so fragilely delimited *place* appear and disappear according to the viewer's observation point. The delicate boundaries, which successively appear and disappear allow the enclosed place to pulsate, thus the interior and the exterior seem to overlap, to flood each other and, eventually, to be mistaken for each other. The place eventually becomes *a process,* depending on the interaction with the subject who is perceiving it. The place becomes palpable, perceivable only when there is a relationship established between itself and the individual - a relationship which presupposes a layering of different *paths*, of perceptions generated by various points of observations - interior as well as exterior to the place.[3]

5. Conclusions

Places can be - and actually are - *produced*, however the place is not a *ready-made* product, a mass produced product, but rather it is *initiated*, behaving, in the end, more like a process - if one were to borrow Massey's term. In this context Certeau [21], by relating *a place* to the everyday experience, practically links the activity of micro-cultures, their everyday activity with the place, through which they identify themselves, thus defining it. If one were to define a place as the experience of the everyday, then one could also *culturally* define a place as the manifestation of a certain group in space. This point of view is circumscribed by a behaviourist approach according to which, as Burrhus F. Skinner remarks [22], culture has the role of moulding, determining and controlling the behaviour. Macro-cultures, micro-cultures, and even the "culture" of street gangs; all of these have the ability of generating and creating places. For Cresswell [7], as well, it is clear that places are the outcome of cultural activities - however, unlike, the abovementioned ones, Cresswell speaks about manifestations of culture like literature, film or music.

The issue raised today - by the different interpretations of the concept of place - is when and under what circumstances does architecture produce places? Put in the simplest terms, architecture is capable of *delimiting*, of organising space by placing a wall, of establishing the distinction between

interior and *exterior*. However, a boundary, by itself, does not automatically transform a space into *a place*. Space - in this instance, architectural space - becomes a place only when *one modifies their perception upon it*. Practically, one identifies a built space as being a place when the image one forms related to it - the mental representation one builds - begins to mean something, to be *representative* in some way - namely architecture which possess the ability of becoming *a landmark*, of leaving a mark in the collective conscious. Or, alternatively, a place can be a temporary intervention which, for a limited period of time, succeeds in organising the space around it - otherwise homogenous -, succeeds in orienting it, making it visible to the passer-by - in other words *changing the perception upon it*. Thus, the three interpretations of place analysed throughout this paper are not only theoretical or philosophical landmarks, but, as demonstrated, they are also the background or even the starting point of some very interesting spatial experiments, experiences and (designed) perceptions. In the end, the circle in complete, linking theoretical exercises with practical ones.

6. Notes

1. images of Luigi Moretti's models can be viewed by following this link: http://azurebumble.wordpress.com/2011/10/12/luigi-moretti-architecture/
2. images of Bernard Leitner's spatial installations can be viewed by following this link: http://www.bernhardleitner.at/works
3. images of Kawahara Krause Architects' project can be viewed following this link: http://www.kawahara-krause.com/

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Art[as]angel
Questioning Urban Discontinuities in Public Art

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Abstract

When architecture and the city become its research objects, art may be in the position of uniquely articulating a relevant, convincing and enduring critique of urban realities. This paper addresses contemporary public-art works that focus on contested urban sites, sites specifically marked by discontinuity. The case studies are projects of Artangel, *British art organization active over the last two decades in commissioning and producing remarkable, often controversy-generating, site-specific art. The studied works are Rachel Whiteread's* House *(1993), Catherine Yass's* High Wire *(2008), Mike Kelley's* Mobile Homestead *(2013) - all addressing the issue of urban dwelling. A close reading of these projects, merging art-historical and urban-(planning)-history notions is proposed. It is argued that these art projects have the power of pertinently questioning unresolved tensions inscribed within their urban sites, tensions between memory and amnesia, between 'organic' growth and* tabula rasa, *between utopian projects and concrete achievements, between private and public spaces... If angels may be conceived of as masters of the interval, agents of the in-between - indeed of continuity, this paper argues - inspired by the organization's name - that the studied art works posses precisely such angelic virtues. They have the power of operating - often only ephemerally – in the very gaps between physical or conceptual dichotomous pairs, generating new possibilities for urban continuity.*

Rezumat

Când arhitectura şi oraşul devin obiecte ale cercetării artistice, arta e capabilă să articuleze o critică relevantă, convingătoare şi viabilă a realităţilor urbane. Acest articol abordează lucrări ale artei contemporane instalate în situri urbane problematice, în locuri marcate de discontinuitate. Studiile de caz sunt proiecte susţinute şi finanţate de organizaţia britanică Artangel, *activă de-a lungul ultimelor două decenii în producţia unor lucrări remarcabile, uneori controversate, de artă situată. Lucrările studiate sunt* House - *Rachel Whiteread (1993),* High Wire - *Catherine Yass (2008) şi* Mobile Homestead - *Mike Kelley (2013), cele trei având în comun problematizarea conceptului de locuire urbană. Se propune analiza celor trei proiecte, îmbinând noţiunile de istoria artei cu cele de istorie urbană (şi urbanistică). Se susţine că lucrările interoghează în mod pertinent conflicte prezente în situri urbane, conflicte între memorie şi uitare, între creştere organică şi* tabula rasa, *între utopie şi realizări concrete, între spaţii private şi publice... Dacă îngerii sunt maeştri ai intervalului, agenţi ai intermedierii deci, ai continuităţii, articolul susţine – inspirat de numele organizaţiei - că tocmai aceste 'virtuţi angelice' caracterizează şi proiectele artistice studiate. Se arată cum acestea operează – deşi adesea doar efemer – în chiar intervalele*

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dintre perechi dihotomice fizice sau conceptuale, generând astfel noi posibilități pentru continuitate în spațiul urban.

Keywords: site-specific art, public art, art as urban criticism, urban discontinuity, urban dwelling, Artangel, Rachel Whiteread, Catherine Yass, Mike Kelley.

1. Art as criticism of urban space

When architecture and the city become art's research objects, art may be in the position of expressing a relevant, convincing and enduring critique of urban realities. Thus, architecture and the city function as art's muses; public art's criticism can be all the more effective since urban space is not only art's source of inspiration, but also its very site, thus an intrinsic part of the site-specific work - an idea that has been drawn on in a previous article.[1] Coined by British architect and art critic Jane Rendell, the notion of "critical spatial practice" refers to interdisciplinary creations that operate in between art and architecture, possessing both the critical freedom of art and the public presence and social relevance specific to architecture; in Rendell's words, the concept includes "work that intervenes into a site into order to critique that site".[2, 3]

Taking incentive from this challenging understanding of public art, as well as from the Workshop Questions' theme - urban (dis)continuity - this paper investigates contemporary public-art works that focus on contested urban sites, sites specifically marked by discontinuity. The aim is to highlight these works' power not only of exposing unresolved tensions inscribed within urban sites, but also of bridging gaps between dichotomous urban categories, indeed acting as agents of continuity in the city. It is argued that public art, when conceived from a critical stance, may become a powerful actor in public space, a significant voice diagnosing urban planning and development within a certain area.

The case studies are three projects of Artangel, British art organization active over the last two decades in commissioning and producing remarkable, quite often controversy-generating, public art. Artangel's site-specific projects are "powered by the belief that artists are capable of creating visionary works which impact upon the way we view our world, our times and ourselves in unusual and enduring ways."[4] The studied works are Rachel Whiteread's Turner prize winning work *House* (1993), Catherine Yass's *High Wire* (2008) and Mike Kelley's *Mobile Homestead* (2013), all three revolving around the concept of home-in-the-city. This choice is motivated on a general level by the wish of making this outstanding art-supporting organization better-known to the local architectural milieu, since Artangel's projects are excellent examples of critical spatial practices; on a specific level, the three chosen projects share concerns for issues related to contemporary urban dwelling that are not only specific to their sites (respectively East London, Glasgow and Detroit) but also quite similar to situations encountered in many European cities and are therefore considered cases in point to argue about contemporary art's relevance in urban (planning) debates.

Drawing on sources such as academic studies, press articles, cartography, planning documents, the paper proposes a close-reading of the three projects, read simultaneously as art works and as indexes to specific urban (planning) histories, followed by a discussion of the critical discourses they open on urban discontinuity. Developed in literary analysis, close reading can be applied not only to texts, but also to the analysis of visual art works as a technique "for discovering form, rhetorical tropes, argument, and ideologies within [art objects]" with the aim of understanding "the interaction of the particular elements that contribute to a work's power and effectiveness."[5]

2. *House*: the presence of absence

Rachel Whiteread's work *House* was among the first and perhaps most controversial Artangel commissions. *House* was a casting in concrete of the interiors (except the roof) of a typical Victorian terraced house in Grove Road in London's East End, using the outer walls as moulds, and having them removed after the casting process. It was completed on October 25th, 1993 and it was demolished on January 11th, 1994. All in all, it physically existed for two and a half months. Despite its short on-site existence, this work became a pilgrimage site for thousands of visitors from within and without London and it triggered lengthy controversies in the street, in the British media, in the art world and even in the British Parliament.[6]

Figure 1. Rachel Whiteread, *House*, 1993.
Commissioned and produced by Artangel. Photo by Steven White. Image courtesy of Artangel.

Rachel Whiteread (b.1963, London) is considered one of the so-called 'Young British Artists', which revisited the minimalist sculpture of the '60s in the early 1990s, renewing it in a post-structuralist and post-colonial context. They learned from minimalism's simple forms, from their preoccupation for the conditions of perception, the object's relationship to the viewer. At the same time, these artists challenged the minimalist assumption of the viewer's allegedly universal character. Thus, post-minimalist art -"minimalism with a twist" or "minimalism with a heart" - endows the minimalist object with affects, often with visceral connotations, of trauma, of loss.[7, 8] In terms of formal approach, precedents to Whiteread's castings of empty space into solid matter would be Picasso's *Moulage de papier froissé* (1944), or Bruce Nauman's *A Cast of the Space under My Chair* (1965), these too playing with the presence-absence dialectic.[9] As notorious precedents to artists' interest in condemned buildings are Gordon Matta-Clark's cuts into walls, floors and ceilings of houses scheduled for demolition in the 1970s, or Robert Smithson's *Partially buried woodshed* (1970).

Whiteread's art of reversal by moulding and casting evokes "the world of the photographic

negative, with its phantom-like reversals of known fact".[10] Her working process has also been described as "mummification of space", as "the making of a mortuary mask", or as bringing "the invisible into visibility" by de-familiarizing the familiar.[2, 7] Between the 1980s and the early 1990s her work evolved, as she said, "in a linear way." She developed her research into an art of the memorial [11], by passing from everyday objects (closets, bathtubs, chairs, tables) to the casting of an entire room in 1990 and to *House*, in 1993. *Ghost* (1990) was her breakthrough work. Like *House,* it is a cast, this time in plaster, of a most typical, familiar interior space, the living room of a Victorian house in north London, this too scheduled for demolishion. Yet, unlike *House*, condemned by its very site-specificity, *Ghost* was installed in different galleries and is now owned by the Washington National Gallery of Art.

House reveals the fragility of domestic spaces, their progressively smaller dimensions and increasingly informal character as one recedes from the street front towards the backyard. However, this private-public tension would be quite as evident even if *House* had been, somehow, located in a gallery - like *Ghost*. But by being anchored in that particular part of London, *House* evoked not only someone's "lost places of childhood" but also the entire East London working class culture. Throughout her work, Whiteread not only addresses private memories, but she also "point[s] to a social world in which private space appears obscenely exposed and public space nearly collapsed […]" [7] Its greatest achievement was linking the psychological to the sociological, a quality shared by Whiteread's creations in general.[7, citing Jon Bird] For instance, her 1991 cast of a mattress *Untitled (Double Amber Bed)* refers as much to the "archetypal events of the bed" as private space as, by its particular position in the room, to the shelter of the homeless, as public space.[7]

But how was it possible for the *House*, to replace the home it once was? How did this strange sculpture, "a house in the park", came to be?[12] Totally de-contextualised as it looked, *House* functioned as a challenging index to an entire area's urban and urban planning history. For the particular site Artangel and Whiteread chose was one thoroughly marked by discontinuity, by an on-going presence-absence tension, as demonstrated by looking thorough the area's cartography from the 1870s until present. The site is in London's working class 'East End', traditionally the poorer part of London. It belongs to the Tower Hamlets Borough and is situated just South of the mid-19th-century Victoria Park, on a sight line with London Docklands on the Isle of Dogs, an area drastically transformed in the 1980s-1990s into the high-rise office district known as Canary Warf. Developed during the 19th century, the area mixed working class housing and factories and was traversed by canals and railways, as it can be seen on the 1870s Stanford maps.[13] If the site of *House* was still unoccupied by 1872, and the entire area only loosely built-up, by 1878 it was already densely occupied with terraced houses and factories - an entirely typical East London area, home to a particular working class culture, enduring throughout the interwar period.

In WWII, during the heavy bombing of London in 1941 - the Blitz – the East End was the most devastated. Moreover, Grove Road was the street where the first bombs fell and the building blocks along it were severely damaged. A 1955 plan of the site shows many of the terraced houses replaced by so-called prefabs, temporary shelters built out of prefabricated panels. These were part on an extensive program implemented throughout the UK after the war to compensate for the severe housing shortage caused by the bombings. However, only inner areas of the Grove Road terraces appear to have been replaced by prefabs, while the street rows appear still intact.[13] At the same time, shortly following the Blitz, London set out for a comprehensive reconstruction strategy. The planning team was led by Sir Patrick Abercrombie, already an international authority in town and regional planning. In a 1944 film entitled *The Proud City*, Abrecrombie presents *The Plan for London* to the public.[14] He diagnoses the existing situation in London's East and South, arguing that the war damage, combined with the disastrous previous status-quo called for radical interventions. Abercrombie characterizes the working-class areas as "slums, of which any city ought to be ashamed… without air and sunlight… roads in the shadows of railway viaducts… row

upon row of dirty houses we should have pulled down and done away with long time ago" and concludes saying that "all these places must go, and the sooner, the better."[14]

As a result, in the spirit of modern urbanism's principles, throughout the 1960s and 1970s, large-scale reconstruction was aimed at both the bombed area and the 'slums' and the East End became a laboratory of modern architecture and urban planning. Numerous collective housing estates of towers and slabs were built by the local councils, replacing both the temporary prefabs and the decaying Victorian and interwar-period terraced houses. John Claridge is an artist whose photographic work between the 1960s and 1980s documents those radical transformations in a powerful yet bitter way. His images, entitled suggestively *Freedom is just another word, Room with a view*, or *Three steps to Heaven* juxtapose ruined Victorian housing to apartment blocks and temporary prefabricated dwellings. Claridge's words too, provide a severe assessment of the changes: "The rich got richer and the poor got bathrooms" – "In the terraces of two-up two-downs, people could talk over the garden fence but in the towers they became strangers to each other. The culture of how they lived was taken away from them […]"[15]

To the West of *House*'s site, across Regent's Canal, a large such estate of apartment towers and bars was built, on the spot of former terraced houses, workshops and one large factory. *Cranbrook Estate* (1963) was designed by a team lead by Berthold Lubetkin, one of the pioneers of modern architecture in Britain, one of the main believers in the progressive virtues of modern architecture. Lubetkin's utopian vision of "looking at architecture as the backdrop for a great drama – the struggle for a better tomorrow" stands at the antipodes of Clardinge's gloomy diagnosis.[16] Another modern landmark of the area, not far from Grove Road, is Sir Denys Lasdun's *Keeling House* (1957). Almost contemporary with Le Corbusier's *Unité de Marseille* (1952), Keeling Houses offered an original alternative to the interior street of the *Unité*, by exteriorizing it and by creating a central nucleus meant to stimulate social interaction while fragmenting the private accesses, to increase intimacy. At the same time, Lasdun sought to merge modernist principles and traditional ways of life - to evoke was made absent through its replacement - by trying to incorporate qualities of the demolished Victorian houses (just like the ones of Grove Road) into his project:

> "These were people who came from little terraced houses or something with backyards. I used to lunch with them and try and understand a bit more about what mattered to them […]. And as a result of these contacts I didn't have flats. I said no, they must have *maisonettes*, […] because this would give them the sense of home. And from these conversations, they wanted a degree of privacy. They said: you know, we're not used to being in a great sort of huge block of one of thousands. So the thing was radically broken up, this building, into four discrete connected towers, each semi-detached on a floor, each a *maisonette*."[17]

As to the Grove-Road terraced houses remaining, partly damaged by war and declared as inadequate, slums, these were planned from the 1940s already to become parkland. For besides replacing the slums with collective housing blocks, Abercrombie's plan foresaw one other feature which heavily impacted the site studied here: It sought to remediate the severe lack of green spaces identified in certain areas by interconnecting the existing parks and public gardens in such way as to form green fingers, or green lungs throughout the metropolis.[18] Thus, between Victoria Park and the river Thames a chain of continuous green spaces was envisaged, none other than the street blocks between Regent's Canal and Grove Road. By the 1970s, some of the prefabs were already removed and the land was bought by the local council. The process continued during the 1980s and the area was gradually 'cleaned' of buildings.[19] As revealed by cartography [13], by 1993 most of the land had been brought into park use except for one house, whose stubborn owner refused to move out. When he finally accepted in 1993, Artangel and Whiteread seized the opportunity and succeeded, after much diplomatic effort towards the local council, to secure a temporary building permit for Whiteread's sculpture.

This is how *House* was possible. After much debate and intense media presence, all attempts to indefinitely prolong the presence of the sculpture on site failed and *House* was pulled down on January 11th 1994, having lasted less than three months. Between Grove Road and Regent's Canal, the Northern part of the recently open Mile End Park, a park which took over 50 years to be realized, presents itself as an empty grass field. Or, as Iain Sinclair crudely put it, "a field of voluntary amnesia"[12]: the park fails to provide any reminder of either the buildings which once occupied the site or the art work which caused so much controversy. Despite all efforts, *House* was demolished. Arguably, it was too present and too critical, despite - or perhaps precisely because of – its radical semantic openness emphasized by James Lingwood:

> "[t]he success of this sculpture has been to fracture the normal stereotypes of opposition and support. It is simply not a case of 'them' against 'us'[…] *House* was literally rooted to its spot, but the meaning of Whiteread's work was inherently unstable. Unlike the heroic models of triumphal arches and declamatory statues, it was by no means clear what values it sought to promote. It did not seek to predetermine the ways in which people could respond to it. Rather […] *House* was both a closed architectural form and an open memorial; at one and the same time hermetic and implacable, but also able to absorb into its body all those individual thoughts, feelings and memories projected onto it."[20]

3. *High Wire*: "living it up"

Catherine Yass' *High Wire* is an Artangel commission occasioned by the 2008 Glasgow International Festival of Contemporary Visual Art. The work consisted in an on-site event followed by a gallery show, consisting in a four-screen film and video installation and lightbox images. The happening took place in the Red Road district of Glasgow, a modernist social housing ensemble of towers and slabs built in the mid-sixties, an iconic part of the city's post-war history. Following the idea envisaged by Catherine Yass, French high-wire artist Didier Pasquette would walk on a wire stretched between two of the thirty-one-story towers - no safety cable, no safety net - wearing a tiny camera attached to his head. Pasquette's walk across the void between the two towers was actually aborted halfway, but he safely returned backwards after having sensed that the wind was too strong. The colour film and video installation features one viewpoint from the wire-walker's head, while the other three viewpoints offer vertiginous views of the walk from around the site. The black and white lightboxes feature negative historic images of the Red Road district. On one of the negatives, Yass scratched a line linking the three highest towers, as if 'designing' Pasquette's walk.[21]

Catherine Yass (b.1963, London) is an artist whose innovative film and photographic work explores urban space from unexpected and revealing vantage points; her work revisits known or less-known architectural and urban sites via short films in which the built environment is often perceived from the air in usual, sometimes destabilizing perspectives that confront objectivity and subjectivity, formalist, objectified imagery and psychological intensity. Somewhat similar to the post-minimalist twisting of minimalist detachment and allegedly pure objectivity, "Yass's work often presents the ordinary and objective architectural world as something charged with psychological tension and anxiety."[22, 23] She surrounds architecture's solidity and inherent dependence on statics with the freedom of flying, of being high-up in the air, of gravity-free movement. In 2002 for instance, her work *Descent* filmed a tower building site at Canary Warf in London in a downwards movement through a misty air, subtly questioning the official discourses of economical and urban welfare.

Through her systematic testing of the film and photographic media's artistic potential, Yass' work simultaneously evokes and criticizes the work of pioneering artists, such as László Moholy-Nagy or Germaine Krull (*the Metal series*), whose stunning photographic views of industrial sites from the 1920s announced an aesthetic sensibility that privileged the unstable and the swift. In the context of Yass' work, *High Wire* is a remarkable piece: it is a complex meditation on the historic relationship between photography, film and modern architecture, on their mutual dependence, on "[their] complicity in the formation of ideologies and [their] ability to demystify these processes if used

transformatively to create art and installations."[24] It is a meditation about the reality of utopian aspirations, personal and collective, as explained by the artist:

> "*High Wire* is a dream of walking in the air, out into nothing. But it has an urban background and the high-rise buildings provide the frame and support. The dream of reaching the sky is also a modernist dream of cities in the air, inspired by a utopian belief in progress. Every time I see Didier turning back I remember hearing him shout, from where I was standing on another rooftop, 'C'est pas possible!' But something was possible, he returned safely. And something emerged from the actuality of the walk, which was a moment when reality became more of a dream than the dream itself."[26]

Figure 2. Catherine Yass, *High Wire*, 2008.
Commissioned by Artangel and Glasgow International Festival of Contemporary Art.
Image courtesy of Artangel.

The Red Road "extraordinary constellation of high-rise structures" has been a landmark of Glasgow's skyline since its completion in 1969.[24, 25] Much like London's, Glasgow's post-WWII reconstruction policy, known as the Bruce Plan, foresaw radical transformations of the entire city.[24] The city's slums, considered among the worst in Europe, as well as almost all other Victorian-period edifices would have been demolished to be replaced by skyscrapers; likewise, the city would be expanded by the construction of large-scale modernist high-rise districts. If much of the Bruce Plan was never realized, the Red Road district was, and became an epitome of the welfare state dealing with postwar housing problems in Glasgow. Designed by architect Sam Bunton, the ensemble comprised 1300 flats in eight steel-structure (asbestos-covered) high-rises which detained, at the time they were built (1964-1969), the record of being the highest residential buildings in Europe.[27] Despite the initial high expectations placed upon the scheme, already during the 1970s recession the place started to be known for antisocial crime. However, safety measures taken during the 1980s (such as intercoms, the installation of 24/7 concierge facilities with live CCTV surveillance) lead to increased resident safety and to remarkable decrease in the criminality level.

During the 2000s Glasgow became the main asylum-seeker in-taker after London, with many of the new residents housed in the Red Road towers.[27]

In 2003 the Glasgow Housing Association was created with the aim of transferring the estate from the public sector to this private association of owners, newly created for the purpose. In 2005 the Association announced its plans to regenerate the area by gradually demolishing the blocks - as renovation and maintenance costs were deemed too high - and by replacing them with about 600 low-rise buildings.[27] The demolitions have started in 2010 and are planned to finish in 2017, two of the blocks having been so far demolished. Recently, a plan to demolish five of the six remaining towers, as part of the 2014 Commonwealth Games opening ceremony, was cancelled following strong public opposition via an online petition which gathered more than 17000 signatures.[28] On the other hand, another petition, intended to save the remaining towers from demolition altogether started in February 2013 and has only gathered about 750 signatures so-far. The latter petitioners claim that "[replacing] the towers with new low rise housing would be both a waste of resources and show a pitiful lack of appreciation of Glasgow's modern heritage."[29]

Given Red Road's recent history, Artnagel's project *High Wire* could hardly have found a better site. The drama of the tightrope walk, with its fear-and-wonder ambivalence mirrors the drama of the generations of inhabitants of the site, the utopian beliefs placed upon modernist high-rise housing as well as their alleged failure. Drawing public attention towards a site scheduled for demolition, to all the social, economical, but also memorial and cultural issues it raises is very much in line with the London project, where *House* was possible because of the imminent demolition of the last remaining house of a Victorian row on Grove Road. Ironically enough, the two case studies seem paradoxical: in the London case, the traditional urban fabric of single-family houses has been demolished to make room for the modernist vision outlined by Patrick Abercrombie's plan ('green fingers' stretching through the city and collective housing in the shape of towers and bars); conversely, in the Glasgow case, a modernist planning achievement would be erased and replaced by more traditional schemes.

4. *Mobile Homestead*: journeys between self, family and community

Mike Kelley's 2013 *Mobile Homestead* is the first Artangel commission in the United States, in partnership with the Museum of Contemporary Art Detroit (MOCAD). It is also the artist's first public work ever as well as his first major work permanently installed in his native town.[30] The Detroit project is another example of Artangel's on-going interest in public art's potential of significantly intervening in problematic urban contexts. Detroit, declared bankrupt in 2013, has indeed been a struggling city during the decades following the dislocation of the automobile industry.[31] The work is a full-scale replica of the artist's childhood house, an ordinary ranch-type house from the 1950s. While the still extant original is located the Detroit suburb Westland, a working class neighborhood, the replica is installed in the city centre, on an empty plot adjoining the museum.[32, 33]*Mobile Homestead:* the first one records the travel of the house-front westward along Michigan Avenue to the original Kelley family home, while the second documentary records the return journey to MOCAD. A third video records the 'christening' ceremony of the work's mobile part. The documentaries successively bring forth Detroit's different districts, juxtaposing the traveling house to contrasting urban landscapes that alternate blight and decay with urban renewal spots, along a journey of over 60km.[32] Kelley's own words clearly describe this variety of urban places: "starting with the urban revitalization of the Woodward area and the urban blight that surrounds it and continuing through to the comparative wealth of Dearborn, the black slums of Inkster, and into the white working-class neighborhoods of Wayne and Westland."[32] The travelling frames alternate with interview scenes wherein Detroit inhabitants speak of their fortunes and misfortunes in a city of troubled recent history.

Figure 3. Mike Kelly, *Mobile Homestead*, 2013.
Commissioned by Artangel and the Museum of Contemporary Art Detroit (MOCAD).
Image courtesy of MOCAD.

"private rites of an aesthetic nature,""one always has to hide one's true desires and beliefs behind a façade of socially acceptable lies."[30] The cultural activities programmed to go on in the ground floor gallery are intended to respond to diverse initiatives coming from the Detroit community at large. Thus, in the words of R. Kennedy

> "[i]n its humanitarian aims, the house is one of the stranger entries in an art movement that has come to be known as social practice: work that blurs the lines separating sculpture, performance, activism and community organizing and fits uneasily into the gallery and museum world."[33]

Mike Kelley (1954 Detroit – 2012 Los Angeles) was a complex, multidisciplinary artist, whose work includes drawing, painting, sculpture, found objects assemblage, installation, video and performance, as well as musical creations; he was also highly articulated as a writer and wrote insightful texts about his own art and not only. He became known in the 1980s with a series of assemblages of found popular-craft objects such as crocheted and fabric toys.[30] *Mobile Homestead* is both special and consistent with the rest of his creations. It is special since it is a public work, "a living art work", "a sculpture activated by the community", in the context of an often inner-looking, biographical or pseudo-biographical oeuvre. It is at the same time consistent with his life-long investigation of personal experiences within a working class environment in Detroit, often via the repressed-memory-syndrome theory, according to which memory voids correspond to episodes of trauma that are thus being subconsciously repressed.[34] In 1995 for instance, Kelley made an architectural model titled *Educational Complex*, which arranged in a formal, apparently coherent composition the buildings wherein he was educated during his life, including his family home, leaving out those parts of buildings that he could not remember.[35] *Mobile Homestead* continues Kelley's investigations of the connections between architecture, personal formation and memory as well as raises, through its complex spatial and functional layering, new questions about the dynamic meanings of home in relation to the inner psyche, the family and the community. Simultaneously, it specifically addresses Detroit's urban history, not only highlighting urban discontinuities but also attempting to bridge them, as is discussed further.

5. Art[as]angel: questioning urban discontinuities

Having outlined the three case studies, this section develops the argument that, although installed in places thoroughly marked by discontinuity, the three art works refuse standing on any of the confronting sides while at the same time rendering these discontinuities evident. It is precisely by being situated - as angels do – in the very interval between pairs of (apparent) opposites, that such work has the power of both being socially relevant and maintaining its freedom and enduring significance as art.

5.1 Centre and periphery

Both *House* and *Mobile Homestead* are situated, at different levels, in-between 'centre' and 'periphery'. Rachel Whiteread's *House* stands in-between the art establishment and the avant-garde, revealing this dichotomy as artificial. On November 23, 1993 Whiteread won the Turner prize as the best British artist of the year. Her sculpture was acclaimed as "a strange and fantastical object which also amounts to one of the most extraordinary and imaginative public sculptures created by an English artist this century."[36] On the very same evening, an eccentric group, under the name of K Foundation, established a private fond, doubling the money amount of the Turner prize and declaring Whiteread the worst artist of the year. In their opinion *House* was "crap, junk," she was "accused of public disturbance, of adding a visual monstrosity to a neighborhood already plagued by concrete" while her defenders praised *House* for "highlighting, through the casting process, issues of negative space that recalled the demolition of housing in London's East End."[12, 37] Thus Whiteread's work was both acclaimed by the art establishment and rejected by pseudo-traditionalists (a rejection that often occurred with historic avant-garde artists, one might only think of the Impressionists, the Fauves, the Cubists, etc).

Outside the art-world, *House* bridged the supposed gap between a cultivated, elitist London-centre population and the poorer, blue-collar residents of the periphery. It was there in memory of the marginal, working-class culture, yet it took on a radically avant-garde, contemporary art language. On a populist tone, one local councilor, among the most furious opponents of House, attempted to instrument this artificial claiming saying that: "[t]his structure is a little entertainment for the gallery-going classes […]."[38] In response, it has been argued that it was insulting and patronizing to assume that simple people would fail to get the meanings of such work: "Whiteread's work has already transformed the way a lot of people who have never set foot in a gallery see the mundane street in which it stands. They may not know exactly what it means […] but […] it does seem to suggest that there are other aspects of life than the everyday struggle for survival."[39] Also, as extensively discussed by Doreen Massey, *House* stood between a 'white' Victorian period and a 'post-immigration', globalised East-End: by the absurdity of its physical appearance, this architectural sculpture uncovered the absurdity of xenophobic politics, quite present in an area with important immigrant communities. It stood as a bridge between a romantic fixation on the past and the crude exposing of past-as-past, without inclining towards any side, rather drawing attention to the universal issue of homelessness.[40]

Mobile Homestead's journeys to and from the original house in the Detroit suburb of Westland may also be understood as a critique of the centre-and-periphery usual hierarchic relationship. The westward trip of the white wooden ranch-style house along Michigan avenue is an allegory and reminder of the so-called 'white flight' that followed the racial riots in the late 1960s, when a large part of Detroit's white population migrated to the city's outskirts including Westland, leaving a predominantly Afro-American-population city centre circled by white-population suburbs.[32] In change, the *Homestead's* return journey to MOCAD, could be read as an attempted reversal of

urban sprawl and urban racial segregation, a gesture of re-integration. It could also be interpreted in the sense of Detroit's current attempts of regeneration by building-back density in central areas, in order to compensate for the extensive degree of abandonment of the building stock and the consequent problem of its management.[41] Looking quite out-of-place in Detroit's Downtown, the white worker house also criticizes and renders relative the usual high-culture – low culture hierarchy by introducing an ordinary home within the high-culture institutional context (MOCAD's yard). Moreover, the high-low culture hierarchy is also subtly subverted by *Mobile Homestead*'s passing by the so-called Greenfield Village, Henry Ford's 1929 open-air museum that groups historic American houses related to important American figures. Kelley's intention was for the *Mobile Homestead* to have a "parasitic relationship" with the latter, functioning "as a somewhat ironic comment on such grandiose notions of history."[32]

5.2 The single-family house and collective modernist ideals

While all three case-studies address the notion of urban homes, neither of them makes a claim either for 'traditional', pre-modern forms of urban dwelling, or for modernism's collective housing ideals. *House* as sculpture both owed its *raison d'être* to the creation of the Mile End Park and the Victorian terraced-houses demolition and, at the same time, exposed and questioned the *tabula rasa* approach of post-war planners. It stood in-between the bourgeois ideal of single-family home and the collective ideals of modernism, revealing them as either unfeasible as a universal solution or as bankrupt. Another revealing coincidence was that Sir Denis Lasdun's above-mentioned Keeling House was listed on the very same Turner-prize evening of November 23, 1993. As the towers were in a derelict state and abandoned, the listing news was met with similar, populist tones of rejection by some of the press, a similarity that appeared to suggest that "while contemporary art was unintelligible, modern architecture was uninhabitable."[39] Keeling house is nowadays listed, privatized, restored and, most likely, gentrified, while the Red Road social-housing modernist district is planned to be demolished and replaced by low rise housing.

Like *House, High Wire* does not make any claim for one urban paradigm or the other. The placelessness of the acrobat high in the air evidently evokes utopia. The extraordinary, daring character of the tightrope individual performance draws - when set in this particular urban context - a strong parallel with the high promises and expectations placed upon modern urban planning during its hey-days, in particular the performance of the Red Road towers of being the highest residential buildings in Europe at the time of their construction. The 2008 walk-on-wire happening and the accompanying film and video exhibition conceived by Catherine Yass draw public attention to the site, at a critical moment in its history; nevertheless, *High Wire* does not suggest how is the towers' performance as a dwelling environment to be assessed – rather, the work makes a bold statement that these iconic towers are important, that the utopian dream of housing large densities high in the air should not be simply dismissed and forgotten. Perhaps Didier Pasquette's unexpected scream *"C'est pas possible!"* as he decided he had to return backwards when he was not even halfway through, could be understood as a metaphoric negative verdict placed on the modernist urban utopia. But it could simultaneously be read the other way around: a claim that the dream of modernity as project of collective emancipation through innovative forms of urbanity should not be given up.

5.3 Public and private, memorial and critical

Nowadays, on the spot of *House*, two humble benches bearing no sign whatsoever, mark the place where it stood: "[a] field of voluntary amnesia", indeed.[12] *House* was a contemporary memorial which was literally made invisible because it was so critical, despite the fact that it did not take any sides as to the questions it opened. After *House*, Whiteread continued to make public sculptures in which the memorial and the critical blend, albeit never quite as contentiously as in *House,* such as

the *Holocaust memorial* in Vienna (2000), or the *Whitechapel Frieze* in East London (2012).[11] These later works are seemingly more successful in harnessing the critical in order to not overwhelm the memorial, perhaps more successful in becoming 'invisible' as in James Lingwood's reflection:

> "In his observations on the urban environment of the early 20th century, Robert Musil wrote that 'the most striking feature of monuments is that you do not notice them. There is nothing in the world as invisible as a monument... an invisibility which is the precondition of the vast proportion of contemporary civic art, the prerequisite for their commissioning and their survival. House, always envisaged as temporary, could not aspire to that condition. In time, over decades, it might have become invisible too. But time was the one thing Whiteread's work did not have.'"[20]

In Yass' gallery installation of *High Wire* too, critical and memorial intentions blend. The artist juxtaposes the black-and-white-negatives of the Red Road early-days photographs to the four screen renderings of the tightrope walk: while the former present the viewer with a frontal, carefully framed view of the towers 'in all their glory', the latter offer contrasting vertiginous, disquieting and unstable vistas, including images captured from Pasquette's head-camera; at the same time, the futile attempt of taking-in all the four different projection screens surrounding the viewer is further disorienting. Thus an official, glorious, public-image of the site is confronted with private, 'troubled' representations. Moreover, the line scratched by Yass on the frontal-view negative appears as a rather aggressive gesture, a subversive intrusion of the irrational in the apparent rationality of the official representation (or indeed ideology).

In *Mobile Homestead* the memorial-and-critical blend is strongly present in the work's spatial and functional organization: public and secret activities; open, above ground and closed, labyrinthine underground spaces; fix site and changing sites of the travelling part; evocative (replica of own family home) and detached (rooms are empty, no reminder of former family life). Further, this duality is present in Mike Kelley's skepticism about public art and, in spite of this, his generous gesture towards the local community. Kelley pessimistically asserted that "public art is a pleasure that is forced upon a public that, in most cases, finds no pleasure in it."[32] Making *Mobile Homestead* a public project was actually only a second choice for Kelley: his initial intention, to buy the original family house and use it for private aims could not be accomplished, as the current owner did not want to sell. He was especially pessimistic about the viability of the community-service project in a city with scarce resources and anticipated that "[t]he work could become just another ruin in a city full of ruins."[32] However, *Mobile Homestead* is so far a successful on-going project that embraces both the notion of art as public good and the notion of art as response to "personal desires and concerns", while maintaining a strict delineation between the two.[42] Finally, it could be said that Kelley's work both evokes and criticizes aesthetic programmes of the 1960s such as Pop Art, *Nouveau Realisme*, Arte Povera, Fluxus etc. that, in different ways, sought to blur the frontiers between 'art' (as private endeavor) and 'life' (as public action).

5. Conclusions

This article contributes to assessing the potential of critical public art in relation to contemporary urban development issues. It aims at enriching the context of architectural literature by introducing visual art discourses positioned at the interface between art and architecture. It is argued that the three studied cases - Rachel Whiteread's *House* (1993), Catherine Yass's *High Wire* (2008), Mike Kelley's *Mobile Homestead* (2013) - represent three specific moments in time and three particular places where art history unexpectedly and resonantly intersected urban history. The analysis positions the three art works firstly within an art historical context, secondly within an urban (planning) context and finally highlights how these works have the power not only of exposing unresolved urban tensions, but also of bridging gaps between dichotomous urban categories, indeed acting as agents of continuity in the city. It is argued that public art, when conceived from a critical

stance, may become a powerful actor in public space, a significant voice diagnosing urban planning and development within a certain area. Finally, the paper seeks to demonstrate that, although installed in contested urban sites, the three art works refuse taking sides. It is precisely by being situated in-between apparently dichotomic categories such as centre and periphery, 'bourgeois' ideals and collective, modernist ideals, public and private, memorial and critical - that the Artangel projects succeed in being socially relevant and at the same time maintaining their freedom and enduring significance as art.

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Influences of the Evolution in Constructive System in Maramures

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Abstract

This paper presents the authors' point of view of the folk wooden architecture from Maramureş and internal and external influences on the wooden architecture and also of woodworking techniques and tools. Improving techniques from processing wood weapons is the result of ten centuries of migrations between III - XII centuries which have brought artisans from many parts of Europe and Asia. The pinnacle of Roumanian wood architecture was reached in the XVIIIth century in Maramures county, being one of the finest "wood republic" as called by the poet Ioan Alexandrescu. Maramures is today one of the last wooden spurs of the continent. Starting with XVIIIth century, woodworking techniques have diversified and the hydraulic saws occupied a predominant role. Therefore the houses have reached the ideal measure and the wooden churches the absolute measure. In wooden architecture the nature of the used material and construction elements, that were to be made led to the construction techniques. Our investigation of the evolution of wooden folk architecture is using as tool the comparative analysis. The comparative research of folk architecture will reseat the assessments on the roumanian peasant crafstmen art of building, revealing similarities with the artisans' creation from other parts of the European continent.

Rezumat

Lucrarea de faţă prezintă punctul de vedere al autorilor asupra evoluţiei arhitecturii populare de lemn din Maramureş şi influenţele externe şi interne, asupra stilului arhitecturii de lemn maramureşene, cât şi asupra tehnicilor şi uneltelor de prelucrat lemnul. Perfecţionarea tehnicilor de prelucrare a lemnului este un rezultat al celor zece secole de migraţii, între secolele III si XII, care au adus cu sine meşteri din mai multe regiuni ale Europei şi Asiei. Apogeul perfecţiunii arhitecturii lemnului la români a fost atins în secolul al XVIII-lea în, ţinutul Maramureşului, el fiind una dintre cele mai frumoase "republici a lemnului" cum o denumea poetul Ioan Alexandru. Maramureşul este şi azi unul din ultimii pinteni de lemn ai continentului. Începând cu secolul al XVIII-lea tehnicile de prelucrare a lemnului se diversifică, iar un rol predominant îl ocupă joagărele hidraulice de mare productivitate. Astfel casele au ajuns la măsura ideală, iar bisericile de lemn la măsura absolută. In cadrul arhitecturii de lemn natura materialului utilizat şi elementele de construcţie care urmau a fi realizate au determinat tehnicile de construcţie. Cercetarea comparativa a arhitecturii populare va reaşeza cadrul aprecierilor cu privire la arta de a construi a meşterilor ţărani români, scoţând la iveală similitudini cu creaţia meşterilor din alte regiuni ale continentului european.

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Keywords: wooden architecture, woodworking techniques, wooden folk architecture, craftsmen.

1. Introduction

Wood is one of the materials which have shaped the history of the construction. The abundance of this material, especially in central and northern Europe, together with its resistance, elasticity, heat properties [1], and with its ability to be more easily processed, lead to the birth of a whole history of the architecture that is based on this material . Thus, by the early twentieth century in the regions mentioned above, wood architecture prevailed both in the church construction and the secular ones [1]. In the southern continent, due to intense deforestation began in ancient times, the landscape gradually turned into a rocky one, which is why this area made the transition to masonry architecture gradually and faster [1].

Countries that are worth mentioning as part of the wooden architecture spectrum are: Norway, Poland, Ukraine, Russia, Germany, Slovakia, Hungary and Romania. Between the architectures of these countries it can be observed the similarities derived from the history of collaboration between European peoples, of craftsmen migration and influences given by the history of territorial occupation over time. The remained legacy of this type of architecture, however, is quite small compared to the amount of existing wooden constructions until the early twentieth century. This is due to degradation, demolition or burning where great local conflicts are in the background, or on a large scale from Europe, or because of improper maintenance requirements relative to this material, or by their replacement due to the design changeregarding the construction and architectural preferences. Norway is one of the countries where one can find the oldest and best preserved wooden churches in Europe, one of them built in Fortun, with an average age of 900 years [1].

Constructive nature and aesthetic similarities between wooden buildings in Europe, especially the ecclesiastical ones, brought to light certain directions of influence and craftsmen migration, who have emerged between the thirteenth and fifteenth century. One of these begins from northern Europe to the south, namely Norway, Poland, Hungary, Romania and the other vertically descends in northwestern Germany to Slovakia and the Czech Republic, by turning to the east, i.e. towards Hungary and Romania (Figure 1). In either scenario it is easy to see that our country is geographically, the most southern of the wooden culture countries.

Obvious similarities, especially between the churches in Maramures and Transylvania with those from Norway and Sweden, consist in the form ofthe bell (the church in Aşchileul Mic or Fildu de Sus' church of the Gudbrandsdal Lom type as in Norway), the shape of the tower (striking similarities with Gudbrandsdal type churches), the walls and wooden tile roofs. These similarities emerge not only in the outside, but also in the design and organization of the interior space. An example would be the presence in front of the iconostasis of a little higher surface than the horizontal plane of the nave, called Sole. This symbolizes the rolled away stone from the tomb of Christ and in this place the priest reads the Gospel [1]. It should be noted though that in terms of system construction, wooden churches of Maramures are clearly distinguished from the rest of Europe and even from some churches in other parts of Transylvania.

The "hot" point in terms of wooden Romanian architecture is the Land of Maramures. It includes the villages in the southern part of inter-Carpathian basin of Maramures, located on the upper Tisza valley and extends on the current territory of Ukraine. In terms of architecture, there can be identified four major assemblies: the Iza Valley, Viseu Valley, Mara and Cosaului. In these areas the wood is not only a predominant element, but one that exists in the area of exclusivity. Villages, starting from the church and ending with household annexes are entirely built of wood, the most widely used species being the fir and oak, predominating trees in the region.

A most frequently worn custom in Europe is that of seeding a tree at the start of the wooden church construction, of the species that gives the strongest wood in the area. The "Lightning Tree" [1] as it was called, for Romanian was mostly the oak, with few exceptions including the holm and the lime tree. One of the remaining living examples is the oak next to the church of Vidra (Arad County), which has existed for over half a century [1].
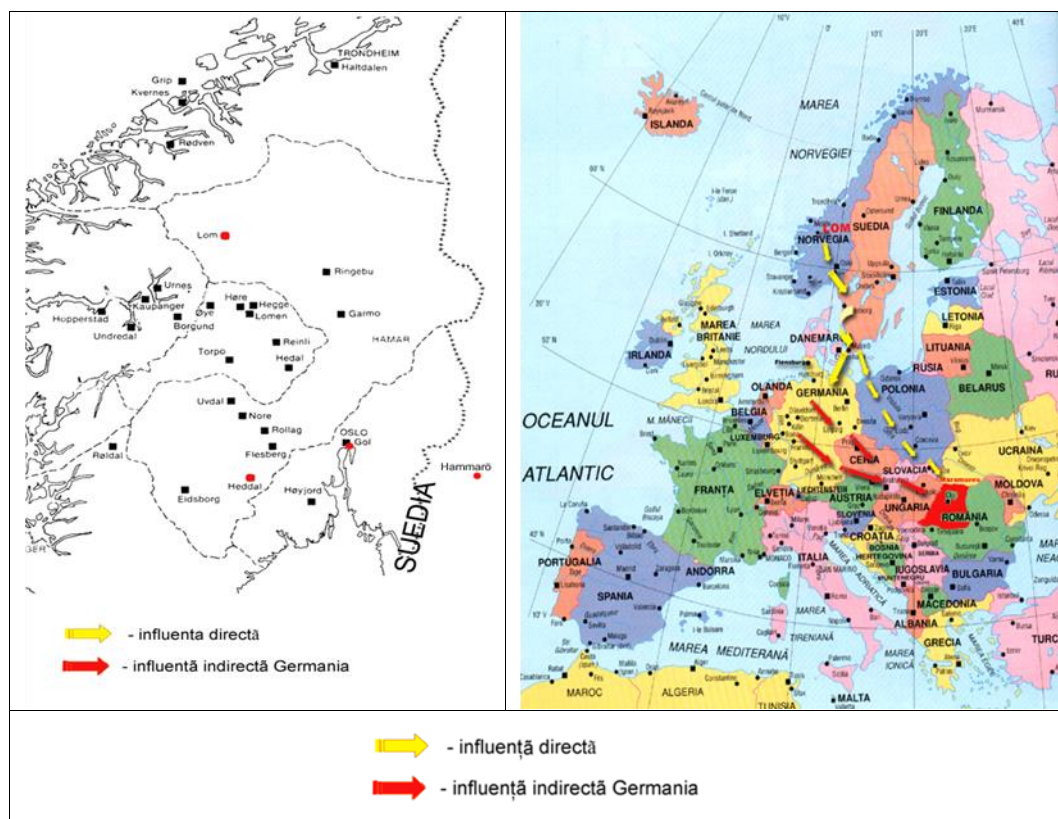

Figure.1 Influence system of the craftsman, possible influence path realized by the carpenter craftsman between the Scandinavian countries and Transylvania.

Wooden constructions in the cited European influence area covered a very wide range of functions, but wooden architecture that has most attracted the carpenters and which they put extra emphasis was that of housing and places of worship (churches).

2. Wooden constructions in Romania

2.1. History

Unlike most European cases, slow bureaucracy in Romania, punctuated by numerous bans and delays from authorities of the time, slowed the dating process at the beginning of wood culture period in Romania. We are especially talking about Transylvania, where wooden architecture is very present, and in this chapter, the churches have a honored role, both by number and as by quality and durability. So, amid the banning by the authorities to build stone churches, along with the few remaining church documents, through a process of deduction and careful calculation, experts attest the emergence of a building wooden churches culture around the year 1000. According to archaeologists, the beginnings are even earlier, the existance of churches plans similar to those of wooden, can be seen inside the Dăbâca fortress. But the most flourishing period in respect to the wooden churches construction was between XIV and XV century, and the area where

most of such construction concentrated, was Maramures. In this area, in the eighteenth century wooden Romanian architecture reaches its peak [2:169].

Placing Romania on the list of countries with tradition in wood craft, part of wood European culture, is based on the richness of raw materials that were available. It is understandable the inclination towards woodworking, given that in the late nineteenth century, Romania was covered by forests at a rate of about 70%. Despite massive deforestation, Romania still holds about 65% of the virgin forests in Europe [2:155]. Most wooden construction in Transylvania, are folk, so they were assigned to the architecture and popular culture, the heritage research being in time under the scrutiny of ethnologists, philologists and even geography researchers. Transylvania's wooden folk architecture it is studied since the late nineteenth century by the University of Cluj. With time, the development of science and research has been extended and undertaken by researchers including those in the field of art history.

Beyond structural similarities, proportions and quality of execution of the churches in Transylvania, southern Poland and the Ukraine, there is a degree of originality, quality and region-specific specifity, and inside Transylvania, the churches of Maramures have earned their reputation within the country and internationally, some of which are included in UNESCO. Among them we mention the church of Barsana (1390, Figure 3), Iza Meadows (Poienile Izei) church, the church of Săcălăşeni (1442), or the church of Ieud Deal (1364, Figure 2). Churches and general constructions of wood in Maramures and Oas Land (Ţara Oaşului) falls within traditional build-beams based on loops.

Civil constructions should not be ignored even if wooden churches made history and became a true tourism brand for the region and the whole country. The Maramures houses have an easily identifiable specific by the presence of four water roof with big height, which houses a porch with carved pillars, an archway built in struts combined system, that connects the pillars of the porch with a continuous arch. The builders in this region had a significant care for aesthetic details, the solar motives of rosettes being sculpted in the doors' frames and windows and also on the famous gates of Maramures.

Figure 2. The church from Ieud Dea

Figure 3. The church from Bârsana

2.2. Constructing techniques

First of all we have to mention there was a whole tradition of the selection, cutting and preservation of wood when building an edifice. All the advantages were exploited with high accuracy leading to the best quality and resistance for the wood: the type of tree, the cutting (autumn to winter for buildings, spring for ornaments), tree exposure to various influences weather (lightning, absence or presence of precipitation or air currents etc.) or destructive (cavities etc.).

Another thing worth mentioning is that most wooden constructions are build from foundation, not the foundation. The foundation was made of wood head, shape and size varied according to the type of construction and the land where it was to be placed. Sole construction placed on these heads , is designed to support the weight of the building and to generate and ensure stability. Rustic solid plinth build of planks that constitutes the sole is made of large planks, joined in right clasp.

Clasp is a semicircular recess, made 15-20 inches away from the end of a wooden plank,with circular section, useful for joints [3: 155, 738] (Figure 4). The distance had the role of preserving the beam ends, such as the straight and round clasp. Due to the disadvantage to bad weather exposure of remaining ends projecting outwardly, a great excuse to start building degradation it has subsequently developed a new form of splice loops, namely the by the end, the notch being made right at the end of the beam. We speak about swallow tail and German clasp. "German Clasp" were used in particular constructions containing hewn beams on at least two sides, realizing the joining at the end of the beam, but it was later cut off to give the walls a smoother look. Also, this type of joining was used in buildings structured with large beams from softwood and that appealed to high quality of processing. These techniques were used at the same time for period of time. With time and development of other techniques and especially other materials, clasps remained to be used only for construction of household annexes.

The walls were built using the technique of overlapping crowns, the one in wattle [1:27]. The first, known as "Blockbau system" is the oldest and most used in the wooden construction from Transylvania. The supporting structure consists of base, crown, pillars and struts and the interspaces were filled from pieces of wood of different shapes, many of them resulting from previous wood cut to achieve the main constructive elements of the building. This is the reason why this technique was used mainly because of its economical nature in relation to others. The filling material does not present specific preferences concerning the quality of the wood, but it is worth mentioning the superstition about hornbeam (considered the "hell wood") that led the obsessively avoidance of its use.
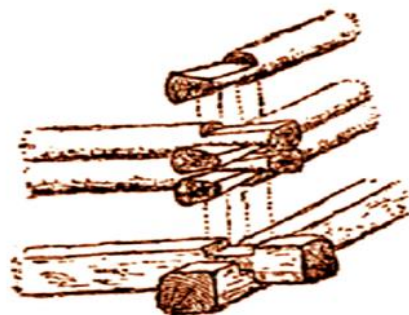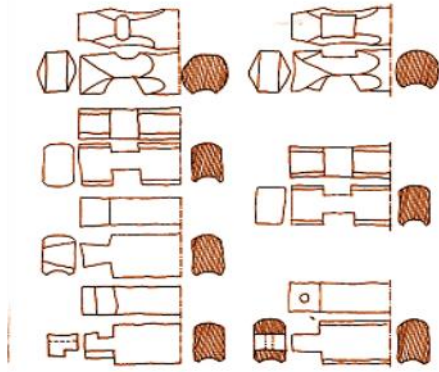

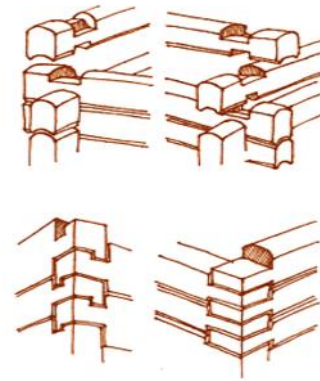Figure 4. Joining system through clasp

Figure 5. Transition system
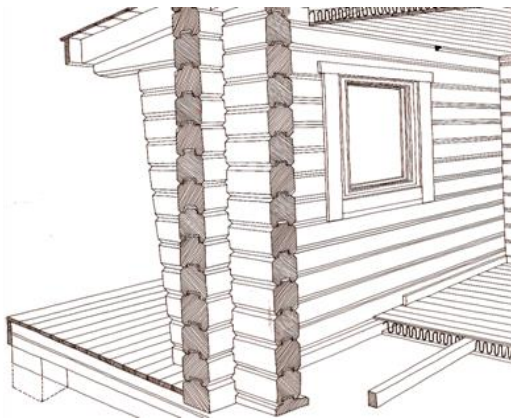

Figure 6. German clasp
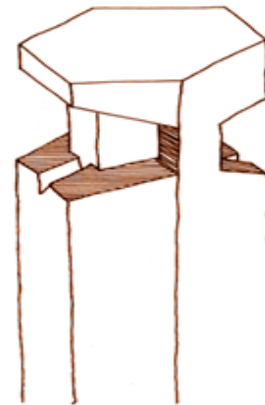

Figure 7. Blockbau System

Figure 8. Swallow-tailed clasp

Regarding the construction of bridges, the exposed (seeming) beams bridge technique is the oldest and most widely embraced, but the ceiling was also on the agenda, the latter being a technique that was used especially in the interwar period in the construction of city houses. The exposed beams bridge consists of a network of beams fixed to the crown of the building at equal distances. In buildings wider than 4 meters people used a main beam to take excess weight given by size construction on other beams, which otherwise risked to curl.

2.3. Characteristics Maramures wooden churches

In general terms, the construction principles of wooden architecture in Romania are the same as in European countries with a tradition of wood culture, the fundamental differences being in the category of the used system constructionand the cultural and religious specific in Transylvanian area, compared to other continental regions.

The first step towards Romanian local specific consists of combining the stylistic and constructive outcome of Gothic forms typical of the West and the Byzantine plan, as oriental influence specific to Orthodox Christian religion in Romania. Religious rites have always left their mark on all areas, but in terms of architecture they have led the development of styles, in case of Transylvania the above mentioned merger being one. In general, the construction of churches in Romania used the technique mentioned above, that of the joist system of roughly squared beams in overlapping crowns [2:155]. Church plans differ from one region to another. Thus, in Transylvania appears the

apse unhooked added to the vaulted ship and often appeared a porch either on the south side, or on the west [2:155]. In Moldova (Bucovina),at the rectangular main body plane were added apses on sideways, and in Wallachia (Muntenia) the main body of the building is unique, with entrance porch bordered by wooden pillars.

Roofs, as well as the towers, gain height as you move toward the north of the country. The covers are made in the majority of cases of shingles and various essences wood. While wooden churches in Transylvania have increasingly gained particular features, they have established separate style in Central and Northern Europe, such as the cant in the nave, the narthex and porch (where applicable), which has led to a double roof construction. The belfry has retained its Gothic influence in most cases. In addition to listing specific items that marked religious architecture in Transylvania, Maramures area in particular, small churches predominate but they provide monumental feeling, with interior and exterior decorations of great finesse, Byzantine and post-Byzantine painting, rich in symbols born from the merger of the specific patterns, religious beliefs and popular culture symbols.

It has always existed a well expressed worry to demarcate the sacred space of the profane or secular nature. Smooth clasps, high walls and well insulated are part of expressing this worry. Churches in this region stand out by tall and slender towers placed above the narthex. The interior is small but carefully prepared, with a balance that respects well determined proportions (balance respected at the external proportions, especially in the vertical plane).

This specific mix of Maramures area denotes the existence of a well-defined single framework within which an original style was born, recognized and appreciated internationally. In the pictures below you can see two of the examples that come to strengthen the aforementioned: the Sf. Arhangheli of Rogoz church (Figure 9) and Sf. Arhangheli of Surdesti church (Figure 10), both of Maramures.
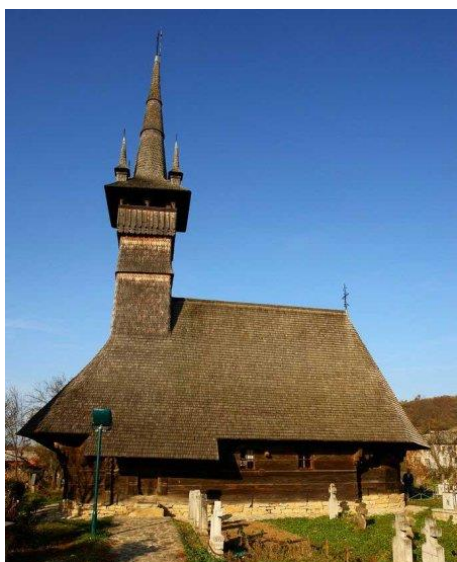

Figure 9. Sf.Arhangheli Church, Rogoz   Figure 10. Sf.Arhangheli Church, Șurdești

2.4. Civil architecture characteristics in Maramures

Maramures population lived on the plains of Mara, Cosău, Iza, Viseu and Tisa valleys, in villages strung along the water like beads on a string. Since the XIIIth century, Hungarian kings demanded taxes from Maramures communities and brought Saxon and Hungarian settlers to colonize these villages. They did this only in a few places, because they faced local tradition and the will of

freedom of the people, every village being ruled by a prince (*cneaz*) or *voivod*, supported by his people. Knowing the danger that nations will unite against theim,the Hungarian kings recognized acquired and inherited privileges of representatives "noble" calling them Nemes - nobles. Thus, in the early eighteenth century, from the population of about 15,000 Maramures, 85% were descendants of princely families.

Instead *nemeşii* agreed to union with the Church of Rome, their example taken over by "nations" and then the rest of the community. Maramures is the only Romanian province in which the transition was made without protest and coercion based on obedience to order inherited from elders [2:169-170]. In the village landscape, Nemes households differed from those of payers, the tax to officials - primarily through imposing gate. This was tall, three or five Sarantos (columns) with two wings filling the gap between them. Instead, the had one pivot wing. It had a wide opening and had to be easier, being made of slats or cleft. Secondly, the Nemes household differed the enclosing which completely avoided the gaze of outsiders, while the inside yard of porţâieş you could always watch the street. Households were identified by location to landforms, to church or to a bridge, and the secure milestone element was represented by the gate or Vranic (vranita) and not the house itself [2:170-171].

Also, in the eighteenth century, "line drawing" action was held, meaning the merging of household in systematized hearths, required by the Court of Vienna. However, Maramures villages were not reorganized, because they had optimaly developed giving the relief, with houses gathered along the valley between steep mountain slopes. Moreover, the population massively exchanging faith to Greek Catholic rite, received the right to build new community constructions: churches, schools, shops, pubs, town halls. Thus, this century was marked by peace and prosperity, creating a veritable "architectural revolution" –the houses reached the "ideal measure" and wooden churches to "absolute measure" [2:170-171].

In the same century, highly productive hydraulic saw develops and massive diffusion terpene birch. Thus, Maramures people had easy access to wood carving and used it to new construction. These have thick beams and sole, exterior walls made of apparently perfectly shaped beams, and open ceiling beams and pillars are massive. The roof rises even higher, the steep roof structure providing protection against precipitation and increasing building resistance in time. The solidity of material has left its mark on the image of architectural structures, covering them with an impressive immensity and made to preserve the oldest wooden building in Romania [2:181-185].

3. Wooden Churches of Maramures and from the rest of Europe: a comparative analysis

3.1. Overview

The gazebo is the expression of local peculiarity of the north-western Romania, and it sheltered the belfry and those who had the role to supervise. The gazebo is located at the top of the bell tower, balancing the composition in terms of gauge, a high tower without gazebo and considerable dimensions being met in Scandinavian churches such as the church in Hallingdal, Norway (1160).

Figure 11. Torpo Church, Hallingdal, Norway

In northern Germany, wooden churches without gazebo were built, such as the one in Flensburg, St. Nicholas Cathedral (1390, Figure 12). However, Flensburg Cathedral has similarities with Maramures churches, in the roof structure (sarpanta). It is about Rogoz church (1561) Budeşti church (1643, Figure 14), the Apşa de Jos church (1561) and even more recent than these churches such as the church of Şurdeşti (1721, Figure 10) and the church of Plopiş (1796, Figure 13). These similarities derive from solving the internal structure of the roof, which has specific rules for obtaining similar external form. There are also differences between Western European and Maramures churches, one of them consisting of different layout of tower structure octagon. This sequence of similarities and differences between the Scandinavian churches, those in central Europe and the Maramures, describe the time evolution of work technique and laid the foundation of determining the areas of migration and influence of craftsmen carpenters.

Churches' plans represent an important chapter in this analysis. Proceeding with such study, we can conclude that in Norway the plan is rectangular, like Romanian churches. Slavic Area, where we especially note Ukraine and Poland, mostly use longitudinal plane. As an exception to the Slavic space, Russia lent rectangular plan with three naves of Christian churches in the whole space of the East, so, much closer to the one from us. A consequence of geographical proximity between European regions with a highly developed timber culture was the collaboration between craftsmen carpenters. The analysis area of constructivo-style blend specially includes Maramures area, southern Ukraine, Hungary, Slovakia, southern Poland and southeastern Germany. One of the results of the analysis revealed, for example, the similarity between the plan and gauge of churches in Slovakia and Maramures [1:8-125]. In Romania, the rectangular plan of wooden ecclesiastical buildings was widely used in homes and farms [1:114].

The proportions used in wood construction are also important. In Romania, there has been a particular concern with regard to this, in particular in height. Almost all geometry behind these constructions is based on simple elements and known reports: square, rectangle, circle, golden number, etc. These reports were respected in homes, especially when it comes to roofing. There are already famous examples of 3:1 (Maramures, Apuseni Mountains) or 2:1 (Ciuc area, Bistrita) between the height of the roof and the walls. In the eighteenth century, Maramures housetops were built even highly, with the development of construction machinery of rafters [2:172].

Figure 12. Sf. Nicolae Church, Flensburg

Figure 13. Sf. Arhangheli Church, Plopiș

Figure 14. Sf. Nicolae Church, Budești

What many of the churches mentioned above share is durability. This quality comes with builders' experience and taking account of the similarity of European churches on a so vast area, with chronological perspective in terms of construction years of each church building, we can see that the Scandinavian craftsmen carpenters began to work and refine the art of wooden churches builders somewhere around the years 1000-1100, to give birth to churches in Gol - Hallingdal (1200) and Lom (1220), Norway. Using these examples, in comparison with the German, it can be seen that there is a gap of about 50 years of experience between Scandinavian and German craftsmen, then begining the migration, whose geographical parameters I mentioned in the introduction to this work. Interesting to see is the detail on roofs of Norwegian churches mentioned above, as being high and steep like stone Gothic churches in Germany. Whatever the details, it can be concluded that the European craftsmen carpenter elite was formed by skilled craftsmen in the construction of churches, given the level of detailed design and decor, along with developments in

technology to achieve over time.

3.2. The evolution of Maramures wooden churches and houses arhitecture

Churches that have been preserved until today, part of the seventeenth and eighteenth centuries Maramures culture, reveal the existence at the time of two great families of carpenters or two schools in the area, which ensured a succession of carpenters specialized in wooden churches construction: one from Salistea de Jos (Nyzhnie Selyshche) and mainly covering parishes in the plains and low hills surrounding Hustu, and the other, answering needs of parishes in southern Maramures, with residence, most likely in one of Iza valley villages below. Starting from the same elements and features of each church it was found the existence of sone itineraries, of larger and often smaller dimmension, with great masters having their name often marked, in recognition of the value generated by them. Artistic sophistication expressed by extensive compositions, carved portals, often served to mark and celebrate the high status of each profession. Beyond the complexity and beauty of carpenters' creation, they also had full responsibility and burden of the construction, a reason more to bring them recognition. The Latin inscriptions on the Maramures houses are noteworthy, but they were written by Greek Catholic priests of that time. As a sign of recognition, these inscriptions contained their names, in addition to the owner or master carpenter [2:174].

Figure 15. Detail, grinder - „sign of the great craftsman"

Maramures people knew therefore to adapt to the changes brought by the new socio-political and cultural conditions and their constructions and developments reflected local needs. Thus began a shift from old to new style, through the disappearance of the first and the appearance of others driven by the advent of technology The generated forms were almost always framed in the expression of the desire for freedom, affirmation and love for the property of local people. The first submitted to changes were the patches of land under the hands of local nobility, who were able to keep a fair balance between spirituality (Eastern-rite Christianity) and noble status of Western origin.

So we can say that in the background / essence, architectural expression has its specific local features well anchored, in case of Transylvania we speak of cultural religious influences, the region being situated on the border between East and West, without however detached from the essential nature of universal culture of wood, by working and migration of large master carpenter specializing in the construction of places of worship. Theis caused gradual improvement of construction techniques compared with time evolution of the profession, but also with local needs and resources.

In Western countries there is a tendency to greatness, with ample spaces and very well highlighted details, and our north relies on the abundance of symbols and small spaces, with a hint of humility specific to our traditional culture, in relation to the peculiar elements to local religion, the most obvious preserved thing in common being the height of the towers. From this point of view, we can

observe an inverse proportionality between the tower height and size of buildings bodies, churches in the north (Norway, Sweden), and those in central Europe (Germany, Slovakia) having massive buildings and smaller towers, discrete. On the other hand, Transylvanian churches buildings have relatively small buildings while the towers are tall and steep.

A reference point on the map of European wooden church buildings is the church of Săpânța (Fig. 17), Maramures County. It is the largest wooden church in the world, and out of the 78 meters high that it measures, only 54 meters belong to the tower.

Figure 16. The church from Săpânța

A less known detail is linked to the motivation of building churches with the highest towers in Romania: the political regime in Transylvania did not allow rights for locals, one ban was consisting of building churches on the crest of the hills, to deprive them of the role of landmark; Romanians response to this was cant towers to keep alive as the symbol and landmark / reference.

4. Conclusions

The value of the wooden churches are uncontested, it is a proof of recognition that many of these constructions are already on the list of UNESCO. The way in which they were built, the used architecture, the style and the influences that were staying at the grounds of birth of these monuments and important points not just in the history of architecture, but in the history Europe taken as a whole and separately for each country. Proof exists of a strong relationship regarding the technique of processing the wood on European level, without impairing the national specific for each space that enters in the area of exercise of this domain. The key of any resemblance or even similarity at such scale is the information, and until recently the existence of consecrated communication tools know today were equal to zero, the circulation of those who withheld the information remains the only viable explanation.

If a profession, in which the major part of its existence did not have other support than the one of exercise through work, talent and passing over the information from father to son, was able to put on the map such similarity lines and interactions between divers states of the old continent, but also

to give way and originality to each society of these states. For us it remains only to study and to learn how could these principles be applied today, in a moment where the speed and the circulation quality of the information tends to unite us in a way that throws us question marks regarding the way in the health of our society is evolving, taking it separately of under the aspect of globalization.

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