

Fig. 2. Computer rendering of currently ongoing project in Lodz, designed by studio MVRDV source: www.mvrdv.nl

II. GUGGENHEIM MUSEUM TRIGGER OF REVITALIZATION IN BILBAO, SPAIN

Looking at the example of city of Bilbao, the largest city in the province of Biscay and in the Basque Country as a whole. With population of 345,141 as of 2015 [5], it is a bit smaller than city of Lodz, but the city was experiencing the same problem as Lodz - creating new identity for the city which was mainly industrial. From 1850s to 1980s city of Bilbao grew in population from 50 thousand to almost 500 thousand, but in the mid 80s of 20th century, after the collapse of industry, city started experiencing growth in unemployment and started losing the inhabitants [6]. Naturally, city lost its identity. In the late 1980s the process of revitalization has begun with new urban planning when the local government created "Territorial Plans to identify opportunity areas" which led, amongst other things, to 1995 inauguration of new metro system, and two years after inauguration of Frank Gehry's Guggenheim Museum. Thanks to this building and process of revitalization the term called "Bilbao effect" was coined [7]. It is a phenomenon whereby cultural investment plus showy architecture is supposed to equal economic uplift for cities down on their luck. It is the father of "iconic" architecture, the prolific progenitor of countless odd-shaped buildings the world over. The building was supposed to be "a driver of economic renewal", an "agent of economic development" that would appeal to a "universal audience", create a "positive image" and "reinforce self-esteem". However, it wasn't the first time in history that the city was reinvented by new structures, it had happened already in Paris, by building the Eiffel Tower, and in 1970s with Rogers - Piano Pompidou Center, or in 1970s in Sydney, when city was placed on the world map thanks to Jorn Utzon's design for Sydney Opera House[8]. Idea of local government in Bilbao was exactly that - reinvention of the city by architecture. Question is, however, can post-industrial cities of smaller scale compare themselves with Sydney or Paris, and by using same solution profit in the same way. To say that Gehry's Guggenheim Museum was to be the only trigger of the revitalization would of course be oversimplification, as the city was already undergoing a period of radical change. It had a new

metro system with sleek stations designed by Foster & Partners and two superb new library buildings. The city was completely rethinking its public spaces and a sophisticated contemporary culinary culture was emerging, however it was the Guggenheim which placed city on the world map. Since it opened in October 1997, the Guggenheim Museum has attracted some 7 million visitors, of whom 60 percent are foreigners. It has contributed to the maintenance of approximately 4,500 jobs, principally in transport, hotels, restaurants, bars, coffee shops, and retail establishments; it has created added value amounting to more than €1.2 million, which has produced an increase in local fiscal capacity and tax revenues close to €200 million. Finally, the 'Guggenheim effect' has also been psychological: it has contributed to the recovery of civic pride. However, many critics see this kind of city development as the problem, looking at economic impact, critics claim that future economy is, because of this kind of revitalization process, highly unstable, because it based on tourism and retail, and speculative real-estate development sector. Also, patterns of employment created in urban redevelopment projects tend to be highly polarized. They are characterized by a relatively small number of highly paid managerial jobs and a far larger number of low-paid, unskilled jobs in the service industry. Process of gentrification followed naturally, and while revitalized neighborhoods are flourishing, the problem of poverty is not solved, rather transformed to other parts of the city, and now from socio-economic point of view we are speaking of the 'new Bilbao' one represented by the renovated, spectacular downtown, and the 'old Bilbao' by the depressed neighborhoods on the periphery. It is clear that revitalization, specifically by model of "building" the landmark is polarizing issue, in some aspects it certainly helps the city, but on the other hand it does not fully solve the problemn.



Fig. 3. Guggenheim Museum in Bilbao, Spain, designed by Frank Gehry source: https://a-lewis.net/category/spain/

III. REVITALIZATION OF GLASGOW, UNITED KINGDOM

Other city which had gone through the similar process is city of Glasgow in the United Kingdom. City, with population of 621,020 as of 2011, has also gone and is still ongoing the process of revitalization. City which had had an impressive industry during 19th century did not escape the effects of the Great Depression, and in 1960s city had already been in great

economic decline. The revitalization process started rather early, thanks to the "Bruce Report" [9] which would ultimately become the blueprint of the modern Glasgow of today. he Bruce Report (or the Bruce Plan) is the name commonly given to the First Planning Report to the Highways and Planning Committee of the Corporation of the City of Glasgow published in March 1945. It influenced an intensive programme of regeneration and rebuilding efforts which took place in the city and surroundings from the mid-1950s and lasted until the late 1970s. Bruce Report death with problems of Glasgow City Centre, sometimes rather radically, proposing demolition of many historically important structures, specifically Victorian and Georgian buildings, which in most of the parts did not happen. Report also dealt with solving the problems of transport, and solving the problem of the overcrowded city centre, dispersing the population to outer areas and new towns, in order to allow a new service based economy to flourish with the help of an overhauled transport system. Since the mid-80s however, the city has enjoyed an economic and cultural renaissance — a financial district consisting of a number of new, purpose built office buildings has rapidly developed in the western end of the city centre, and this has become home to many well-known banks, consultancy and IT firms, legal practices, and insurance companies. Between 1998 and 2001, the city's burgeoning financial service sector grew at a rate of 30%. Glasgow was then named European City of Culture in 1990, followed by City of Architecture and Design in 1999 and European Capital of Sport in 2003. The city's waterfront has also been completely transformed, from industrial dereliction caused by the decline of shipbuilding into an entertainment and residential centre piece. The banks of the Clyde have become a playground for property developers, with office blocks and high-rise luxury flats taking the place of the old shipyards, granaries, wharves and docks. Particularly the riverbank is interesting urbanistically, as in walking distance, one next to another are located many landmarks of architecture, starting from Glasgow Science Centre designed by Building Design Partnership, Norman Foster's The SEC Armadillo (originally known as the Clyde Auditorium), and last but not least is Riverside Museum, designed by Zaha Hadid [10]. Specifically this building has emerged as the landmark of the city, and was the most visited attraction of Glasgow in the year 2017, with an 1,355,359 visitors, which is 7.7 percent incline comparing to the year 2016. Not to speak about museum functionality, or even the appearance, the structure did important urbanistic job - it activated the waterfront, and naturally and spontaneously, surroundings were developed, the pedestrian zone was created, the same as bicycle roads etc. Also on the socio-economic plan it was important for Glasgow, as not only it has brought tourism as continuous economy, but also changed the image of the riverbank for citizens of Glasgow. However, similar as in case of Bilbao, it might have blocked the further development in terms of social housing, as the surrounding area grew in value, and there is a certain level of fear trying to continue development and for architects it is hard to build next to Hadid's

building, as there is possibility that whatever is built it will be overshadowed by Riverside Museum, and Hadid name. Also, although the architecture team claims that building is contextual, it is hard to say that building correlates with the surrounding in any way, and together with the plot it takes a lot of ground space, which creates problems in future urban planning of the area. Once again, there is a polarizing situation surrounding inviting "starchitects" to design and be in a process of revitalization, but in case of Glasgow less so than in case of Bilbao. Glasgow, unlike Bilbao, was more worldly recognized and has already had many landmark structures during history, with examples of Victorian and Gregorian architecture, and later on with presence of Charles Rennie Mackintosh and his architecture. City was not reduced to being "city where is Riverside Museum" as Bilbao was reduced to "city of Guggenheim", the same as Paris was not consumed by Pompidou Centre [11]. Also, 'landmark' architecture structures can also not overshadow the function of the building, as an example could be used I. M. Pei's Louvre Pyramid [12] although the structure is widely recognized and it is a landmark, it does not overcome the function of a museum as much as Riverside, or even more Guggenheim in Bilbao do. When visiting Guggenheim, one can claim that the function of the building becomes irrelevant as many of the visitors come mainly to see the structure and architecture.



Fig. 4. Aerial view of Riverside Museum in Glasgow, designed by Zaha Hadid source: © Hawkeye Aerial Photography for Zaha Hadid Architects

IV. REVITALIZATION PROCESS IN LODZ, POLANDH

Lodz, nowadays third city by size in Poland, with population with little bit less than 700 thousand inhabitants and decreasing [13]is the most typical example of the polish post-industrial city. Once it's textile industry had collapsed, and after Nazi regime and losing the most of its Jewish citizens city has undoubtedly lost the identity. After the collapse of communism, as new era in Poland started it also have meant new life for city of Lodz, new urban plans and creating the new identity of a city, which would not include only "post-industrial" prefix [14]. City has begun massive development in the very beginning of 21st century, creating student life and investing in Universities, but

also developing business. Plots in the area were rather cheap, as well as the work force so it was not surprising that many global corporations opened headquarters in Lodz. With money influx, local government could start the plans for revitalization, which are still in process. Social awareness of post-industrial architecture heritage has also grown after the conservation and revitalization of Manufaktura complex. The Manufaktura is an arts centre, shopping mall, and leisure complex which is today major tourist asset of the city, it includes the largest public square in Łódź, which acts as a venue for cultural and sports events [15].

The Manufaktura opened on 17 May 2006, after 5 years of planning and the subsequent 4 years of construction. The total area of the complex is 27 hectares. The work involved the renovation of an old textile factory building. In old factory buildings now can be found restaurants, bars, shops, cinema, museum and other public activities. Seeing the success of the renovated complex, developers and city started investing in other similar properties, conservating them, renovating and reusing them. Other example of reusing post-industrial architecture in Lodz are Scheibler Lofts, also set in old factory now high-end residential complex. With industrial architecture coming back to life, city centre was going through revival and naturally process of gentrification followed, with displacement of lower income residents. Creating new layer of "landmark" architecture can surely give the economic boost to the city, and also help the process of revitalization in way that certain areas of the city which are at the moment vast, abandoned, or demolished will come to life, is not necessarily bad for Lodz. The question on the other side is how they correlate with existing architecture and which amount of respect there is for existing architecture and heritage. Also, Lodz has currently an opportunity to create landmarks out of existing architecture and heritage, such as was made with Manufaktura complex, as there is enough social awareness currently for architectural heritage. Public opinion about future Libeskind project in Lodz is the best indicator of how much social awareness there is currently for heritage. On public survey people voted that they do not want Libeskind project for Lodz Architecture centre, at least not in that shape and in that location, because it doesn't correlate with the city at all, and they feel like it doesn't have any connection with the city in matter of architecture or history [16]. On the other side, MVRDV project was received much better, as with materials and forms is implemented in the city matrix in more subtle way, although it does not have that "landmark" effect. It does however feel like it is designed for the city and its citizens.



Fig. 5. Manufaktura complex in Lodz, Poland source: https://retailnet.pl/2018/03/01/122264-manufaktura-z-kolejnymi-rekordami/

V.CONCLUSION

Making comparisons between Lodz, as the post-industrial city, currently going through the process of revitalization and development, and cities such as Glasgow and Bilbao, cities which have already gone through bigger part of the process, is necessary, and a lot can be learned from situations which occurred in these cities. Gentrification is the process which closely follows the process of revitalization often, and should be certainly dealt with, and not supported. Also, when making comparisons thing that should be kept in mind is the visual identity of Lodz at the moment, and the risk of losing that identity when city goes through revitalization and is being reinvented. Situation which have happened in Bilbao with city developing but losing the identity and authenticity in the process is problematic and it is big possibility for Lodz, as the heritage architecture can easily become overshadowed by new architecture, especially if new designs are too free and do not follow urban planning rules. Glasgow, on the other hand, had more different layers and eras of architecture, which were easier to survive in the palimpsest of new layers. Lodz, as the city which in bigger part was product of industrial revolution does not have this kind of historical palimpsest, so it is necessary that collision of old and new is carefully planned and delicate. While "starchitecture" can help the revitalization process and boost economy, it might create bigger gap in socio-economic differences in society and provoke process of gentrification and displacement more than it is necessary. Landmark architecture should be designed in a way that is contextualized and that it correlates with heritage and existing architecture. New architecture should be used to emphasize the existing identity of the city, more than dominating the surrounding in an ignorant way. While Guggenheim Museum in Bilbao did bring many positive aspects to the city, it overpowered the existing city structure, while in Glasgow we can see better urban planning example where riverbank was implemented with new structures it still did not completely lose its identity. The same happened in Paris with Louvre Pyramid which did not take away from the city, but brought in the new layer which became part of the city matrix. Introducing new public typology in the city also should

not mean automatically displacing the inhabitants and gentrifying the area. Nowadays, 20 years after Guggenheim Museum in Bilbao was opened, we can start analyzing the positives and negatives of introducing landmark architecture to the cities and creating conclusions what can it do for city and future development. It is certain that although there is economic boost which this kind design brings, in matter of tourism and real-estate development in the beginning, once that it starts fading there is not much maneuver what to do next. In an ever changing society, with technology and advancement happening on faulty basis, needs from what city should be and how it should look like are changing faster than ever before. That is why urban planning now is more important than ever, that is why cities should be changing with proper urban planning rules rather than provoking the change with creation of landmark architecture and letting the change happen by default, which might result in unwanted processes, such as gentrification, displacement, and inauthentic "global cities", uncontextualized and international style architecture.



Fig. 5. Interpolation of old and new architecture, pool at the rooftop of what used to be textile factory, nowadays hotel Andel's, Manufaktura Complex in Lodz, Poland

source: https://polskaniezwykla.pl/web/gallery/photo,453863.html

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