Budapest University of Technology and Economics
Scientific Student conference (TDK)

Skyscrapers as a vertical methodology in the urban

Adaptability.

An approach for designing an adaptable skyscraper.

By
Anas Nasser
Supervisor
Szabo Arpad

Abstract:
1904 Imre Steindl built the gothic revival, baroque, renaissance and the largest building in Budapest, which is the governmental Parliament. The following year 1905 Miklos Ybl built the neoclassical St. Stephen's Basilica, which is the most important religious house of god in the country. The story of these two buildings has more meaning than the great architectural form, they are equally high with 96 meters (314 ft.), and they are the highest two buildings in the Hungarian capital. The equality in the high-rise of these massive blocks came to ensure people that, both government and religion are equal in this country, and nothing is more important. These establishments carried this message for over a century. Until 2021 they will keep dominating the urban environment with their height, their unique architectural form, and their functional value, making sure they are the sole dominance in Budapest silhouette. in 2017 against the ban of having taller buildings than the ones mentioned earlier, the Hungarian government broke that rule, giving permission to the newest tallest tower ever in the country, and the most innovative skyscraper in central Europe, which is the new headquarters for the MOL group (one of the most important companies in Hungary on the international level for gas and oil). This change was occurring next to Dombóvári út, on the Buda side bank of the Danube, and supposedly will finish in 2021, deleting the most charming city promise of the dominant equality between religion and politics. This building will be slightly far away from the city center. However, this authoritative project will be visible to people from different locations, bossing all the building on the Danube River, and printing a new style regarding its architectural form. The effect of this building might seem normal if you look at it as unite, but on the urban environment in this city generally, and the surrounding area specifically, it will have a huge impact. Since this change will affect the shape of the city to more modernity, this paper will argue how this change will affect the urban fabric, and how will it respond to the urban needs we are having at the moment. Whether it will be an asset or it will be a wrong detour in the way of a better shape of the city. Looking into the case as if this shift in the urban forms, the urban fabric, and the whole city environment, will adapt to what the city and people's economic, cultural and social needs. Covering some theoretical approaches regarding the changing in the urban forms, the urban fabric and the whole concept of how the city adapt to the demands we need. Moreover, the research will imply the most efficient way to create an adaptable skyscraper, to make sure that we get the most benefit from such a massive project. Taking some interesting cases in several countries, where such an experience happened or was banned, to learn from their experiences on how to manage to benefit totally from this massive shift in this decision. Sweden -Malmo tower-, Paris, Frankfurt, and Warsaw have different scenarios, opinions, and reasons for skyscrapers. Looking to their architecture, cultural background, history and their evolution in accepting or rejecting the concept of the high-rise buildings in their country, as a way to see the influence of iconic architecture in shaping the city into modernity. The paper will also focus primarily on Budapest and the new MOL group tower and the effect of its presence on the urban environment in general and on how this path will adapt to the needs of the city of Budapest.

Table of content:

Introduction:

Tall building has been a representation of power a wealth throughout the time, since establishing the very old nations. Civilizations always aimed to reach the sky, from the old Egyptian empire -building the pyramids- , all the way leading the French to build the Eiffel tower, until the eastern world races the future to accomplish the highest skyscraper ever made. The fact that we need the high-rise buildings is crucial. The city are extending all over the agricultural lands, the population is increasing dramatically and it became very difficult for government to find residence and work places for workers. For other nations they invest their resource in the creation of powerful strong cities, where tall buildings cover their lands and their space. However, these towers are walking slowly to shade the architectural culture we have. Unnoticeably demolishing the chancing of maintain the original portrait of our cities, putting obstacles in our conceptual solutions to find the answers for our needs. In a world where technology is controlling our lives, skyscraper became as a technological application – crossing geographical borders to reach international recognition- that control most of our architectural decisions. Taking the easy road to reach sustainability, the high-rise buildings could be far away from achieving the purpose of covering our needs. Moreover, they are creating a chaotic formation in the urban forms. Their adaptability to our requirements is not necessary replying to our demands. The race for attracting investments starts with shaping our cities, open minded cities have more chances of increasing their capitals with massive exploitation. Architecturally conservative city are in continues inner fight of taking a side of whither the go towards the technological solution of skyscrapers or maintain their original image, in fear of regretting their resolutions. On the other hand, some of the regions managed to merge the old part and the new parts of their character in the correct way, gaining more cultural power and more self confidence in attracting touristic benefits. However, what we are witnessing is increasing cases where our resolves are going out of control, and we stuck following a certain pattern we are not supposed to keep chasing. Maintaining the giant iconic buildings vital could consume a lot of our energy and resources. In the positive way skyscrapers are becoming an asset of breaking the rhythm in our city’s skyline, making a shift in shaping the upper space in the sky. Resulting to tall building could lead some inner parts of the nation to an economic, financial, cultural, and social flourishing, making our path easy to the architectural prosperity.

I. Theoretical part:

1. The advantages and disadvantages of skyscrapers on the urban level:

The opinions regarding skyscrapers vary from a scholar to another. Some of them think they are the perfect direction towards the future city. Others think that they will cover the heritage of the current culture, spreading the new urban pattern over the original ones. To make space for all opinions we had to argue the advantages and the disadvantages. The cons of such a tall structure, primarily that they can cost a lot of money with not maximal use of the floor surface. Plus it has very high operational costs compared to the low-rise buildings. Secondly, the environmental effects, the most noticeable effect is the wind funneling and turbulence around them. Moreover, the shadow they cast might block the sun from entering several buildings. Therefore skyscrapers could change the environment climate in any urban zone which might lead to block some of the needs the other type of buildings need. The social and cultural factors play an important role in rejecting the tall buildings or accepting it. For a lot of people, they consider them not good living places. Like most of the people in Copenhagen, Denmark, where skyscrapers are not that much favorable as a homing methodology. On the other hand, people in Manhattan, United States, consider them a prestigious way of living, and an indication of a richer life. Individuals in some traditional cultures, who lived in low-rise buildings, feel uncomfortable regarding living in a high-rise ones. Thirdly there is also always safety concerns regarding this building, with fire and height in case of emergencies, and isolation from social connection with other people. More or less these buildings could come to create traffic nodes if there is not a well-planned strategy to provide traffic circulation around them in the working hours.

The advantages of these buildings were taken from these Angles. The thought which is the most common is that they offer really good plenty of places for people coming from the countryside, therefore, a lot of residences will be available, avoiding the problems with population density, which can make it easier for the city to adapt to the new big number of the inhabitants. As well as, it is known that these projects provide spaces for companies for more offices' area, and they allow firms to express their businesses in a very high quality prestigious places. Other parties say that they are a nice global competition, to show civilization and advancements to the other nations (Russia's reason for erecting the first skyscraper was to take this advantage into consideration as a way to demonstrate the soviet domination in the architectural field, knowing that decision did not come to respond to any social, cultural or economical needs). "Lately, it was discussed how they could lead to a big urban regeneration, leading to more innovative activity" (Audretsch, D. 2008). Contributing massively to the value of the lands and the surrounding areas is not a negotiable advantage, which can lead to better future investments on an urban level since even the announcement of a new skyscraper in any area could double and sometimes triple the value of residence in the surrounding blocks especially if the tower holds mixed functions including commercial ones or entertainment facilities. Moreover these buildings come with a full package, they mostly own complementary services in most cases and they come planned enough to be self-sufficient like creating several floor parking and solving a lot of issues when it comes to vehicles space providing. Tall buildings can project a sense of socio-economic power, and promote the city as a leading

and modern commercial center. “Skyscrapers epitomize people’s pride in their cities and showcase the achievements of warm architectural passion and cold engineering logic” (Ali, M.M. 2005). Several people will think that tall buildings will be the sole saver for the agricultural lands, so we don’t spread over them in the future with the overpopulation we are witnessing, here the vertical extension could save the horizontal existing lands. However, the main questions remaining are: when is the perfect time to build a skyscraper, regarding the advantages or disadvantages we noticed earlier? If they are not needed now for any purposes, is it correct or incorrect to build them ahead, way before they are anticipated just to show signs of advancements and modernity? And the main question remaining is: if we already decided on making a skyscraper. What is the best methods to do it, in a way which will merge with the urban fabric, and respond to big numbers of needs, adapting to all the obstacles it will face in the future?

2. Reasons for adapting (with the use of tall buildings)

Cities are growing always because of the conditions of the unique development found within the current urban environment. “The final form and texture of an expanding city depend on several factors, such as the availability of land, preferential balance between public and private transport, population pressures, strength of planning and development regulations, the availability of urban services, existing infrastructure, and future plans” (Ali, M.M. 2010). Therefore, several cities are choosing a vertical way to add more capacity in the city, especially if there is more population pressure. Like in the case of New York City, where the number of people escalating dramatically, and there is no more dwelling to cover the necessities of the city. Therefore, several skyscrapers were erected to cover multiple social and economic needs the city has. In this case, we can say the city was adapting with the rise of the numbers of individual, expansion, and congestion in a certain way, which so far was accepted as a successful method there. “The social, political, psychological, and cultural effects influence the design of tall buildings. Social and political changes such as growing population, development and transformation of information technology, communication systems, and stable political governments are key elements of the social and political environment of a cit” (Ali, M.M. 2010). Therefore politics can play a strong role in determining the whole shape of the future city, and to move to the right direction in the urban planning, which we need to have a stable government, which can reach reasonable settlements, and find solutions towards better cities. “Tall buildings serve specific functions in meeting urban needs” (Ali, M.M. 2010). Meaning that they are used as a very important way in the process of adaptability. However, creating such a massive building with one function could be less adaptive towards the city than another. Towers where you can find several functions in them - which leads to a variety of people using them and more vitality in the long term- are considered more useful than one function ones. The mixed functions are not the only answer to an adaptive tower, the flexibility in changing the function based on the socio-ecominc's future alterations leads to the best fit with the surrounding environment. One of the most recent uses of the tall buildings was a bit out of the need, and it was more about releasing a statement of a new cultural print, which a lot of countries want to have, especially in the cities where there is no architectural pattern or a certain heritage to preserve. These countries ran away with their resources to start new cities with modernity and complexity, ensuring a new identification, which they did not have or had but weakly.

“Cultural representation is becoming evident in the recent examples of tall buildings especially in East Asia and the Middle East (McNeill 2005, Beedle 2007). Basically, you cannot say that building a skyscraper is a good solution or a bad one because every decision is controlled by several circumstances. Therefore, the place, the environment, the culture, the politics…..etc., could determine whether the best answers to cover the needs of the city occur in reaching the sky.

3. The long term problem emerging from skyscrapers:

The most important aspect to consider about whether these tall towers are the answer or not is to measure there adaptability and flexibility to change throughout the time. Moreover, building a high tower is not a problem. The issue starts to emerge when we have to change the use of this block to serve the new needs we have in the urban space. “The cost of changing buildings is higher than needed because most buildings are not designed to anticipate change in use over their lifespan” (Brand 1994). Meaning, we are spending more and more on shifting the function in the long term, and the use of the building, than making it. That is one of the biggest obstacles planners, architects, and decision-makers don’t consider when they approver erecting an iconic building. After all, the whole new movements in city planning are going towards sustainability. Like Crowther indicated “Building that initially designed to be more flexible in structure and construction are more sustainable” (Crowther 2003). Making the most benefit of a building environmentally is not just about using good materials and recycled materials, it is about having a useful function into it, as long as it is alive. The future target of a building must have several scenarios for a short, medium and long term, knowing the future changing in the urban fabric on the city planning level could warn us about multiple possibilities the new building could adjust to. Merging the architectural design with the city planning when it comes to metropolitan buildings with enormous functions could save a lot of money and a lot of efforts in the future.

4. The sustainable adaptive solutions for high-rise buildings

The mixed-use towers are preferably the most sustainable ones like mentioned before, residential/commercial towers are considered to be the most successful ones in applying the concept of sustainability. “Four conditions that must be present for vital cities, the first of which is the need for districts to serve more than one primary function and preferably at least three. This concept of ‘mixed-use’ to encourage different users at different times has underpinned the development and regeneration of many successful cities” (Jacobs 1961). The other way to win a lot of advantages with constructing such a giant block is looking into the surrounding area, absorbing the urban fabric in this space, to see if this tower will be vital or not, and to measure the distance people will cross to use such a building. Looking into the urban design level this kind of projects could have the most influence here, as the scale of the planning goes smaller, the bigger the impact of the building. Here on this level, the design must match the surrounding environment, making sure that it will adapt continuously with the possible changes, which might happen in this area. That is why the commercial and residential functions are faster to adapt because they could merge easier than other functions, as long as there are good public and private transportation in the area. “The good urban design itself does not guarantee sustainability within an urban context unless, over time, adaptability is inherent within the design and

matched in the surrounding environmental and social fabric" (Loe 2000). Another door to a better more adaptive tower is to study the behavior of the people in such an area because if you have an isolated function like an office building, only workers and client would approach this settlement. Adding public spaces could be very beneficial to all the parties in big projects, people adore outdoor places and if the place has more activities, it is likely to see more people reaching it and those people will help to attract more and more to make this establishment more alive. In this way, you guarantee that it will not be a big loss in case you have one function in a building, you would always have the key by using the whole surrounding area with functions which can serve people and their needs. After all, the whole purpose of any building ever is to respond to certain settlements and the more needs the building is serving the more important the area will become in the long term, not just the short time. "Increasing behavioral opportunities of urban public spaces is a key prerequisite to adding performance for different users, and the adaptability of the physical environment to change over time (Shehayeb 1995). "A mix of uses is needed if a city is to be sufficiently complex to sustain safe public contact. This can be achieved by ensuring that, while places may attract different people at different times and for different purposes, people can use many facilities in common". (Watson 2003).

5. The location and the direction of the change towards adaptive towers:

In the center of the city and due to the density of buildings, the options are limited for installing different types of blocks. "Where there is no tall buildings exist at all, great care must be exercised before making such a decision" (Ali, 2010). That was the downside of Warsaw, Poland where the tall building shaded several important buildings. In this case, we need to pay more attention because the major aim is to sustain community and predict the growth of the population and the direction of that extension, in some situations we have to shape that direction in a way that can be always under support and control. Knowing that the infrastructure is the way to support any project because density and good infrastructure are sides of the core of adaptability. Therefore, if the infrastructure is good the foundation of any decision regarding the population will be carried with less worry. "Good planning involves predicting and coordinating urban growth with its infrastructure system so that they can grow incrementally together over time" <....> "Tall buildings create a concentration of people, their concomitant development with an urban transportation system that is sustainable can produce significant economies both for the developer and the city" (Ali, 2010). Opening up to a rich ecology of urban life (Amin, Thrift, 2002). Besides the economic support -of skyscraper mixed with good infrastructure- this tall building reshape the volume of the whole space changing –in some cases- it's cultural and architectural face to a new path. The major contribution of a tall building is it's significant to the volumetric dimension of urban space (Beedle, Ali, Armstrong, 2007). "Adaptability applies to buildings, including their interiors, as well as to external space, both private and public. (Carmona 2001). According to (-Schmidt, Austin, Gibb 2010), "there are six types of adaptability in a building: Adjustable, versatile, refitable, convertible, scalable, moveable". In the case of the skyscraper, it is very difficult to change the scale or the location of the building. However, the changes happen in the first 4 options are logical because of the size of the building. "These changes could happen on a long term or short term, the longer it happens the more adaptive the building is, the

shorter it happens it will indicate how much more flexible the building is", according to (Blyth, A. and Worthington, J. 2010) and (Leaman, Bordass 2004). For other researchers the "adapted means, more of a social use" (Schneider, Till 2005) or "territorial changes-social aspects"- (Groak, 1992). The last two agreed that, the building which is faster in the physical changes considered to be rather flexible than adaptive.

6. Conclusion of the first part:

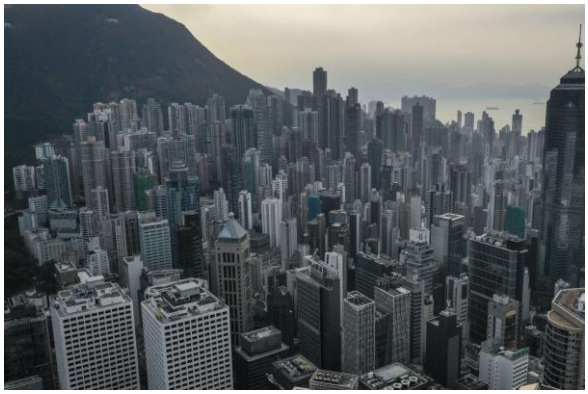
Summing the whole issue of building a good tower is to build it with, firstly an identification which contains several functions and aims, to target several numbers of people. "The character of any settlement … depends on the number and nature of the functions served by the behavior settings that exist there and by the number of people who participate in them" (Lang 1994). Secondly, this project and the surrounding area in urban design level must be more eligible for the changes happening on the bigger scale of the country, to respond to the whole needs wanted. The overall aim of urban design is "to create robust places – cities, precincts, open spaces – that endure under change … to make the city legible and to fulfill human needs in a multidimensional way (Lang 1994). In other words, the issue will be about how the building with its design adapts to the environment on all level of designing, and in all the important aspects, which can form the city. Adaptability is emerging as a core issue in the sustainable design agenda. It applies across a wide range of scales from the individual house, through public space, to movement networks. There is a strong case for the merits of adaptability across the three areas of economic, social/cultural and environmental value. (Carmona 2001). The location and placement on any project must take the first and the higher priority, so there is no blocked masses or shaded areas. The place must be unique attractive and developed with strong infrastructure as a solid support for the tower

II. International experiences:

1. Global:

Skyscrapers are identified as a high rise buildings which have over 40 inhabitant floors, (The Editors of Encyclopedia Britannica 2016.) Hong Kong, china comes in the first place of completed built skyscrapers with 355, to be followed by 280 ones in New York, Shenzhen comes 3rd with 222, and Dubai comes 4th with 190 erected high-rise towers. On the other hand, Shenzhen has new 62 upcoming new high developments over 150 meters and Dubai 51 coming second, to be followed by Mumbai- India with 50 upcoming ones (Wikipedia, 2019). Basically Asia is running way ahead in the skyscraper concepts, the major reason is the over population and the wants to find work and living spaces. In 2014 (Nebojša & Čamprag, Nebojša. 2015) classified the number of skyscrapers worldwide as the following: Asia has 2570 building over 150 m, north America come second with 910 -with a massive gap in between it and Asia-, followed by Europe and a poor comparison with 170, only 59 in Australia and new Zealand, and almost 15 in the

whole African continent. In 2014 the number of skyscrapers where 3826 with 67% in Asia located increasingly in china.



This dominating percentage mostly come due to the number of people living there and their demands. Even though northern America started the use of such buildings in Chicago then in New York, Asia especially in china was the one in desperate deficiency for the vertical spread like New York that did not come as a way of showing power only, it was a decision of a need. However, china with the big numbers of the skyscrapers is still suffering from a lot of planning problems. “Although China’s urban planners now make use of internationally recognized practices, such as zoning regulations, height restrictions and controlled development, to promote a vision of the character of the city as a whole, their efforts are often blocked by conflicting regulations and regulatory agencies as well as a power structure which permits numerous concessions to be made to high-profile developments. As a result, planning often seems to follow rather than to lead patterns of development and investment” (Gaubatz 1999: 1514). Therefore the compact skyscrapers could result to a loss in directing the way of developments.

2. Europe:

“In Europe, after WWII expansion of building skyscrapers has been accepted traumatically, contrary to America. Visual impact of the tall building on an American grid is quite different from the unpredictable impact within more complicated and older European urban pattern”. (Ivana Lukić, 2011). As mentioned earlier, Europe was the one continent which did not want to be in the race of the modern, large buildings proportion. In Denmark and Holland local authorities had the power to prevent the erection of tall buildings. (Ivana Lukić, 2011) On the contrary, this continent was aiming to preserve its own heritage and history under any coast, especially after the Second World War, since most of the building were in low to high damage. The strategy was to help, restore and renovate what they have. Restoration wasn’t monopolized by old materials only, multiple facades were regenerated structurally by new materials. However, the big aim was to make the cities look exactly as they used to be, that was the goal in case the building is damaged partially. Regarding the hopeless buildings the decision to make new modern premises took the primary pick. That is the reason for the appearance of several modern edgy styles in the middle of an old historical regions. Some of the regulations insisted on

following the urban existing fabric in their cities, all of what was the fear of the Brussel experience. While other felt the necessity to add an attraction factor to break the rhythm. Paris, berlin and several big capitals -after the Brusselization trauma- had a strict plan regarding the zoning areas in their districts aiming to making a special theme in each part of their cities.

3. Brusselization:

"The indiscriminate and careless introduction of modern high-rise buildings into gentrified neighborhoods" and has become a byword for "haphazard urban development and redevelopment". (State, Paul F. 2004, Stubbs, John H.; Makaš, Emily G. 2011). In the 1960s and after the war took most of the city of Brussels and consumed the charm that was there, and under no regulation or planning strategies for the zones, the city witnessed a lot of new large constructions in a chaotic form with no certain aim or goal. Trying to have a new type of regions, thinking that modernity is the only way to solve the damage from the war. That decision was necessarily the lesson to most of the European cities, where they got afraid of having such a horrible organization for their horizontal spaces without any architectural or cultural aim. Thankfully, most of the other cities started to calculate patiently their steps, doing a lot of regulations before they start spreading there modern buildings, having skyscrapers in a useful way and as beautiful symbols not just a show of corporate presence. “How the skyscraper moved from being an icon solely of American identity and corporate power in its various cities to becoming a signifier of modernity in other parts of the world, and what symbolic meaning might be attached to that, is, as yet, an unwritten story’’ (King, A. 2004) Like in Paris where u can see its tall structures fixed far away from the center so they don’t influence the cultural, architectural magic the city has. This way they offered the corporate financial power, and they represent a beautiful side of the space. When we talk about the big change in the city, we are not focusing only on the small facades in the streets, we are actually mentioning buildings with a relatively larger scale than the surrounding areas, where they can shade the old structure with modern ones. That itself could lead to disorganization, not just in the city fabric but also in the mind of the visitors and the inhabitants of the city, leading to less confidant and bigger psychological effect on the place and the individuals they belong to. Visual interruption and deformation for a city could result in the lack of the sense of the place, taking away from the historical or the special buildings the chance to shine on their own. It actually a cause for undervaluing the emotional price of the blocks.

4. Eastern Europe:

As a strong pole in the political world, the Soviet Union as in politics aimed to show their power in architecture. When Brussels was into the ugly shift, Russia wanted to prove that

they can imitate what the Americans are doing, leading their labors to build the tallest building they have (1952, Moscow, 176 meter).

Back in time residential buildings in the Soviet Union had the pre industrialized pattern. They were famous for their large repetitive buildings especially the residential ones.

Those forms spread all the way to Eastern Europe, where you can see the influence of communism in most of the regions located in the east of this continent. Back then it was a good option, safe and fast solution for a better dwelling. Nowadays, this era is witnessing progress where everything has its own specialty. Similar buildings start to look boring and out of context, No one wants to look at the same building over and over when the walk in a street. Variety makes the place more memorable, and the more experiences the person gets in his daily or touristic journey the more the area is rich architecturally. Therefore, the decisions of construction new large scale building should be unique if it is considered in the new style category, it has to be special, and it should come from a need and not a show of power only. Creating architectural show in an urban developed area will guide the tourists in the streets aiming for authentic and originality, not the strong copied items.

The paper aims to show some of the unique cases of the skyscrapers experiences. The goal is set to demonstrate several trials, where governments are starting to have their

high-rise buildings, looking into the reasons for their choices. Here, it is shown some of the strong good and bad notices collected from the most influential tall buildings in Europe located in: Frankfurt, Paris and Warsaw and Malmö. Each narrative had different solutions to deal with in the urban change, and each one had a various approaches regarding the vertical extension in their civil territories.

5. Paris (La defense):

Far away from Brusselization Paris has originality and modern advancement when it comes to architecture, it kept the skyline so well controlled making sure that it will not impact the shape of the original city, at the same time leading it to a better destination. The first thing a city planner come across when a skyscraper is mentioned is the skyline of the city; the influence of the high-rise buildings reach the sky and it pulls the visual attraction to a certain point carrying the attention sometimes from small objects around.

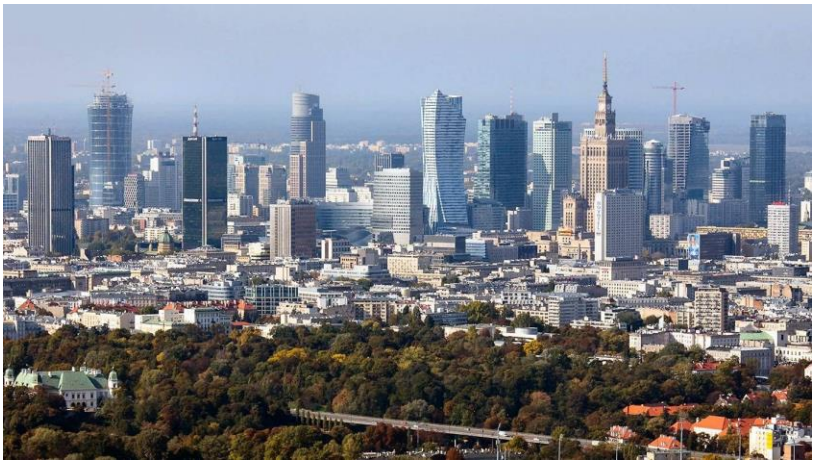
Lynch -who was one of the pioneers in the matter of shaping the lines and the cities- states about “the skyline it should be led by “visual plan”: a series of recommendations and regulations <...> all in concern of visual form in urban scale”. (Stamps et al. 2005: 73). “Every city should have its own regulations about its urban skyline so that it could establish its character and coherency, in order to be visually recognizable, attractive, and distinguished by visual quality.” <.....> locating skyscrapers and other attractive city landmarks spontaneously contributes to the poor image of urban skyline. Their location must be carefully selected, it must be appropriate and justified. (Ivana Lukić, 2011). Following those principles Paris gathered all of its massive blocks 3 kilometers away from the city in a big business district called La Defense region, covers 750 acres of space and the city’s largest space with 3.5 million m2 including the Housing Office areas (Doğan 2008).

That decision basically led to not violate the urban forms of the city, as well as adapting with the wants of that part of Paris as an important, global business influencer. Tall building should always imply important location, in case of group of building it is important for them as a group to look attractive and arranges with a justified reason. The last thing a capital like Paris needs is miscomprehended or incoherent arrangement which can deform the nice sequence of the urban story. The studies state that it is important to define zones, districts, where skyscrapers could be built, and, also, they should be carefully located within those zones (preferably in the center, edges, etc.) (Ivana Lukić, 2011). It is crucial to establish an excellent and amazing images. Several mental pictures could lead to the correct foundation for attracting global tourism and investments, advertising the local advancement. Every city should identify its unique superior achievements and advantages, finding a way to be different from other urban centers, which can be seen in urban skyline, as well. The main idea is to keep a balance so that overall general

character is not invaded. What makes Paris special is the planning system with the radiating polar plan of carrying several visual axis. La defense district had the end of one of the visual axis, giving it a futuristic look, sitting on a path from the past to the future - where in a certain location- it forms the background of the Eiffel tower. We can assume that France wanted to push itself in a place where it maintains her financial name and reputation, at the same time it did not want to deform the historical, cultural, and architectural side. The responding to the international and European need from Paris was heard clearly. Creating this district was a necessity in a preserved way. Better that distributing the big capitals in different locations and making the connection between financial companies difficult. This zone is the French destination for the financial deals, laying an important lesson in the way of preserving the original urban forms in the best way possible and at the same time adapting coherently with the, regional, national, and European needs.

6. Warsaw:

"To avoid disputes and a discussion which is not based on merit, we should assume that the development of a contemporary image of a city should be based on the principle of protecting valuable urban arrangements and historical facilities, whereas new tall buildings should be erected without deteriorating the historical cityscape".(Budziło K., kulturowego, miasta, 2012). The case of this city is diverse. The urban development occurred in the core of the city, where a lot of tall buildings were erected to show epochal progress. Many believed that this movement was a bad decision, because it was big demotion to the heritage center. The evolutionary approach necessitates a continuity in developing urban space. The continuation, however, does not mean that contemporary architecture should be abandoned, it means that one should focus use sensitivity, reason, knowledge, and culture (Budziło K., kulturowego, miasta, 2012). That what we miss in the city, the cultural effect is a bit vague and unclear. Walking in the city you can see chaotic arrangement of the historical periods and the timeline is missing. The chaos does not occur in the planning process only, but the placement of the building is miss understandable and totally unreadable. It is almost like incorrect gap filling. Therefore, it is hard to put the whole city in on category as modern or historical or even ancient. Basically it is a mixture of architectural fashions in on large space. There is no zoning strategy applied so the movement during the daily transportation could be messy, unorganized, and misplaced. Even if Warsaw is responding to the need it has. It is violating the most important term when it comes to urban forms adaptability which sustainability. Sustainability comes by saving resources, time and efforts. The other big thing missing from this mixture is the link between buildings, as large scale part of Poland, this side 'Warsaw'



is not gathered by union and also fails to protect the city historical areas, since the big-spread- large scale buildings over shadow some single parts of the city, leading the attraction to them and demolishing the charming role of the old unique vistas. Which we cannot see in a city like London do to a very strict LVMF system aimed to protect 27 vistas. Tall buildings become visible against their backgrounds in an accidental manner which distorts the integrity of the original composition. A common mistake most architects/ planners sometimes do not focus on in case of constructing a tall building, which are the background, vistas, and panoramas. This reflectance made one of Poland tall buildings lose one of protected views of the St. Paul's Cathedral dome. The well designing process helps to avoid deformation of major vistas and panoramas. As well as, it enables planned development of spatial values with tall buildings as a new component of the cityscape, a component which can be a positive extension of the cityscape without any harm to the city's cultural heritage.

7. Frankfurt (the financial district):

In Germany, in most of its cities, only historic center had evaded that destiny. Right next to it, the skyscrapers often make their stand. (Ivana Lukić, 2011)

Frankfurt policies had much more organized principles about how they wanted to future the city. It had the most rapid transformation compared to other European urban centers, concentrating its high rise buildings next to the old central zone which is the historical zone, that had a big public rejection, since the distance is not far enough to make the urban forms more breathable. The skyscraper zone concentrated in the Banking District, following the name, we can easily tell that this district was predominated by banks, investment companies and financial headquarters settling their businesses in that area. All of those capitals were located next to the core center creating undefined urban district, which has more possibility of expansion to make Frankfurt at least the economic capital of the country and to Europe if we speak frankly. The strategy to form this city in this way was decided by the municipality, attracting as many investors as possible. Development of the booming skyline was regulated by the High-Rise Development Plan of 1999,<.....> presented an urban design vision for the implementation of high-rise buildings into the urban fabric. Its principle of keeping the skyscrapers within groups or clusters produced an ensemble effect, such that grouping skyscraper silhouettes would produce a high-quality skyline that would foster the image of the whole city. (Nebojša & Čamprag, Nebojša. 2015). The municipality was prices even with the texture of the building to avoid repetitive materials (mostly glass) in the facades, suggesting using other elements like natural stone or metal….etc. The most recent intervention with the district is the connection with the riverside, where Three high-rise buildings are planned within the block as new urban landmarks (Jourdan & Müller 2008); two of them are positioned as an introduction to the existing skyscrapers further along Neue Mainzer Street, working as a gate to the financial

district. In the context of functional transformation, besides the mixed office-residential use, the rest of the quarter is planned to serve mainly as an attractive urban residential area. The rule of the gathering skyscrapers in one region was broken several kilometers to the east, building the new European Central Bank (ECB, 2010) headquarters in the brownfield riverfront of the Ostend district, which involves a radical extension of the city's skyline towards the east. The process was the new adaptation with the demands of keeping Frankfurt as important global economic player. The changes in the urban form in this city was happening into big zones all next to the original city. Germany, in most of its cities, only historic center had evaded that destiny. Right next to it, the skyscrapers often make their stand (Ivana Lukić, 2011). The waterfront that gives the new modern investment areas an attraction signal from the water, the land and the sky (or the other the high points existing around). Laying a strong impression of development and almost erasing the old original part of the city from the skyline. Since all the visual attraction goes up, it is hardly noticeable the old part of the city. This is the aim of Frankfurt municipality. All the efforts are gathering to make it Europe's financial capital. Therefore it's a response from a regional, national, European planning level to over control the surrounding areas as a perfect example of a safe financial center with more future extend According to the plan. There are 23 new high-rise buildings planned for insertion into Frankfurt's urban fabric (Jourdan & Müller 2008).

8. Malmo:

The importance of this city comes through the resemblance with the main case study (Ivana Lukić, 2011). Two cities erecting one single skyscrapers on one side of the city, next to a water front, serving the future progress strategy. However this urban change comes only to adapt and complete the Bo01 housing expo, Hence, it mainly came as the last completed step in building the sustainable city of Malmo. One of the most influential buildings in the world. The city politicians felt that Malmö needed a new addition to its skyline, recovering from the crisis that the city suffered from, in the late 90s (when the leading boat business were sold away). It replaced the formerly highest structure which was the shipyard crane, removed and transported to South Korea in 2002. (Anderberg, Stefan, 2015)

Basically the politicians in Malmo saw the need for people to have a new Symbol of the city. Therefore the call for a star architect was made to sculpt the new face of the space. Santiago Calatrava got the honor of redrawing the new sky line. Breaking the rhythm was crucial the city was flat in all meanings, nothing was attracting the visitor or the inhabitants as a beauty factor. However, Santiago Calatrava took an inspiration from a sculpture he had to twist the buildings -90 degrees from the bottom to the top- and twisting the minds of the viewers 180 degrees in the technological advancement of his building. The housing

Expo or “The city of tomorrow” was the one on the most important projects for Malmo, with sustainable concepts all over the city from buildings’ designs all the way to the eco transportation methods all occurring in the Western Harbor. The vision was to create efficient sustainable systems for an attractive and convenient compact city, which would serve as a model for future urban development (Anderberg, Stefan, 2015). The Western Harbor as simultaneously an attempt to create a sustainable urban landscape and an attempt to gain attention. (Jönsson, Holgersen, 2017). There are few who raise their eyebrows when Chinese, Indians, Germans, Englishmen—thousands of city construction experts from around the world—come to Malmo to be inspired and to gather knowledge about sustainable city development.’ (Malmo 2011, 4).

In designing this building with a sketch from Calatrava imagination about the form the human body, Such aspects as the direction that the building faces, the materials that are used to construct it, the types of glass, and the interaction with the local climate will all need to be modelled and optimized and this is done with images.(inside) 147 apartments in 9 twisting pentagons turning with 6 floors in each, were not considered a success at the beginning, even the housing organization failed in selling the project and the attempt to buy condos in the turning torso was not as successful as it was expected, because of the prices of the apartments. Even the rental price was above the average salary The lack of diversity is due to the high price of homes in the district; a three-room flat in Bo01 starts at around SEK 2 million (GBP 170,000), which is more than twice the national average price. (Västra Hamnen, 2015). That made the suitability of this project shaky. Monitoring and evaluating the success of the sustainable systems continues to be challenging due to the complexity and cost. (Västra Hamnen, 2015). However, later on, the developers deemed the project as a success. On the form of the city after the skyscraper was built. It is obvious that as the political power aimed, they got the dominating symbol they wanted; a very high-rise building, which you can see from almost every point of the city. It is isolated totally with its height. However, the unique formation makes it very attractive landmark, even though it has no physical connection with the surrounding. This project was pointed to be a strange object in the sky, a distinctive mark to pull attention; Physical attention. Functional attraction was not the goal at all in this building. If this tower did not have a very creative idea, it would be a real disastrous addition to the urban center. Creativity is evaluated as one of the most important aspects of creation in the global world. (Ivana Lukić, 2011). Calatrava with his inspiration and different special thinking manage to create a new skyline in the city, which was memorable. However, the struggle between finding the unique shape and the low prices was difficult, which basically led to a rejected response from the city’s inhabitants, since it does not answer their demands. The city could build a normal low budget tower, but then the form of the city will be damaged, here we could find the struggle between the special forms in the architecture and the influence they have on planning a city -with the effect they have on the urban fabric- and the response to the needs of the community with the lowest costs. The housing expo BO01 was a sustainable concept itself but the turning torso is considered the magnate in this city, we can safely say that the tower completed the story of the city of tomorrow. The emerging Western Harbor with the tall Turning Torso as a landmark has become the most important symbol for this new development of Malmö. (Jönsson, Holgersen, 2017).Nowadays, a lot of businesses such as KPMG, SIGMA moved to western Harbor in an attempt to approach the sustainable

city of tomorrow basically the Harbor attracted new financial capitals based on the sustainable reputation. Positive experiences include the success of the exhibition form of development as both a marketing tool for the city and a catalyst for attracting further development to a particular area. (Västra Hamnen, 2015).

9. Conclusion of the second part

The increasing number of the skyscraper pointed many regions into following a pattern, not creating that pattern. Hong Kong with superior achievements in the tall structures is now obligated to keep following a modality it started. Paris and Frankfurt managed to keep their developments under a strict direction. On one hand the French managed to maintain the specialty of the old part, differentiating a sufficient zone for its necessities with a beautiful organization of its components. On the other hand Frankfurt has a more unique urban role to play, therefore the core city was vague by the new style it has, which is cannot be considered as a negative aspect only. The attraction of the investment makes it a solid player in the regional plan it supposed to fulfil. Again Frankfort vertical extension followed the application of the zoning process horizontally, it did not expanded the current working zones only but Frankfurt started to direct its developments into another regions, keeping short distant from the actual core, making new gates and horizons to the future. Looking to a relatively less successful narrative. Warsaw could not contain the zoning of its buildings, leading to multiple heritage covering, and more problems to solve on urban level. However, this change is still giving Warsaw a lead in advanced architecture the only missing part is the urban connection, and the lack of a clear urban fabric in each district of the city, losing several important vistas. Malmo was also successful in applying a new method to reach urban sustainability. However, the financial strategy made that application less solid that it was expected. But it is safely to say, it is relatively on of the most promising changes on the level of the continent. Stratifying the concept of the sustained zone could be an example to follow. Since it is the shift we need to make in most of the cities. Knowing that the turning torso didn't overcome the pattern the city is following. Correctly this tower has drawn a new print in the skyline, but did not shade the main goal of the rest of the western harbor.

III. Budapest:

1-analysis:

Unlike Paris or Frankfurt the city of the bridges has more similar narrative to Malmö, Sweden than the first two mentioned. The past of Malmö has been written in the future of Budapest. "While there are no directives or procedures which define what those benefits from the single build objects are" (Lukić 2010: 4). However, only the headlines of the isolated towers are alike the details are different. Firstly we discussed earlier that the turning torso by Santiago Calatrava was built as the one of last phases of the development of Malmo. The Mol campus comes as one of several new developments in its area. "Every civilization has its own skyline image and every of them were characterized by its high objects" (Ivana Lukić, 2011) the Hungarian civilization skyline is characterized by few tall buildings, the most important ones are the Hungarian parliament (orszaghaz), and the Szent István basilica (Szent István Bazilika), built in 1904 and 1905 respectively. As

mentioned they came equally in height as a symbol of equality between religion and politics, in 2017 the new skyline and the whole urban area was on the edge of a change. A decision of building the highest building in Hungary and one of the most advanced sustainable skyscrapers up to date was approved. Building it in will be completed by 2021 with unique design done by Norman Foster and partners, Finta studio, and Kenzo as the star architects to this project.
Before that decision was made the biggest 3 financial companies in the country of Hungary wanted to show their power and set a strong visible strategies for their companies by erecting massive blocks, those companies were (Richter pharmaceutical company, OTP Bank -the largest bank in eastern Europe- and Mol group -the elite company for oil and gas in Hungary). The first two withdraw from the race of the skyscraper power show, leaving Mol group to set the dominant block in the urban environment of the 11th district. This soon to be a monument in scale, will be the headquarters were Mol will host all the employees at the campus tower. This approved decision came before the ban from the Hungarian government for having buildings over 90 meter, and because of the timeline the tower can still be built since it was approved before the ban. Earlier, Hungary's government discussed an outright ban on skyscrapers over 90 meters in height in Budapest in order to preserve the traditional profile of the capital. However, as reported in August, the ban would not apply to the planned headquarters of MOL as the building was cleared beforehand. (BBJ, 2017)
On all the planning levels this building will affect the urban fabric. Since its scale is enormous, the effect will be bigger in the physical form. Supposedly it is important to investigate whether this building is a show of power, or it actually could help in the development of the city, changing this urban center to a more advanced one. Therefore, to argue correctly, we need to measure its effect on all sides and we need to see if it will reply in the future to the social, economic, cultural requirements of the city. Urban policies should be based on innovation and creativity, enabling maintaining character and coherence of urban form (and consequently, urbane skyline) as a response to social, cultural, economic, technological and / or political development and changes. (Ivana Lukić, 2011)

2- Location:
Kelenfold sub district is located in the 11th district on the eastern side of it by the Danube bank. There is a lot of new projects are going to be constructed there. This industrial-residential area could witness a lot of attraction for investments, basically it is easily possible to change it to the new financial gate. Between Budafok út and the Danube River, this triangle shaped land has location and potentials to set some of the big projects. Since it is not the center of Budapest but not far from it at the same time. A similar triangle was developed in the northern part of Hungary, holds also some companies' building in the 3rd district (Graphisoft, Microsoft, sap). But more on the modest size, where the size of the buildings take more horizontal extension. This area (Located in Obuda) provides a lot of job positions and several individuals travel to it daily to seek their daily jobs. The new Mol building is in the southern part, also in Buda side of the river. If this area develop to financial center, it could work perfectly with the other two companies' centers in Hungary

(the one in the 3rd district and the one in the 13th district). The only difference in this new area is that it can be developed on a high tech sustainable merits, so it can be a better attraction to more European and international capitals.

Competing in height of objects certainly brings global recognizability, but the same goal could be achieved by specific form, adding symbolic elements. Distinct form in relation to morphology of ground becomes element of visual identification. (Ivana Lukić, 2011). Here we could really ask an important question about the necessity of the high rise building. Budapest is very old authentic city with its own architectural style, several old bridges, charming streets, and architectural styles to walk through and to look at. The magic of this city is released in its old buildings, bridges, and baths

and the touristic attraction they form. Therefore, to start a new phase with modern buildings could not enhance the image of the city, most importantly, it could not respond to the needs we really have to fulfil. Any change in the region must have a meaning, installing a building only as a symbol of ruling could lead to massive deformation. Witnessing other experiences showed the consequences of unplanned zoning and the harm it can cause. This is only a warning, does not mean that the skyscraper will be problematic, actually it could open a lot of new doors to a whole new urbanism.

3-Project's aspects:

This project comes with many potential arguments attaching to it and a lot of bright beginnings which might lead to merge this beautiful city with a brand new part.

1-The southern gate: on the city planning level this whole urban sector with this skyscraper will form a new urban symbol in the southern part of the city, which can be a

strong magnet to the area. It could make the vista of the Danube River very rich for cruises, as long as it does not cover any of the important monuments in the city. Therefore, people can start with the new building and get to the magical old part later in their journey, also this visual trip in the river can work on the other direction as well perfectly. The only concern is the surrounding of the new skyscraper. Here, there is an important question: what kind of futuristic buildings will occur there? Are they going to be companies' building, residential, commercial, or recreational entertainment facilities?. This part could be answered correctly through a strong study of what the area require to be considered as a success. This section is located on the Danube, considered to be one of the most important faces of the city, which should be treated in the right way. Presence of cultural actors – like museums, theatres and concert halls, strongly

Impacts on character of urban fabric, in economical as well as in modelling sense.

Incorporating them in city context add value to the content in their environment and

Land, gives new swing to the development of the city and opens new possibilities for Empowering cultural economy. (Ivana Lukić, 2011)

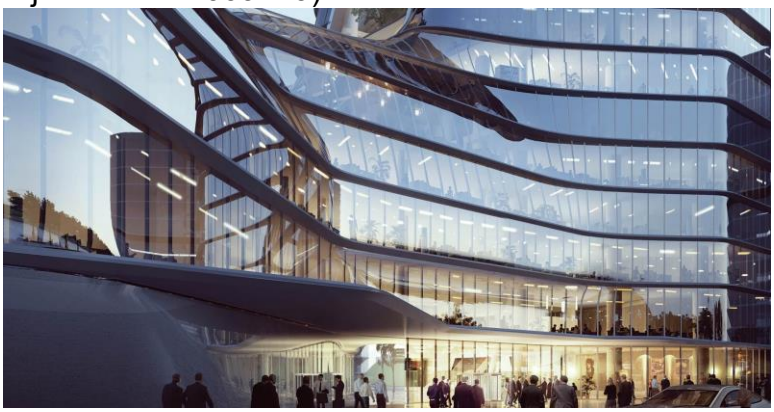
If we look to the other part of the river, we can see a strong representation of the cultural side of Budapest, with two monumental buildings (the palace of art known as Ludwig museum and the national theater). These cultural structures can empower the opposite side of the river. Moreover, it is important to make this sub district also represent a nice aspect of the city, holding some company's headquarters in a very respectful architectural style would create balance on both sides of the river. "A key question for urban planning refers to the possibility of promoting creative environments and 'cool city' images in order to attract these professionals" (Vanolo 2008: 370). Making more variety professions related architecture gatherings, or entertainment functions would also support installing the concept of encapsulation. "The encapsulation process – the creation of the city as a coherent realm of experience – involves a blending of politicized spaces of representation and spatial attachment, articulating what we will call politico-emotive geographies that invoke a range of feelings"<.....> "Through the dialectic of encapsulation / decapsulation we can also deepen our understanding of the symbolic and emotional negotiations involved in the production of the "city as spectacle".(Ivana Lukić, 2011).

2-The Skyline competition:

“The 21st century city skyline is a continuation to the 20th century skyline with
More emphasis on high technology style of buildings” (Abu-Ghazalah 2007: 49)
Architectural Changes lead to a new urban skyline shape which is characterized by: clarity, clear comprehension, readability, recognizability, and specialty. We will reach clarity when we study the story of the movement in the city. We need to create several iconic buildings which form a narrative that makes the city different from others, each must be very comprehensible. Budapest skyline is still very clear and recognizable, it is difficult to see the same scenario in any other city; the castle, the parliament, the bathes, the cathedrals, and the universities on the Danube form a nice continuous events, making one ride on the Danube in the Hungarian capital very special and logical, with the domination of the two highest buildings in the city. The new skyscraper will affect their presence slightly, this effect is considered to be miner because of the distance. If the tower was located in the center it would shade several buildings leading to a massive visual damage, but since it is located in the southern part of the city far away from most of monumental buildings, it is easily to be said that it will not have a big hazard on the image of the city, except breaking the rules and being under the microscope, as it always will have the reputation of the tallest building in the capital. That reputation is not pleasant to a really authentic city, where very original architecture exist. Looking back to an important example where the American government was very accurate about the importance of the high buildings in relation to the capitol dome. Wherever there is parliaments the importance increases as one of the most important examples of the people’s voice. If city authorities are serious about conserving central symbols, they have to pass the laws and establish regulations. Symbolic importance of the Capitol Building is greatly dependent on the visual prominence of the Capitol dome as a unique form on the city skyline so that no new development should extend above the base of the dome. (Ivana Lukić, 2011). this project could still stay a successful one with less 30 meters but now since it is defend we need to measure how that will affect our current buildings. The design and development of an area with such a position (by the river) and importance represents an opportunity to significantly influence the image of the city skyline (Nebojša

Čamprag, 2015). But it is only fair to say that the location of the building will not cause a big harm as the ones we studied in Warsaw experience. There are three types of urban skyline views that mattered – from approach roads by land, waterfront views along a river or the seacoast and the views from high vantage points (natural viewing platforms) or from the summits of tall buildings. (Ivana Lukić, 2011). This building will matter always from the waterfront part and from the high vantage points. From the streets' vista it will matter from some angels and some locations but will not over shade any important monument to be precise.

3-The surroundings: 'the MOL Campus seeks to preserve live-work relationships as part of the urban experience' (arch daily 2018).the merge of this building with the surrounding area is important. Processing of developments for several establishments changes the visual image of the zone. We don't want to create a visual isolation from the other sides. Everything must be connected, and one of the most successful experiences in the connections between urban forms is the installation of green public areas, where it could create a scene belonging with colors and visual relaxation, taking eyes off the difference in the architectural concepts and styles between the new buildings and the old ones. "Connection with nature adds new quality and returns the role of nature. Sustainable solutions create connections and flows of open and natural and open themselves to nature and connect with nature" (Bajić-Brković 2009: 49).



4-the scale and innovation: It is substantial, that urban macro-image has its landmarks with a big idea "something unique, something extraordinary, something that will give them a chance to be proud of and something to make it a significant place in global itinerary <…>"(Kostof 1991: 279). Since we are creating a landmark, the physical form must be acceptable by people and the innovation should be of the chart. Highly developed environments today has clear need for more quality, more attractive and original designs in every aspect of life. Quality of modelling is more and more important. By favoring city economy, tourism, needs for making strong local identity, appears the requirement for attractive objects and areas in the city which could be seen on urban skyline and become landmark which structure a city and gives it more attractive image.(Ivana Lukić, 2011). Otherwise we are creating a big insensible mass on the most important side of the city. For that Foster and partners' design was unique, creating a

skyscraper which will merge with a podium with inner green areas in the middle, and glass surfaces all on the exterior surfaces. An integral part of the MOL Group's sustainable vision for 2030, the building provides a blueprint for the office of the future. Its unique form integrates a 28-storey tower with a podium a single form to create a unified campus. The lower floors house restaurants, a conference center and a whole host of other facilities for staff, while the flexible office spaces are on the upper levels.<.....>Greenery travels through the heart of the building, from the central atrium to the rooftop, bringing nature closer to the workspace.(Mol campus, 2017) Supposedly, this design will not create a big controversy since the designer is a star architect in a collaboration with several Hungarian partners who could read the urban requirements successfully. Setting a new benchmark both for Budapest and Hungary, the design of the building makes the most of its urban context to drive a sustainable response. (mol web) Creative policies of creative global cities are highlighted with creative design and physical environment. However there are several experiences where the design did not match the reality and that could lead to unacceptance by the people and a total rejection by the urban environment. Demolition for such a building is very difficult, even changing the facades is not an easy job. Therefore, a clear study of the building's proportion must be addressed, the texture and the materials must be picked carefully and future regulations towards the pattern that must be installed all around this area must be applied, avoiding messy portrait of the city. When inserting a foreign object in the environment wanting it to adapt with the surrounding in all scales, the foundation of the decision is to follow the fabric which evolve in the space around it. Like visiting foreign countries, as a visitor, you must follow the rules and traditions of the host country not bringing bad influence on the individuals around you, trying the most to learn their movements and the way they are thinking, so you can adapt in the best way possible to the new conditions. The same principle alien with installing a new foreign building is first to see the surrounding areas, the texture, the environment, and the regulations especially if the building is a unique case and already under the microscope as the new shiny element in the sky. To adjust with the need of the city is not necessarily about just taking the same form or texture, it is more about not invading and deforming what an old city is used to be, we must not be covering or over shading anything. Oppositely we should be embarrassing the surrounding and making this step an attraction to more developments in the area.

5-The future prediction (the Balna building and the Marriot hotel): The production of spaces of futurity as one form of encapsulation is production of urban panoramas and skylines through two (overlapping) forms: the conjunctional and the hyper-representational" (Jansson, Lagerkvist 2009: 26–27).

Hungary first experience with modern edge architecture on the Danube River will not rely first in the Mol group tower. As previous big experiences happened and occurred on the river with the Balna building located in the 9th district of Budapest and the Marriot hotel which has one of the largest scale buildings on the river. The Balna building form a very modern, metallic, and deconstructive connection with old building. Resembling a big whale, this new style shot had an influence on the physical form of the city, as this new

building was not very accepted at the beginning. It is now forming a real image of the city. However, the functional part of it did not have much of a positive results at all. Since it was supposed to be a commercial center, recently the movement and the flow in it considered to be slow, the vitality of this building was not successful and changing the function inside is not easy, since to was aimed for only commercial business. The only effective parts in this building are the restaurants and the bars on the corner of it, those are the only vital part of the building. Therefore the urban influence is not just about the physical representation, we could create a lot of beautiful buildings, which could not be 100% vital. The key to such a problem is to create flexible more changeable buildings with more futuristic options that will create a major sustainability to not just the building but to the whole area. That all go to the new skyscraper and the possibilities in the design process and the plane on the long term. Because sustainability is not just about preserving the environment, it is about gaining benefits from each single part of the project we create, with the lowest harms we can cause. Thus, we need to install several scenarios to each decision we make, staying away from only focusing on showing one architectural concepts.

The other building on the river, is the Marriot hotel, located in the opposite direction from the Buda castle. With green glass surfaces, this building has a big mass proportion taking the visual attraction on some other parts of the river. The opinions about it vary when it comes to liking it or disliking it. However the architectural style was not the best scenario to match the area. The future function for it is unreadable. Therefore, continues maintenance on its façades is important to keep it physically vital as long as possible.

6-Creating the new sub district: as the new suitable solution relies on the theme of the area as mentioned before. It is not necessary to build a lot of tall buildings, it is about creating a zone, where we can aim to target one of the aspects the city can provide (finance, culture, economic, entertainment) or a mix between more than one aspect, with more harmony and in a homogenous way. The concept of the La defense district is very encouraging example to follow, whither we want to build small scale or big scale blocks. This development could also walk following the zoning in the unique Frankfurt experience, where we create several sub districts for financial advancement and capitals, thus we can show, what actually we can participate in.

There is no doubt that building this project will have a massive impact on the value of the purchasing prices of the lands around it, especially for a non-residential projects, in this case the government could benefit largely from selling this valuable areas to invest in this new financial/economical projects (that is, in case of having a zoning plan for the land).

4. Conclusion of the case study:

The Mol campus could set a new example in the urban professional field, it could be a new gate to the southern part of the city. As well as, it could open new doors for the sub district, the district, and the region. However, it must be followed by multiple establishment which could work alone and could complete this project urban purpose. Assuming it will create a new zone, this establishment could supplement the other two most important business sections in the city. The location -by the end of the bridge in the corner of a transportation node- gives this development process a huge advantage, since it is relatively close to almost every needed. It could enhance the visual image of the city with more memorable variety of images, and it will also enrich the urban picture of the district. The arguments this project releasing is about shaking the solid skyline, which considered one of its negativities, the block's distance from the center could save it from creating a shadow on the important architectural monuments (the parliaments, the Buda castle, Szent István Cathedral and many other religious valuable buildings). in case of upcoming extension for this zone, every movement must be directed to take place to the southern direction far away from the residential area in the west in this case we grantee a certain sustainability and the right sense of development. Adapting with the surrounding would be difficult but increasing the green proportion could help visually. Future projects must follow certain matching texture or materials with more harmony to the existing buildings, so we do not step over the chance of creating chaotic image of the city. Continues maintenance must be applied on the building to keep it alive physically as long as possible. Like mentioned before a total renovation of the façade is not a flexible solution.

IV. References:

-Abu-Ghazalah, S. 2007. Skyscrapers as Tools of Economic Reform and Elements of Urban Skyline: Case of the Abdali Development Project at Amman, Middle East Technical University Journal of the Faculty of Architecture 24(1): 49–70.

-Anderberg, Stefan. (2015). Western harbor in Malmö. ISOCARP review. 11. 210-227.

-Ali, M.M. The skyscraper: Epitome of human aspirations. In Proceedings of the 7th CTBUH World Congress on Tall Buildings: Renewing the Urban Landscapes, New York, NY, USA, 16–19 October 2005.

-Ali, M.M. The Sustainable City: VI, Sustainable urban life in skyscraper cities of the 21st centery, WIT Transactions Ecology and the environment, Vol 129,university of Illinois at Urbana-champaign, USA, P.205-207, 2010

-Amin, A. & Thrift, N., Cities: Reimagining the Urban, Polity: Oxford, UK, 2002.

-Audretsch, D. Agglomeration and the location of innovative activity. Oxf. Rev. Econ. Policy 2008,14, 18–29.

-Bajić-Brković, M. 2009. Mogu li kreativne ekonomije da proizvode održiva rešenja? Neka evropska iskustva, Arhitektura i urbanizam 24–25: 47–60.

-Beedle, L., Ali, M. M. & Armstrong, P. J., The Skyscraper and the City: Design, Technology, and Innovation, Edwin Mellen Press: Lewiston, NY, 2007.

-Blyth, A. and Worthington, J. (2010), Managing the brief for better design, 2nd edition, Spon Press, Abingdon.

-Brand, S. (1994). How Buildings Learn: What Happens After They're Built. New York: Viking.

-CARMONA, M. (2001). The value of urban design: a research project commissioned by CABE and DETR to examine the value added by good urban design. Tonbridge, Thomas Telford.

-Crowther, P. (2003). Design for Disassembly: An architectural strategy for sustainability. Thesis for Doctor of Philosophy. Brisbane: School of Design and Built Environment, Queensland University of Technology.

-Dąbrowska-Budziło K., Ochrona dziedzictwa kulturowego, jako warunek zachowania tożsamo-ści krajobrazu miasta, [w:] Tożsamość krajobrazu miasta, Wydawnictwo Uczelniane Zachod-niopomorskiego Uniwersytetu Technologicznego w Szczecinie, Szczecin 2012, s. 44-52.

-Doğan, A., 2008, “Metropollerde Prestij Göstergesi Olarak Yüksek Yapılar”, Mimar Sinan Güzel Sanatlar Üniversitesi Fen Bilimleri Enstitüsü Yayınlanmamış Yüksek Lisans Tezi, İstanbul
-European Central Bank (ECB). 2010. New ECB premises Architecture and Energy Design. Frankfurt: ECB.
-Erik Jönsson & Ståle Holgersen (2017): Spectacular, realisable and ‘everyday’, City
-Groak, S. (1992), The idea of building, 1st edition, E&FN Spon, London.
-Gaubatz, P. 1999. China’s Urban Transformation: Patterns and Processes of Morphological Change in Beijing, Shanghai and Guangzhou, Urban Studies 36(9): 1495–1521.
-Ivana Lukić (2011) Relation between creativity and planned regulation in the process of shaping urban skyline, Limes: Borderland Studies, 4:2, 131-149.
-Jacobs, J. (1961). The Death and Life of Great American Cities. New York: Random House.
-Jansson, A.; Lagerkvist, A. 2009. The Future Gaze: City Panoramas as Politico Emotive Geographies, Journal of Visual Culture 8(25): 25–53.
-Jourdan, J. & Muller, B. 2008. Hochhausentwicklungsplan Frankfurt am Main, Fortschreibung 2008 – Städtebauliches Leitbild und Standorte. Frankfurt: Jourdan & Muller PAS.
-King, A. (2004). Spaces of global cultures: Architecture, urbanism, identity. London: Routledge.
-Kostof, S. 1991. The City Shaped: Urban Patterns and Meanings Through History. Boston, Massachusetts: Bulfinch Press, Little Brown and Company.
-Lang, J. (1994). Urban Design: The American Experience. New York: Van Nostrand Reinhold.
-Leaman, A. and Bordass, B. (2004) “Flexibility and adaptability”, in Macmillan, S., Designing better buildings, Taylor & Francis, Abingdon, pp. 145-156.
-Loe, E. (2000). The Value of Architecture: Context and current thinking. London: Royal Institute of British Architects.
-Lukić, I. 2010. Vizuelni aspekt regulisanja urbane siluete, Nauka+Praksa 13: 61–64.
-McNeill, D., Skyscraper geography, Progress in Human Geography, 29(1), pp. 41-55, 2005.
-Nebojša & Čamprag, Nebojša. (2015). Frankfurt and Rotterdam: Skylines as Embodiment of a Global City. CTBUH Journal. 2015. 26-32.
-Schmidt R., Eguchi, T., Austin, S., and Gibb, A. (2010), “What is the meaning of adaptability in the building industry?”, In proceedings of the 16th International Conference on ‘Open and Sustainable Buildings’, CIB 104, Bilbao, Spain, May 2010, pp. 227-236.
-Schneider, T. and Till, J. (2005), “Flexible housing: opportunities and limits”, Architectural Research Quarterly, Vol. 9 No. 2, pp. 157-166.
-Shehayeb, D. (1995). The Behavioural Opportunities Approach: An explanatory and narrative approach to urban public space. In A. Seidal (ed.), Banking on Design: Proceedings of the 25th Environmental Design Research Association (EDRA) Conference (pp. 208–215). San Antonio: EDRA.
-Stamps, A. III; Nasar, J. L.; Hanyu, K. 2005. Using Pre-construction Validation to Regulate
Urban Skylines, Journal of the American Planning Association 71(1): 73–91.
-State, Paul F. (2004). "Brusselization". Historical dictionary of Brussels. Historical dictionaries of cities of the world. 14. Scarecrow Press.
-Stubbs, John H.; Makaš, Emily G. (2011). "Belgium, Luxembourg, and the Netherlands". Architectural Conservation in Europe and the Americas. John Wiley and Sons.
-The Editors of Encyclopedia Britannica. "Skyscraper". Encyclopedia Britannica. Encyclopedia Britannica. Archived from the original on 2016-10-26. Retrieved 25 October 2016.)
-Vanolo, A. 2008. The Image of the Creative City: Some reflections on Urban Branding in Turin, Cities 25: 370–382.
-Watson, D., Plattus, A., and Shibley, R. (2003). Time Saver Standards for Urban Design. New York: McGraw-Hill.
-Arch daily, (2018), https://www.archdaily.com/tag/mol-campus
-Budapest Business Journal, (BBJ), (2017), https://bbj.hu/business/foster-and-partners to-design-mol-campus_140338
-Malmo. 2011. Sustainable City Malmo¨ Magazine. http://www.malmo.se/download/18.3744cbfb13a77097d87462f
-Mol campus, 2017, http://www.molcampus.hu/en/hq
-Västra Hamnen (2015) The Bo01-area A city for people and the environment http://malmo.se/download/18.7101b483110ca54a562800010420/westernharbour06.pdf
-Wikipedia, List of cities with the most skyscrapers, 2019, https://en.wikipedia.org/wiki/List_of_cities_with_the_most_skyscrapers