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NON-PLACES IN THE CENTER OF THE HISTORIC MAIN TOWN IN GDAŃSK? DESIGN THINKING AS A METHOD OF SOLVING PROBLEMS IN CITIES

Abstract: The interiors of reconstructed extensive blocks of the historic Main Town in Gdańsk are nowadays degraded areas, full of cars, with "holes" after never-finished archaeological excavations. It is not surprising that inhabitants avoid them. These are NON-PLACES. This situation prompts social movements to act. The first step towards the change was the interdisciplinary and transdisciplinary project of revitalization of one of the backyards. The main issue was to find a way of its development accepted by users, economically justified and based on the cultural heritage of this unique city. This was noticed by the dwellers, the media and the local government as well. The second step – the implementation of the project – is in progress. Based on this example, the question could be asked how to improve public participation in development process to make it more inclusive and effective. The aim of the paper is to assess if Design Thinking methodology could help to strengthen dialogue in urban space. The project of development of the backyard in the Main Town in Gdańsk can be an example that it might be the relevant method of solving problems in cities in the participatory way.

Keywords: Heritage conservation, inclusive planning, participatory research, urban revitalization.

Introduction

Cities have always struggled with misery and ugliness. It is nothing new today, even in their centers. Very often this situation is connected with the age of building structures, domination of one function, lack of inhabitants or poverty. In some aspects the main town of Gdańsk is similar in this diagnosis. The difference resides in the history after the second world war: rebuilding and political transformations. The second has resulted with pathology behaviour, whereas the first has given its place when it shows up. It finishes with views of neglected space for which no one feels responsible: no residents of the urban quarters – users of the space nor city authorities are its owner. Recognition of this problem and finding solutions was a key point for a group of volunteers gathered around initiative of academics from Gdańsk University of Technology and Non-governmental Organization FRAG under a Pilot Project "Urban quarters – non-places?"[1]

According to this experience, authors of this paper consider why municipal policy in this case is still not efficient and effective. Then the question comes about as to what should be changed to encourage public engagement in providing higher quality results in order to satisfy all. In the end some recommendations of that issue shows up. The thesis of the paper is to prove that Design Thinking methodology is relevant and a universal method for solving problems in urban spaces under the example of Pilot Project. Authors belief that this methodology provides quality of organization processes of change, public participation and qualitative results as well.

To reach the aims and to prove a thesis of the paper several methods and techniques are used. The most important is a methodology in comparison of case studies. Next to basic Pilot Project from Gdańsk; two others, Oslo and Copenhagen, are chosen to present literal replication as relevant. In the end it shows cause-effect relationships due to the same factors: empathy and iteration. This methodology is based on qualitative methods. Some techniques used are scene investigation, interviews, survey of documentation, description, analysis and bibliographic query, according to grounded theory.

[1] Project Design Thinking „Urban quarters – non-spaces?" was organised by *Doctor-Ants*, scientific organisation at Gdańsk University of Technology, and led by Joanna Szechlicka, on behalf of FRAG association in framework of „Design Thinking @ PolitechnikaGdańska" initiative led by Joanna Pniewska (Szustakiewicz). Its aim was to promote and educate about Design Thinking as a way of thinking and method of solving problems in an innovative and interdisciplinary terms. ProjektanciKwartalow.pl group worked on the project of urban quarters redevelopment and authored its results.

1. Design Thinking in theory

Design Thinking (DT) is an approach to defining and solving problems in a user-centric, creative and multidisciplinary way. It defines design as a certain way of thinking and working due to Meinel and Leifers four basic principles [2011]: human rule – to satisfy users' needs; ambiguity rule – to stay open and accept failures; re-design rule – to envision the future understanding the past; tangible rule – to facilitate communication using prototypes. These are perfectly mapped in the 5 steps of DT process used by the school of Stanford including: Empathy – Define – Ideate – Prototype – Test [Brown, Katz 2009].

Empathy is all about understanding users and other stakeholders – their needs, expectations, context. All of this is to Define the problem from users' perspective and investigate further – how the needs were met and problems solved by others, what the resources are, markets, competition, *etc*. The Ideation phase stimulates individual and team creativity in order to find a number of great solutions to be Prototyped and Tested with users. The listening and failure acceptance approach of designers throughout the whole process is reflected in the iterative essence of Design Thinking – if needed, it is recommended to go back to the process phase in which the mistakes could be fixed and lucking information collected. This sequence can be filled with various methods and tools increasing the effectiveness of the process by its customization to the problems substance.

Design Thinking main difference from the engineering and scientific way of thinking lays in starting problem solving processes with a vision-goal definition instead of careful investigation of all the problems restrictions (see: Table 1, where most important elements of Design Thinking theory are described). Therefore, DT is especially recommended for poorly defined, complex, "wicked" problems that have many stakeholders with different opinions on the best solution and its expected results [*ibidem*]. The promise of DT is to create solutions on the intersection of business, technology and human values that in consequence are feasible, viable and desirable [*ibidem*]. This way the distinct expectations of various stakeholders can be met.

From the perspective of urban design, authors consider empathy, co-design, social responsibility, iteration and pre-defined process structure as the most new to hitherto revitalization practices. Design Thinking with its pre-defined structure shows a certain way to follow on which many different tools and methods may be applied like different vehicles are used to travel.

But DT structure is "only" an effect of way of thinking about change in the world. The key point there is a human centred principle with its empathy.

Table 1

Selected elements of Design Thinking in theory

	Design Thinking
Principles	• Human rule • Ambiguity rule • Re-design rule • Tangible rule
Approaches	• Empathy (A, B, C, D) • Social responsibility (A, B, C) • Engagement (A, B) • Multidisciplinarity (B, C) • Deep and wide exploration of problems (A, B, C) • Thinking out of the box (B, C) • Flexibility (A, B, C, D) • Ok2fail (A, B)
Methods	• start-point with empathize phase (1, 2, 3, 4, 8) • co-design (1, 2, 3, 4, 7) • iteration (2, 3, 6, 7, 8) • interviews and observation (1, 2, 3, 6) • multidisciplinary team building (1, 5, 6, 7) • challenging (2, 5, 7, 8)
Tools	• Stakeholder map • Personas • Empathy map and defining problem according to Point-Of-View • Model from empathy to testing
Effects	• technically feasible • economically viable • desirable by users

Source: Authors' own work (Tables 1-3).

Understanding users makes the core value, the source of inspiration and the path to innovation for design thinkers [Plattner *et al.* 2011]. Various methods and tools are used. Most common are: in depth interviews, ethnographic observations, shadowing, service safaris, user dictionaries or visualisations. Those may be accompanied by other methods used by psychologists, sociologists, anthropologists, *etc.* This variety enables designers to dig deep and get the most of empathy of all kinds: cognitive (intellectual reaction to emotions of others), emotional (emotions

sharing with others) and compassionate (honest concern about those people in need) [Ekman, Białas 2012]. The point is to understand the users' point of view so well as it was ours. Tim Brown explains the empathy goal as understanding how people use things, what they do and don't do, and what they don't or can't understand in their actions [Brown, Katz 2009]. This is where the innovation based on emotional relationship with customer begins [Liedtka, Ogilvie 2011].

The second important part of methodology is crucial for this paper in iteration [Kim, Hinds 2012], which is a natural consequence of "ok2fail" attitude under which we are ready to accept our failures and learn from them to develop even better solutions. This way we are assured to "fail cheap, fail early" which means that with comparably low investments we are able to diminish the risk by taking small steps and observing their consequences. In the end iteration encourages further solution development and betterment instead of implementing solutions that do not meet users' needs.

2. Participation

Can Design Thinking be an effective methodology to help problem solving in cities? Before authors answer this questions it is important to examine and explain some important points of reality in regards to the concept of urban change. At first this movement is carried out by various stakeholders: public authorities, residents and other stakeholders. Their role, especially city authority, as well as use of public funds, is to determine the form of intervention in declined spaces. All together, allow claims that revitalization is the most suitable approach[2] that ensures that the needs of all people and institutions involved are met. As the term has many meanings in different countries[3],

[2] In Poland formal document which is used the most in frame of revitalization is local program of revitalization (LPR) and local revitalization plan. It is important to stress that this paper come up in November and in October new state act of revitalization was signed which change the formal perspective of revitalization in Poland.

[3] Bryx, Jadach-Sepioło [2009, p. 53]. In Poland Revitalization Act was just signed by President in 27.10.2015. This is the first legal act concerning revitalization. Till now Polish governmental institutions, in *e.g.* Gdańsk City Authorities [Barański 2015], interpreted revitalization according to "National Strategic Reference Framework 2007 – 2013. Guidelines of the Minister of Regional Development in the programming of activities on housing" (Minister Rozwoju Regionalnego, *Narodowe Strategiczne Ramy Odniesienia 2007-2013. Wytyczne Ministra Rozwoju Regionalnego w zakresie programowania działań* dotyczących mieszkalnictwa: *Wytyczne w zakresie programowania działań*, 2008, p. 4) or definition introduced by Scientific Board of Project „Revitalization of Polish cities as method for cultural heritage preservation and factor of sustainable deve-

authors of the paper understand it as a wide and complex process of renewal of city space in physical, economic and social aspects where public bodies, residents and others are engaged[4]. In this frame the participation activity has its place as those which ensures, on different levels, involvement of all stakeholders, which is a similar approach to Design Thinking methodology.

Participation, in very general, as it is an engagement of citizens in decision-making processes which concerns some aspects of their lives. But it is not enough to use only this one short sentence to describe the reality of this action clearly and comprehensively. Authors of the "Understanding participation: A literature review" noticed that "many different bodies of literature around the thinking and doing of participation highlight that participation means different things to different people" [Brodie et al. 2009, pp. 14-15]. From this point of view three perspective of participative topics were revealed and described by Brodie et al. [ibidem]: individual, social and public. The first focus is on particular involvement based on individual values, world views, personal experiences or identity such as living according to religious beliefs, being a feminist or anti-racism etc. Social participation, as authors mentioned above shows, relate to collective activities of individuals that may be a part of their lives. It refers to both formal and informal contexts. It has little to do with political structures and institutions or governance. Some examples are involvement in voluntary, community organizations or cultural or leisure groups. The last type focuses on engagement of individuals or communities within structures and institutions of democracy in decision-making processes. The core to an approach of this type are in institutional organizations, ex. public bodies. Consider both society and individuals a key issue to succeed in policy delivery and vice versa. There is a strong belief in all three groups that it is better to work together than individually.

So how this engagement can be visualized? Brodie *at al*. [*ibidem*, p. 19] notice a Wilcox five-rung ladder of participation. It points out collaboration

lopment" (*Rewitalizacja miast polskich jako sposób zachowania dziedzictwa materialnego i duchowego oraz czynnik zrównoważonego rozwoju*) in: [Ziobrowski 2010, p. 9]. Discussion about the substance of revitalization is presented in comprehensive research of Zygmunt Ziobrowski (series "Revitalization of Polish Cities" by Zygmunt Ziobrowski (ed.), *Rewitalizacja Miast Polskich*, tr. [Bryx, Jadach-Sepioło 12 vols, Kraków 2009-2010], [Noworól 2005, pp. 36–42], Pawłowska 2004, pp. 24–27], [Lorens 2010], [Zuziak 1998]. In other countries definitions proposed by state institutions are introduced in publications as below: [Tallon 2013, pp. 4–5] (in United Kingdom); [Roberts, Sykes 2000, p. 1] (in Anglo-Saxon planning culture); [Fraser *et al*. 2003], p. 4 (in Western Europe)

[4] Such as authorities and municipal agencies, local entrepreneurs and companies, representatives of academia *etc*.

and partnership working of in-depth engagement: information, consultation, deciding together, acting together and supporting independent community interests. These different levels of involvement as well as definition of revitalization shows interaction between stakeholders. In this depiction they demand from each other taking into account their expectations and needs. In this understanding, as authors of this paper assert, the participation concept is treated instrumentally on the level of cognitive empathy. It is a matter of the individual comprehension of each body involved in participation activities if these two more, emotional and compassionate, are met. The quality of participation rely on empathetic engagement of all parties involved in the process. This results in the significant difference between participation in revitalization and Design Thinking: the "full package" of empathy, which is at the core of this methodology as its approach and basic step in method. Thanks to this authors claim that Design Thinking results presents better quality solutions.

There is a second indicator of the quality of participation in revitalization: level of real impact of stakeholders during planning process on its results. This is strictly connected with being flexible and ready for change when new insights appear. There is no participation where all decisions were already made beforehand. In that situation collected opinions of stakeholder are intended to create an illusion of democratic process and this happens quite easily as, for example, Miessen point out that in his book [Miessen, Choptiany 2013]. As in this paper, authors focus on the key differences between participation process in revitalization without and with Design Thinking, the first question under the evaluation of participation concerns if it took place or not[5]. In terms of this answer there is possibility to evaluate level of impact of stakeholders for decision making participation which should be examined next[6]. These are aspects of the ambiguity rule, which, next to the human one is second principle of Design Thinking methodology. It reflects in ok2fail attitude and iteration method and there is no DT without them. That is a difference between one and the other: revitalization with or without DT.

Around these human centric and ambiguity principles in the Design Thinking, Pilot Project of change in neglected backyards of Gdańsk Main Town was settled answering the needs of finding the effective method for urban change.

[5] Despite the fact, that it would be scientifically interesting to evaluate both of the participation processes using the measurements proposed in guide.

[6] Important publication in this field is guideline by [Warburton *et al*. 2007].

3. Non-places in Gdańsk Main Town – Pilot Project of revitalization of backyards under Design Thinking methodology

The interiors of extensive blocks of the historic Main Town in Gdańsk for many years were open spaces for inhabitants. Their nowadays shape was an idea of reconstruction after the second world war. The historic urban structure used to be very intensive[7]. Destruction of buildings was significant[8] and the decision to rebuilt block of flats with all their modern requirements was made. In the assumption of Zachwatowicz Plan [Gawlicki 2012, pp. 175-182], which was master plan for rebuilt, Main Town was going to be mainly workers district[9], with kindergartens, schools and other public facilities. Residential buildings around each of the quarters were shortened to 1/3 of their first depths so without outbuildings and usually no third tract in the main tenement house. It was important to provide airy, sunny flats full of greenery. There were banks, beaters and playgrounds full of children and adults. Residents used to prepare ice rinks during the winter and planted trees by their own. The community was much more consolidated and relation closer.

Situation changed during system transformation. City authorities care less and less about backyards. It has been considered as a half public space which, sooner or later, is going to be sold. That is why only the most essential responsibilities were taken. Social structure of residents started to change: people got old, children grew up and move away, more apartment for rent appears. In consequence the neighbourly relations broke down and the backyards nowadays are full of garbage, puddles, people drinking alcohol, "holes" after archaeological excavations and cars. It is not surprising that inhabitants avoid them. These are NON-PLACES.

This dramatic situation prompts social movements to act. The first step towards the change was the interdisciplinary project of revitalization of one of the backyards. The main issue was to find a way of its development accepted by us-

[7] The Buhse Plan reflects it was around 75-90% of area for each of the urban quarters of Main Town.Buhse Plan is a plan of Gdańsk Main Town from the 1869 which is engraved on stones. It precisely reflects changes of the space and ownership structure; in collection of Polish Academy of Science in Gdańsk.

[8] The scale of damage was described recently by [Gawlicki 2012, pp. 18–23] and [Friedrich 2015, pp. 37-43].

[9] That was a claim of Communist propaganda, as for example in Wytwórnia Filmów Dokumentalnych i Fabularnych, [*Między Złotą i Zieloną Bramą. Plastycy zdobią Gdańsk*, 1953].

ers, economically justified and based on the cultural heritage of this unique city. This was noticed by the dwellers, the media and the local government as well.

During 3 months of working under the DT process a team started with empathy phase. The flagship tools for this part are Personas canvas, which, together with the Empathy map tool, rely on a deep understanding of the users. They helped to identify the stakeholders, their needs, problems and insights around. These tools were the beginning of designing and opened a path to the next step in DT. Under the empathy the diverged and complicated problems without one solution were identified. They were, in example, starting with the technical problems caused by the unstable situation of covered underground heritage (foundations of the outbuildings never restored after second world war destruction) and with overpowering neighborly relations finishing – both, directly and indirectly, being the result of long-term neglect of the owner of backyard – local government. These just led us to redefine a challenge which used to be a "project of development of backyards in Main Town in Gdańsk, accepted by users, economically justified and based on the cultural heritage of this unique city" to the "project of model development". The reason was, that designers realized that without more involvement of city authorities in changing this space of backyards in Main Town, there is no possibility to overcome the situation. City authorities expected that residents would take responsibility for the space by themselves. They did not take into account that the space, and social relations, were abandoned for so many years, that there is no power in this local society to overcome the situation on their own. Taking all this into account it would be unethical, as designers realized, to encourage residents to lease or to buy the backyard areas.

Without empathy there would be no consideration of ethical issues. As a DT starts with this approach, thinking about the future and responsibility on many levels – not only technical, but social as well – is part of this methodology. Once more let the authors stress, that empathy can happen in revitalization process without DT, but it is not obligatory that all three aspects of empathy arise – in DT it always arise. It happens because it is not the designers point of view but those who the project is for. The point is not to reach the targets set at the beginning if they do not fulfill the needs of users. Just to finish the part about empathy in Pilot Project with conclusion that it was a great educational experience for designers not only from a technical knowledge aspect but as a socially responsible human being aspect as well, and from this point of view it can be considered a success story.

When the challenge changed the proposed solutions following the model development idea which resulted with totally unexpected solutions from the

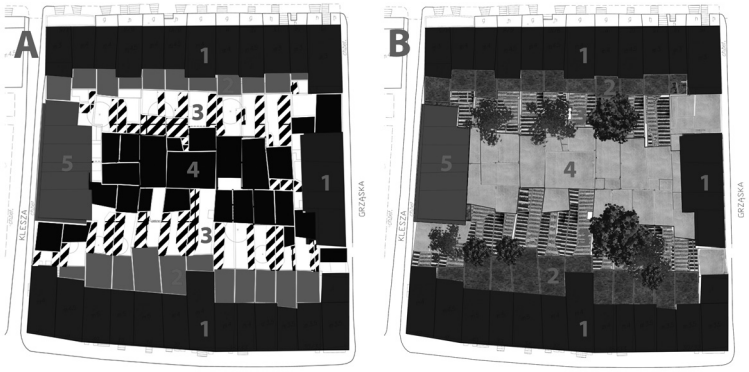
users point of view. In this context, unexpected does not mean unacceptable, but innovative.

The new value as a result shows the possible development considering social and economic issues which respect the cultural heritage of the city.

There is triple divided space (Fot. 1): the nearest to tenement houses is dedicated to half-public spaces used by each of the community block of flats as gardens (2); the second is a circulation zone with car-parks (3); the third is dedicated to half-public or public usage as an integration space for neighbours (4). Due to time reasons and character of the project (educational for students and PhD candidates) as well as interdisciplinary character (where the multi-disciplinary was needed) the Pilot Project ended with unfinished conception of model development from Design Thinking perspective.

There was only one iteration done (Fot. 2) and the solutions required changes due to testing with residents. That is why it is entirely accurate to claim it was successful in this aspect.

Iteration is essential for this methodology and the main conclusion after this Project was to focus on verification of solutions much faster when new a project had been set. Fot. 3 shows shape of the project after iteration with



Fot. 1. Historic analysis (A) including situation before second world war and characteristic of usage of the space with functional triple-division as a project interpretation (B) of usage of space Part A, before second world war: 1, 2, 5 – tenement houses; 3 – side outbuildings/connectors; 4 – outbuildings. Part B, project: 1,5 – existing buildings, 2 – half-private space for each of the housing association as a green/recreation space; 3 – circulation area with car-parks; 4 – half-public or public space, dedicated minimum to all residents from the urban quarter.

Source: [ProjektanciKwartalow.pl].

Fot. 2. Testing with residents in hall one of the tenement houses in quarter by Sylwester Ciszek
Source: [www.sylwesterciszek.pl].

residents. At this point it is important to stress that lack of iteration in that moment was not the result of negative attitude. "Ok2fail" was extremely well implemented here as the second project had started in October 2015.Designers are a multidisciplinary and transdisciplinary team (architects, urbanists, civil engineer, sociologists, economists as well as residents of the quarter and academics, NGO members and local governmental officers), several iteration are already planned. What is important to stress is that local government has taken more responsibility on their own, when soon after Pilot Project and strong lobbying

Fot. 3. Visualisation of the project after iteration with residents
Source: [ProjektanciKwartalow.pl. and P. Mrozek].

Table 2

Selected elements of Design Thinking used in Pilot Project
("erasure" means, that element has not appeared during the process)

	Design Thinking
Principles	• Human rule • Ambiguity rule • Re-design rule • Tangible rule
Approaches	• Empathy (A, B, C, D) • Social responsibility (A, B, C) • Engagement (A, B) • Deep and wide exploration of problems (A, B, C) • Thinking out of the box (B, C) • Flexibility (A, B, C, D) • Ok2fail (A, B)
Methods	• start-point with empathize phase (1, 2, 3, 4, 8) • co-design (1, 2, 3, 4, 7) • interviews and observation (1, 2, 3, 6) • challenging (2, 5, 7, 8)
Tools	• Stakeholder map • Personas • Empathy map and defining problem according to Point-Of-View • Model from empathy to testing
Effects	• technically feasible • economically viable • desirable by users

by NGOs, as well as positive attitude of group of politicians and officers to this initiative, new funding and additional institutional support was launched.

Taking all this into consideration, there is a quite optimistic vision of urban change in case of backyards in Gdańsk, as the majority of DT principles were implemented (Table 2). Of course there still are a lot of things to do, but "ok2fail" attitude has been kept open for developing and changing with empathetic approach which provide right principles for designing. How much more still should happen becomes visible when you look at other positive examples of urban change where these two: empathy and iteration, are a core of thinking about challenge and taken activities.

4. Empathy and iteration as a key to success in revitalization in Oslo – Design Thinking approaches matter

The whole Grorud Valley and its part Bjerke district is a traditional industrial area of Oslo. Over the years the character of the industry changes what significantly affects the residents of these neighborhoods. Like most districts in Oslo, Bjerke noticed a large increase of population in last ten years: in 2005 there were 24,448 inhabitants and in 2015 already 30,502[10]. As in documents of Norway Bank, which is supporting the action[11], "most of the new residents were immigrants or had immigrant parents. People in Grorud Valley also have a weaker connection to the labor market than people elsewhere in Oslo".

In Norwegian approach, there is no revitalization projects that remain in isolation from other similar projects. The project itself for Grorud Valle is a part of a wider regeneration plan in the city of Oslo, which is part of a broader strategy at the national level. At the same time, this project itself is also a collection of many activities on a smaller scale and lower level. All this, however, creates a consistent scalable mechanism that adapts to the challenges due to the fact that it focuses on people and their needs, not the investment itself. Key approach for designers of the process is an attitude that "people are responsible for creating problems and responsible people for creating solutions" [Sarvo 2015].

In the example of Grorud Valley revitalization, a strong influence of the approach associated with the methodology of Design Thinking can be seen (Table 3). The process is preceded by a deep analysis of the problems which are treated as a dynamic process of an anthropological origin. The search for solutions begins with the diagnosis of the stakeholders in this process and their needs. Developing of the solution is provided by the citizens themselves under the guidance of experts and local leaders. Just as in Design Thinking, there are no measurable objectives to be defined at the beginning of the process but challenges which can be redefined during the process. It is not a comfortable situation from the point of view of the administration when it is not

[10] 'Oslo Kommune Statistikkbanken: Befolkningen etter bydel, delbydel, grunnkrets, kjønn og alder − Begge kjønn, Alder i alt, Antall', [http://statistikkbanken.oslo.kommune.no/webview/index.jsp?catalog=http%3A%2F%2Fstatistikkbanken.oslo.kommune.no%3A80%2Fobj%2FfCatalog%2FCatalog48&submode=catalog&mode=documentation&top=yes, accessed 22 November 2015].

[11] Husbanken, 'Challenges and potentials in the Grorud Valley', [http://www.husbanken.no/english/other-areas-of-responsibility/area-boost/the-grorud-valley/challenges-and-potentials-in-the-grorud-valley/, accessed 22 November 2015].

possible to determine the necessary level of financing of a project. However, this is the most appropriate approach since the purpose of revitalization are changes that are acceptable by society and actually could improve their lives permanently. It is not possible to diagnose accurately without a thorough empathizing on residents. This approach which built a positive and respectful relation between people, goes even further. It leads to situation in which the local community takes the initiative in the process and begins to make changes

Table 3

Project in Grorud Valley, Oslo in relation to Design Thinking methodology

Design Thinking	Project in Grorud Valley, Oslo
Principles	A. Human rule B. Ambiguity rule C. Re-design rule D. Tangible rule
Approaches	1. Empathy (results from principles: A, B, C, D) 2. Social responsibility (A, B, C) 3. Engagement (A, B, D) 4. Multidisciplinary (B, C) 5. Deep and wide exploration of problems (A, B, C, D) 6. Thinking out of the box (A, B, C, D) 7. Flexibility (A, B, C, D) 8. Ok2fail (A, B, D)
Methods	• start-point with empathize phase (results from approaches: 1,2,3,4,6,7,8) • iteration (1,2,3,6,7,8) • interviews and observation (1,2,3,4,5,6,7) • multidisciplinary team building (1,3,4,5,6,7)
Tools	• Stakeholder map • Personas • Empathy map and defining problem according to Point-Of-View • Model from empathy to testing • Sense of ownership and responsibility • Rapid results gain credibility • Transfer of the power and experience and awareness
Effects	• technically feasible • economically viable • desirable by users • long term and sustainability of the effects

without the participation of the authorities and involvement of public money at all. The number of these phenomena, not the cost of expenses or permanent mark in space, are treated as a real indicator of the success of revitalization.

All of these small scale revitalization processes could be based on social engagement without the support of authority, but the conducive environment for large scale process require more involvement from the government. One example of that is a big investment in creating a new park with cafe and place that could hold local community meetings. By restoring water on the surface, the whole space has once again become an attractive green place. Important is that this was not a previously prepared idea of the officials who notify the inhabitants only to inform of such thing. The entire idea has to come from the citizens and be introduced by authorities only. What's more needed was such place where locals in the community could meet does not appear until people start working together on this common revitalization project so the idea of this place was the important voice of this community that they need this participation and that it helps them to build stronger local relations.

Another common attribute of the process Design Thinking appears in the revival of the iteration of Bjerke, particularly in relation to the social processes. The revitalization process is judged by the number of residents participating in the process on different levels and depth of engagement. That is why improving of process is done by deepening the empathy, due to iteration. For Norwegian revitalization approach engagement of citizens in activities (and creating relationship in society) come up much more important things than polishing the results of activities in material aspects – failure in point of material one gives opportunity to gather once more and challenge the issue. This helps residents learn of the consequences of their actions and allow them to gain "noticeable and rapid results which are important to the credibility of long term initiatives and also vital to maintain the interest level of the mobilized groups" [*ibidem*].

5. Long-term and holistic practices in Copenhagen – future of Design Thinking in Gdańsk

The neglected space in historic center, including backyards, is not the only problem in Gdańsk. The issue has been recognized in most of the European countries including Copenhagen. Long experience of this city in successful renewal deserve attention.

Strongly influenced by Gehl studies from the 70s, focusing on promotion connection between architecture and sociology and "human centered"

approach for planning [Gehl et al. 2013], the City of Copenhagen focused on vital issue which was urban revitalization at the heart of the historic city.

In the 80s the governmental urban renewal program for Denmark provided, among other things, grants to help the owners of buildings in blighted urban quarters. In Copenhagen, restoration of historical housing was included in the governmental program for many years. Because of significant funds and efficient organization, program brought tangible results. The program lead not only to improvement in aesthetics of urban quarters and technical standard of the buildings but above all, the quality of life in the historical quarters of Copenhagen improved. Semi-public spaces inside quarters were redeveloped including enlargement of the inner-quarters "green" areas, recreational areas and essential parking spaces for residents [Bartoszewicz 2007]. New spaces foster closer contacts between neighbors and process has taught all involved actors to work together improve their surroundings. A series of public consultations and meetings while creating the program, spurred changes in the local community, which participated financially and contributed with their work in projects leading to change in the neglected district.

In 2000, integrated urban regeneration was introduced. This approach focused not only on the buildings but also on social and economic development, covering: social and economic development, local participation, partnerships among local stakeholders, analysis of local challenges and possibilities and raising the quality of the common space. But also this approach focused on achieving above mention goals, by providing support to owners that are unable to take part of revitalization themselves. It has been the primary objective of Urban Renewal in Copenhagen to redevelop the most blighted properties as well as common courtyards in need of intervention. The older housing stock of the city consisted of many small, very dilapidated and outdated housing, lacking toilet, bathroom or central heating. Furthermore, many of the common courtyards were degraded[12].

The third major program which include courtyards improvements is Sustainable Urban Renewal 2009-2013 for the City of Copenhagen – a sustainable governmental strategy for building renewal and communal courtyard improvement. It has been formulated through a series of focus group interviews with urban regeneration companies and private developers on the future of urban revitalization. One of the objectives included testing the new initiatives in the strategy and finding new ideas for future goals. Themes such

[12] City of Copenhagen, 'Sustainable Urban Renewal 2009-2013: A sustainable strategy for building renewal and communal courtyard improvement', Copenhagen.

as greater focus on sustainability, improving available support and simplifying the rules for the areas around the buildings were researched. At the same time, the strategy is a tool to address gaps to modernization and upgrading of the poorest housing in the City of Copenhagen [Nijhof 2010].

Copenhagen municipality has appointed six areas in Copenhagen for urban revitalization: Fuglekvarteret, Skt. KjeldsKvarter, Sundholmskvarteret, Gl. Valby, Husum and Central Vesterbro. The endeavour is, in cooperation with local citizens and stakeholders, to start a dynamo for a positive development by making it an attractive neighborhood to use, work and reside in. One of the projects in this program is Gl. Valby, which combine physical planning of urban spaces and urban revitalization with initiatives that strengthen cultural life in the area and create more leisure activities for young generation. Besides representatives of the City of Copenhagen, the project steering committee consists of representatives of the areas interested parties, residents, institutions and associations. The project is based on open working groups dealing with physical, cultural and social revitalization. A broad spectrum of cultural initiatives is used to draw attention to the area and create a local feeling of community. A driving force of approach used in Gl. Valby was the way it tackle the neighborhoods problems which appeared in the Gl. Valby master plan:

"Instead of focusing on neighborhood shortcomings and problems of renewal, the deprived neighbourhoods should be guided by endless possibilities. The projects many actors should locate and activate the neighbourhood resources. These can be the guys in the corner, who are are good at playing football and are willing to teach soccer to younger children. It can be the housewives, who want to create a cooking school. Such possibilities are only detected if we talk to each other and get to know what dreams we have for our neighbourhood".

The example of Copenhagen is to point out how important not only small part of the city is, such as backyard, but the system and a holistic way of thinking about the city as a body. It also shows that the scale of urban change in terms of empathetic and iterative approach does not matter. There are universal values with are flexible enough to follow never ending development of the city. Copenhagen with its long-term experience is a good example of principles shared with Design Thinking as a methodology.

Conclusions

Presented case studies from Grorud Valley in Osloand in Gl. Valby in Copenhagen proves the positive influence for revitalization process when em-

pathy and iteration are key points. Both countries have a long public participation history and taken activities, in term of this two aspects, is a vivid, effective and transparent part of process supported by public authorities. What is interesting, revitalization process in these countries is considered a long-term process, where iteration is a very normal part of city development – cities change so fast that revitalisation should be iterated all the time. The society of Gdańsk engaged in the urban change process and has an ambition to follow these examples as both are considered to be successful stories. In this context the second project in the backyard of Main Town, which is in process, is considered as an iteration to the Pilot Project.

It is not easy to convince the public in Poland that empathy and iteration are crucial points in building quality of revitalization. As many interviews with public officers indicate the fault lies with the restrictions in European funding or public procurement law which has a preference of quantity, not quality, measurements for evaluation. As a result, activities in the area of revitalization are tailored to available resources and not meet the needs of people.

There is a need to change attitude so that restrictions on the similar funding shames and spending public money were not obstacles in participatory process as in presented case studies. Authors of this paper strongly believe that Design Thinking with its methodology of principles, approaches, methods and tools is the right answer for building cities on quality values. This belief stems not only from theoretical considerations but practical experience as well.

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