Revitalization strategy of urban spaces through a holistic vision – case study Timisoara, Romania

Branea Ana-Maria, Radoslav Radu, Gaman Marius Stelian and Morar Tudor

Abstract— The recentralization of historical centres is an important matter concerning the lifelines of an urban settlement especially in this moment of profound structural crisis.

Without a well made strategy, its profound understanding by the local authorities and its coherent application, the city's public urban areas may collapse.

The centralizing strategy applied in the case of the city of Timisoara, Romania, to the central areas took place on three levels, namely revitalize-restructure-renovation in this order by using the potential of the existing students as an engine of development. The revitalization itself took place on another three levels meaning Re-Functionalizing of buildings, Re-Creating Public Spaces and Re-Orienting Events.

Keywords—Public Space, Re-function, Renovation, Urban Space

I. INTRODUCTION

Due to the geopolitical changes, which generated both economical and social changes city central areas are the most vulnerable urban spaces. This vulnerability occurs directly through neglect and abandonment of the central areas, or indirectly as a consequence of the territorial urbanization in any point of the region, by decentralizing living, commerce and office areas.

Without a well made recentralizing strategy, a good understanding of this strategy by the local communities and its coherent application, the historical city area may collapse through "Balkanizing" [1] or through the phenomenon of deserting this area. This might happen through the closing down of local commerce, abusive taking over of the public space or the loss of enjoyment of the street-life and having this area taken over by the poorest people in town. As a sum this negative effects can lead to the loss of the city's centrality.

The first action of taking over the public space started with temporal, legal or illegal constructions which afterwards tend to become permanent (in Cairo over 60% of the buildings are illegal-according to data from the international Biennale of Architecture from Venice 2006). This slowly leads to the loss of the initial identity of the central area. The possible "balkanization" scenario of the central "Cetate" area from Timisoara is shown figure 1 and 2. [2]



Fig.1 – Public space in Timișoara – West European Culture 1750- 2005



Fig.2 – Public space in Timişoara — Hypothesis for the

Oriental culture 2025

A. Defining the concepts of urban and public space

After a serious study, the crisis provoked by the geopolitical changes shows itself as a continuous incongruity between the physical unit, represented by the urban space (US), public space (PS) along with its own characteristics, and the social unit represented by the human being with its culture and its characteristics, [3] which makes our role, as space modellers, to be one of continuous harmonization or imbalance of these two units whatever the role we choose to play. We refer to this kind of relation as a "behavioural space/site" [4]. By modifying the physical unit we affect the social unit too and vice versa. There are moments during a cities' development when the continuous harmonization process is interrupted by groups of interests which desire an abrupt change in behaviour. These moments due to the geopolitical changes, as we already mentioned, are materialized by ideological changes or by the changing of the administration. As the social unit change (the mentality) is hard to realize in a relatively short time, it is usually proposed to change the physical unit, in which us, the spatial modellers, take the lead. From this physical unit, the most rapid change in the transition periods can take place in the public space segment, which is administrated by the new and vulnerable politic power, an action which is presumed to lead to the change of human behaviour (in this period the parks, public markets are lend or sold cheap for gas stations, commercial spaces, which are the symbol of the new era, etc.)

In order to proceed we must clarify the urban and public space concept, as follows:

The urban space (US) is defined as the sum of all types of spaces between the cities' buildings [5].

The public space (PS) and the private space (pS) are defined as an urban space (US) to which the characteristics of property, access, and control are added [3].The public space must be understood as part of a network of squares, streets, parks, etcetera.

The typology of urban open spaces can be distinctly differentiated depending on several aspects. It can be divided into domestic, neighbourhood, and civic. The last category subdivides further into commercial, health and educational, transport and recreational categories. [6]

The direct attacks towards the central historical area (at both the physical and the social unit level) are doubled by the indirect attacks of the developers who build where the land is cheaper, therefore at large distances from the centre. This phenomenon is called by Francesco Indovina [7] as the "territory's' metropolization" and it has one rule, maximizing the landowners' profits with the aid of developers which apply for financial aid. The phenomenon has started 100 years ago, with housing, office and commerce buildings and therefore it deeply affects mostly the central area of a city.

Starting with the industrial revolution, the human development has concentrated in urban areas to the prejudice of rural areas, reaching the territory's urbanization in each point of the region, determining the merger between the rural and the urban environment on some of their characteristics.

Thus a decentralising phenomenon of housing, commerce and offices occurred which led to the emerging of a new urban development pattern- the fragmented one.

Through this kind of operation the spaces' self-limiting and the control of the community were abandoned, things that stood as absolute rules of human development through history.

We presented these theoretical points in order to prove that according to this philosophy, in this period "the centralization of old cities" can no longer be the only priority or approach to set in motion a city's economy and stop its sprawl type development. [8].

B. Historical centres are Europe's engines of research, innovation and economic development

Considering these effects, the danger is the loss of the cities' identity, given by their historical centres' identity, through their globalization. In response to the danger of the destruction of European city centres, in 2007 appeared "The Leipzig Chart for Durable European Cities", a European Community act, in which one of the main goals is to attract investments and activities in the cities centres through the citizens' participation. Another goal is to put an end to the limitless extension of the cities. Hence an official act recognizes that the historical centres are Europe's research, innovation, and economical development engines.

Urban centres accept growth and change as natural phenomena of their existence being at each stage of their development places of exchange not only commercial, but mostly of ideas, playing the role of old bazaars.[9]

There are two attitudes regarding the danger we already mentioned, a "passive" one of nostalgia and passiveness regarding the past and an "active" one dominated by the idea of giving the historical centre the most important place, the place of material exchange and social contact. Our proposal falls within the second attitude.

C. Urban development models

It is necessary in order to offer the premises for an historical area recentralizing strategy to explain the essential elements of the three big patterns of urban development, the "service city", the "entrepreneurial city" and the "sustainable city", with the advantages that help our strategy.

The first model, the "service city", bases its strategy on tourism, culture, museums, entertainment, restoration and commerce development. Unfortunately few towns in Romania can strictly apply this pattern, because of an essential element, the number of tourists, is insignificant. Thus Romania in 2007 had 6.971.925 tourists of who 1.550.957 were foreigners, and in the West Region, in which Timisoara is situated, there were 674.554 tourists of who 160.463 were foreigners (data from the National Institute of Statistics Timis- 2008) in comparison with Pisa where there were 5,5 million tourists or the millions of tourists in Cairo in 2005. The Global Tourism Organization prognosis for a rise in tourists number for the 1995-2020 period is only 4,6%, compared to Barcelona's where the

prediction is 153% for tourists and an increase of 234% in the number of museum visitors for the same period of time. In Romania, bearing in mind the proportions, the Sibiu area is the only case where this model can be applied.

It should be noted that, according to this model, it is necessary for Romanian cities to reach a labour occupation level in the services area to over 80%, same as other European cities. By to this criterion, our country's cities situation is similar to Istanbul's, where only 53% work in the service area (data for cities beyond Romanian borders come from the Venetian Biennale in 2006).

The second model, the entrepreneurial one, bases its strategy on the entrepreneurial culture of using universities, ideas, talents for creating top technologies and applying innovation. Although our main university cities are poorly graded in the global research, they have a great advantage due to the great number of students. In Timisoara for example the proportion between the students and the locals is as high as 15%, where as in a city like Los Angeles it is 5,8%, in Milan 3,8% (data from the Venice Biennale). This great percentage of students can be a substitute for tourists. This can occur because 50% of the students are form other cities and are extremely active, financial and social dynamic, and can revitalize the central areas, unless the university campuses are moved outside the city.

The third model, the sustainability (holistic) one bases its strategy upon a balanced development of all economical, ecological and social criteria. This model proposes avoiding the excessive one way development and tries to avoid the social and ecological unbalances which result from an exclusively economical development, be it based on services or entrepreneurs. This should be a city's main management objective.

From the beginning we specify that the escape from our historical centred cities' current crisis can be done more easily in cities which have universities and can use students as tourists to bring life to the historical centres binding the three models.

This strategy was formulated by Assist. Prof. Dr. Arch. Radu Radoslav while he was director of the Urbanism Department in the Timisoara City Hall (1998-2006) through the Development scenario for the metropolitan area of Timisoara. [2] In the following years steps have been taken to set it into motion. Phase one was applying it on the central area of Timisoara, which has already been accomplished. By revitalizing a citys' historical centre its entire economical development is encouraged. While this is a huge step forward, one centre no matter how lively and attractive it may be it cannot stand by its self let alone hold an entire city. Phase two consists of establishing a support network for the "Cetate" centre by creating community public spaces, which will be detailed later on.

II. HOLISTIC STRATEGY FOR CREATING PUBLIC SPACES

A. Phase one - revitalizing historical central areas

The holistic strategy for recentralizing the "Historic City" is

performed on three levels, manly "revitalization – restructuralization - renovation", exactly in this order.

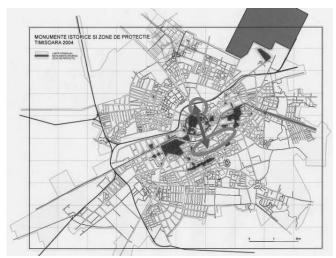


Fig. 3 – Revitalization – Pedestrian link between the existing University Campus – proposed University Campus and "Cetate"



Fig. 4 – Promenade created on the route that links the existing Student Campus with "Cetate"



Fig. 5 Public square designed in the new Student Campus at

the North of "Cetate"



Fig. 6 Proposal for an Architecture Faculty and its public square in the "Cetate" neighbourhood

The revitalization, also, is performed in three parts:

1. Re-functioning of Buildings.

(Operation done with private funds) It is done by transforming the inhabited spaces on the ground-floor into coffee-shops, pubs, clubs and beer-houses for the young.

2. Re-making of Public Spaces

(Operation done with public funds)It is done by gradually banning cars from public spaces along with remaking the urban infrastructure, by making a terrace network and by placing artistic works and restoring existent one.

3. Re-orienting Artistic Events

(Operation done with a public-private partnership)It is done through the cooperation of the local administration and the small businesses. This operation is absolutely necessary in order that small businesses resist the attacks of big commercial chains, which have fabulous funds reserved for artistic events inside malls, and which aspire to the public life of the historical centres. So, on the public space festivals, carnivals, scenes for mobile theatres, music shows should be organised.

According to the sustainability pattern previously mentioned it clearly results that by applying only one specific revitalizing strategy of for the "historic city" isn't enough. It must be bared in mind a holistic strategy, complex, which firstly must blend the strategy for a historical city with other strategies such as the ones for 'the mobility city", [10] "the university city", "the commercial city", "the services city", "the residential community city", "the "green city", "the logistics centres city", etc.

So, if we analyze "the commerce city" the new MALL (the symbol of the new society) must be put in the proximity of the historical centre in order to communicate with the old commercial spaces in the central area and to sustain themselves mutually (in Timisoara the former industrial areas or the new areas are favourable for such a placement).

If we analyze the "historic city" the whole central area must be referred to as an "OPEN SPACE MALL" (Fig. 3). In these commercial places the entertainment experience is promoted where adventure blends with the ecstasy of pleasures and with maintaining personal security. Thus appeared the "shopentertainment" where fun is sold next to restaurants, children's entertainment, high tech digital displays, cinemas, fitness centres. All of these create a tie between products sales and amusement, temporarily exhibitions and artistic events.

In order that small merchants in historic areas resist to the multinational chains pressure it is necessary of the local administration to offer them financial facilities such as: no taxes and dues for 10 years, reductions for fees for merchants who open terraces, micro financing for 10 years, interdiction to put banks in the pedestrian areas, etc.

If we analyze the "University City" the university campus must be placed in the historic centre or in its immediate proximity for the students (who are the most active) to be able to walk through the central area and use its facilities.

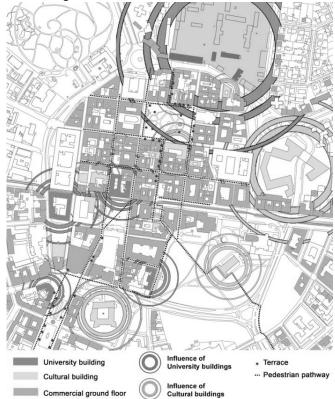


Fig. 7 Commercial ground floors and terraces in "Cetate" centre

Only through the overlapping of these strategies of maintaining and relocating the buildings of various universities in "Cetate", Architecture Faculty at the south west, and by building a new university campus at the north of the historical centre, on the old Oituz military barrack, alongside the existing 1960 Campus at the south of "Cetate", can the historical area be reactivated. By the step by step emergence of higher education institutions in the place of military ones, a public square instead of a highly guarded premise the pedestrian inflow of the "Cetate" centre was permitted, which sent a clear message to the business owners that opened terraces, pubs, coffee houses on these routes. (Fig. 4) (Fig. 5) (Fig. 6) (Fig. 7).

The next step of our demonstration is defining the concepts of centre, [9] network of centres, historical centre. A centre can be formed of a public square and a promenade in accordance with the dimension of the spatial unit.

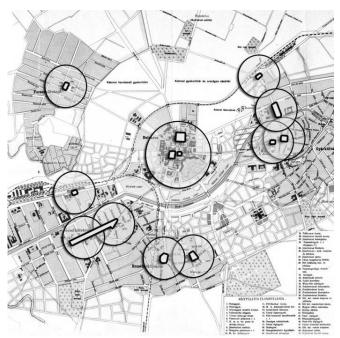


Fig. 8 – Public spaces in Timişoara 1890



Fig. 9 – Public spaces in Timişoara 2005

A city of 60,000 inhabitants needs a main centre and probably 6 secondary ones for the pertaining communities. Cities of 60,000 to 350,000 inhabitants need a network of centres, of which one is probably centrally located, 6 neighbourhood centres and 36 community ones for support. Cities of more than 350,000 inhabitants need at least two main centres and a network of secondary and community ones which all support the main one. If these centres are historical it is a plus, if not we have to create that "something" that can generate a clear identity of the city.

An analysis of the historical evolution of Timisoara's centres (Public Spaces) shows that their number has not increased since 1890 (Fig. 8) till 2005 (Fig. 9) even though the population increased from 75.000 to 350.000.

Recentralizing the life for the entire city cannot be done simply by recentralizing the historical centre "Cetate". Therefore in proposals of the Research Group for Sustainable Development, Architecture Faculty, "Politehnica" University of Timisoara (the Master of Urbanism dissertation papers 2008-2009 and 2009-2010 and the contracts with the local administration of Timisoara) the city was divided into about 112 territorial units of reference, of which over 70 are residential. Being well defined major traffic routes these areas have the potential of housing vibrant local centres and play an important role in formulating future strategies for urban development. The suggested communities are distinguished by an uniform urban landscape, a consistent historic evolution in specific periods, a homogenous population, uniform land use patterns a similar legal status, unitary zoning and density regulations. [11]

The study for each of these communities was carried out on over 70 levels, of which we mention density, facilities, residential typology, [12] but also whether they have centres.

The areas were chosen so that no major road routes would cross these Basic Spatial Units (USB), which could cause accidents in the two main disadvantaged categories (the young or elderly).

The analysis for each 5.000-10.000 inhabitant USB was carried out on both physical and demographical criteria. It was thus discovered that there are many neighborhoods, USBs, with a density lower than 3 units per sqkm, where as many European norms require for an efficient resource management a minimum of 30 units per sqkm for single houses and about 100 units per sqkm for collective housing.

Only in the communities that reach these densities can kindergartens, schools with sports facilities, indoor swimming pools and parks function. The above mentioned ideas were the result of studies carried out by the Research Group for Sustainable Development Timisoara (GCDDT) from the Architecture Faculty, "Politehnica" University of Timisora, for the Timiosara City Hall. These studies dealt with sports facilities and densification and confirmed that at the base of any well functioning city lay its communities. This is why this study deals with an essential criterion namely that such a Basic Spatial Unit should have its own center with its own public space creating a second degree network that would support the main center the "Cetate –Mall".

It was thus proven that in 2010 there are only 3 communities with partially functional centres (all of which are historical, one being "Cetate"), and a small number of communities with potential centres. In these studies there were offered solutions for 30 such communities' centres of different

typologies – block of flats areas, single houses, historical areas, and etcetera. (Fig 10)

To create a network of support centres for "Cetate" a series of pedestrian pathways were proposed which contain each community's promenade converging on "Cetate" but also interconnect. This is the only way the whole "Cetate" neighbourhood can become a centre, a pedestrian public space, fit for the size of the city. (Fig. 10)

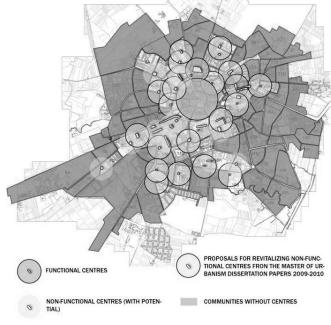


Fig. 10 Community centres 2010

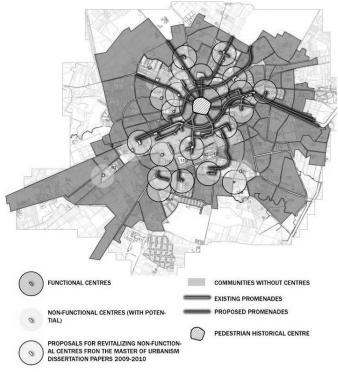


Fig. 11 Proposed community centres and promenades

The study's aim is to draw the attention of the local administration not to the city's shortcomings but to its needs and potential. It does not claim of offering the exact and only solution for each community but only a guideline for approaching such a project and an input from the inhabitants interviewed. It was therefore attempted to cover as wide a range of communities as possible. The following three examples are a sample of the variety of the study covering everything from single housing USB's to historical or collective housing neighbourhoods. (Fig.12) (Fig.13) (Fig.14)



Fig. 12 Single housing USB public space - Sudului



Fig. 13 Historical neighbourhood USB public space - Fabric

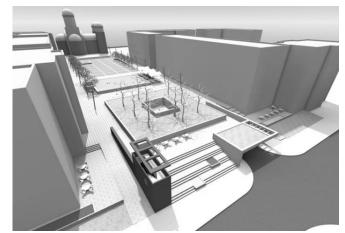


Fig. 14 Collective housing USB Public space - Aradului



Fig. 15 Balkanization of the public space in the Student campus

The strategy applied to revitalize Timisora's main centre, the historical neighbourhood "Cetate", which has proven its success, can be downscaled and adapted to fit any community public space. It increases liveability and attraction through a perpetual cycle of users drawn by other users.

This applies to almost all of Timisoras USBs however not to the Student Campus. It already has more activity and therefore attraction than it can handle creating a discrepancy between its state and its function as a place for learning and rest.

Being the densest area in the city, with over 300 units per sqkm, more than three times the European recommendation, it presents a unique allure to the small business and real-estate communities. Starting from only a few shops 10 years ago the commercial sqm per inhabitant escalated in the past 4 years. What was feared for the "Cetare" centre, its Balkanization, and was thankfully avoided, occurred instead in the Student Campus. First private then public spaces, both squares and green areas, were gradually taken over by illegal buildings, inadequately built, sometimes dangerous for the buildings around, and with inappropriate functions for the character of the area. (Fig. 15) If the "Cetate" centre was aimed at becoming an open space mall the Student Campus became a continuous food court and night club all in one. If in most USB activity would bring the inhabitants together having a major role in forming the community in this case it prevents it from coagulating.

Public space generally has physical and functional conditions which influence social interaction, comfort and security which attract people to the settings. The physical and functional qualities of public space are related to physical amenities, the activities, accessibility conditions, and the surrounding land land-use that support the activities there. [14]

The development of positive public spaces requires active community participation; a clear redesign program based on people needs; an appropriate management programs to coordinate attractive events and activities in the surrounding area. The main goal is peoples' satisfaction in Public spaces. [14]

Undoubtedly all inhabitants feel the discrepancies in function and at one time or another are disturbed by the commotion but none are ready or willing to give up the advantages of living in a 24/7 activity filled life.

If so far the parallel between the "Cetate" centre and the Student Campus has only revealed opposite pole differences the solution comes in the same form, the symbol of capitalism, the MALL.

In the first case placing it near the historical centre drew activity by encouraging people to cross and use its amenities. In the second case it will draw the activity away, organize, centre, regulate, monitor it freeing up the space previously illegally occupied.

This strategy is built around the completion of the refunctioning of a slaughter house, built in the 1900s, an architectural historical monument, into a mall at the South West of the Student campus. Even though the work was seized due to the current economical crisis, there is no doubt it will restart as soon as possible, as the area's potential is unparalleled in the city. (Fig. 16)

As detailed in the strategy to revitalize the historical centre the resources available to the private sector, mammoth commercial chains, to organize events and mix shopping with entertainment, excitement and adventure cannot be matched by the small business owner. All the activity, commotion, will be drawn from the Student campus but at the same time kept at a reasonable proximity as to be mutually beneficial. As opposed to a revitalizing strategy the local administration should not intervene and let the small inappropriate and illegally built businesses go bankrupt. Thus through a cleansing strategy all the land abusively taken over could be reclaimed at a reasonable price as opposed to the same action being attempted at this moment when the businesses are unchallenged and therefore in full power.

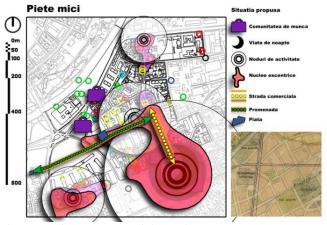


Fig. 16 Student campus activity nodes

The reclaimed land can be used to mend some of the other problems of the Student campus, namely insufficient housing and parking spaces, total lack of public spaces for meeting and interacting, cultural facilities, disuse of green areas due to their residual character.

We propose a three phase strategy to reach these goals the first being reclaiming the land at a reasonably slow pace, as it becomes available as not to artificially increase its price.

The second phase would be completing the built fund with inserts in to the urban pattern, left unfinished since the Romanian 1989 Revolution. This will be three dorms, a Student Cultural House and a new proposal for multistory parking unit with a commercial ground floor.

Once the parking complex is completed, and the ground level parking no longer necessary, phase three can commence redesigning the open public space into a mixture of green areas and public squares all aimed at encouraging interaction, communication and the forming of a community.

III. CONCLUSION

The holistic strategy of revitalizing a city's public spaces must rely on a balanced development of all the economical, ecological and social criteria. Our approach proposes to avoid the excessive one way development and social and ecological unbalances resulted by focus only on the economical development, be it based on service or entrepreneurs. This should be a major objective in any city management program.

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