ARCHITECTURAL STUDIES

Vol. 4, No. 2, 2018

Olga Gazińska

CITY RECONNECTION AS BASED ON THE PROJECT FROM STREET TO CITY BY THOMAS B. THRIGES GADE, ODENSE, DENMARK

West Pomeranian University of Technology, Szczecin, Poland
e-mail: Olga.Gazinska@zut.edu.pl

Received: September 04, 2018 / Revised: October 16, 2018 / Accepted: October 18, 2018

Abstract. Many current problems of the public spaces in cities are connected with ill decisions taken in the past 50-60 years. It is mostly connected with the rapid growth of the importance of cars in the 20th century. More and more cities in 50' through 70' invested vastly in road infrastructure, with a thought that private transport is the sign of lived in, energetic, fast growing city. These road developments often took space of historical parts of cities, not paying attention to tearing of urban tissue or newly formed problems for pedestrians. The project *From Street to City* by Thomas B. Thriges Gadein (Odense, Denmark) is a positive modern example of how the regeneration of historic urban tissue of the city is performed. Thomas B. Thriges Street, built between 1959 and 1970, was a four-lane street that allowed transit thorough the main part of the city. The main goal of the *From Street to City* project, designed in 2011–2012 by Henning Larsen Architects, is to connect the two parts of the old town with new public spaces and multifunctional buildings. In the paper, the project solutions and other actions of Odense municipality for creating a better, friendlier urban spaces will be shown. Moreover, the relation of Thomas B. Thriges *From Street to City* project to the idea of smart city is presented.

Key words: urban design, road infrastructure, smart city.

1. Introduction

Contemporary cities face many challenges that are often contradictory. Meeting the expectations of the inhabitants while keeping public finances afloat, care for the environment, being competitive and attractive in the national or international arena, requires a forward-looking and holistic development strategy. Modern urban development models, with sustainable development at the forefront, indicate tools and solutions to meet the needs of not just the present but also for the future generations. Road infrastructure is one of the investment categories that demand changes. Especially the wide transportation arteries in the city centres are in need of transformation. One of the organizations promoting the change of roads into more of public spaces is the *Project for Public Spaces* (Project for Public Spaces, 2017). It provides good examples of how different cities rearranged or transform streets to bring them back as public spaces. It also provides concrete solutions that could improve the quality of urban space. Even minor changes of the street space can cause changes in its perception and how it is used by the residents. Starting from bottom-up initiatives such as greening, supporting local businesses and others, and ending with large scaled, top-down urban regeneration projects. Such a broad project of reconnecting the city into one coherent urban tissue will be presented in the paper. The project *Thomas B. Thriges – From Street to City* of Odense, Denmark, is the case study.

2. Split cities and transport

The problem of divided city centres is widespread and common across all latitudes. Odense and the title project *Thomas B. Thriges – From Street to City* are examples of positive changes in the area previously dedicated mostly for car communication. It is also an example of global changes, in terms of urban development models, such as compact city, complex city, citta slow, smart city and many others, mostly based on sustainable development. The car, especially in the developed world, is no longer an indispensable tool and a sign of social status. Moreover, driving does not mean freedom any more but rather it is considered to be a restrictive tool. The reasons for these changes are numerous, and they are both social and environmental as arouse from deeper awareness of ecology and health; economical as to own a car gets less and less profitable; improvements in the public transport system. Promoting public transport and cycling is not just an invention of developed Western European cities. Cities of South America, with Bogota at the forefront, also introduce regulations and alternative ways of moving around the city (McGuirk J., 2015). It is also dictated by the equalization of opportunities for the inhabitants and the fight against air pollution. Broad road arteries in city centres, especially historical ones, cause additional problems. The more they divide the consistent urban fabric, the more they hinder free walking, cycling, or other communication methods. The introduction of wide streets in historic cities took place mainly in the 1960s, when the post-war car industries began to develop rapidly. It was then that individual communication began to be perceived as the most important, and because of it broad roads were built. The new road infrastructure was primarily designed to improve mobility, but it also changed the way people move and spend time, accelerating the pace of lives. The passenger car and its associated infrastructure have also enabled the emergence of urban sprawl which is against the modern idea of complex and compact city. One of the examples of historical city centres divided by transportation arteries is Szczecin, Poland. The old city was destroyed during bombing in the World War II, and after the war, by demolishing most of old still standing facilities. Starting in the 1960s, the old city has been changing and has differed freatly from its historic appearance. It was cut off from the Odra River by a wide four-lane arterial road, which was divided into two parts by the four-lane Wyszyński Avenue, and separated from the 19th and 20th century city centre by a four-lane Niepodległości Avenue from the west, and the Piotr Zaremba's Castle Route from the north. In addition, the bridges on the Castle Route and Wyszyński Avenue are only connections between city centre and the Right Bank district on the other side of the Odra River. The old town was enclosed in a roadside trap and did not have a chance of development, and the investments there (including the pseudo-modernist housing complex) did not affect positively on the appearance or function of the area. It was not until the 1990s that the area began to change with new buildings built on the pre-war development plan. The historical network of streets was also restored, as much as possible, but still within arteries. Despite these changes, the old city is still not an example of good public space. Continuously being separated and divided it does not encourage walking, and the presence of so many wide roads stimulates further intensive traffic. At this point, the old town is plundered with parked cars which negatively affect the reception of space and does not allow for further development.

3. Thomas B. Thriges – From Street to City Project

Thomas B. Thriges Street was built between 1959 and 1970 to reorganize the city of Odense (Brandrup H. H.). It was mainly based on car traffic and its task was to enable faster connection between northern and southern districts as well as provide a faster commute from the city to the harbour. In result the historical medieval city was arbitrary divided into two parts. The project *Thomas B. Thriges – From Street to City* is designed to re-connect the city and change the way people commute. The project encompasses approximately 700 meters of four-lane road (approximately 51.000 square meters) that goes through a historic downtown from Østre Stationsvej, at the railway station, to Albani Square. It is an excellent example of changes which are initiated and have a positive impact not only for the urban development process but also for the favourable perception of the city and the considerayion of needs of its inhabitants. In the 1960s, the overriding problem that created the highway in the city centre was to streamline direct connections in an expanding industrial city. The street, like its name (Thomas B. Thriges was an entrepreneur of the 19th century; electric motors

were produced at his factories), has become a symbol of the city's industrial development (Ibidem, p. 2). Over the years, the needs of the city and its inhabitants have changed with the increasing prosperity and the decreasing importance of the industry. The street that facilitated mostly car communication within the city has become a hindrance to another, suddenly more essential form of communication – pedestrian. Social and cultural needs came into the force, while the street began to limit not only space but also activities. Hence, a radical change in this area has happened – from the transportation area separated from the human (non-space), into the active and cultural space in which the man is in the centre of interest (good place) (Ibidem, p. 3–4). The reconnection is to be carried out in accordance with the principles of sustainability, and has to be compact and consistent. The resulting public areas are to be the new centre of urban life, connecting with existing pedestrian and public spaces, activating the inhabitants social life.

Fig. 1. Visualization of the project *Thomas B. Thriges – From Street to City*, source: http://www.arkitektforeningen.dk/sites/arkitektforeningen.dk/files/evalueringsrapport.pdf

In 2010, an international competition for the project *Thomas B. Thriges – From Street to City* was launched. In 2011, seven projects were submitted and three of them were chosen for the nomination: the projects by the Entasis Team, Adept Team, and Polyform and Team (Puggaard A. P. 2012). From those three, after thorough analysis and discussions, the project Entasis Team was awarded a prize. The selection criteria were: the quality of the proposals, both architectural and urban, as well as the relation to the premises and requirements of the competition; description of the organizational and design process over time, and the way of connecting interdisciplinary team competences; unity with regard to sustainable development, in particular social, economic and environmental; reference to the long-term development of the city. The winner-project was then coordinated and detailed together with the representatives of Odense municipality and inhabitants, representatives of the region and the specialists. The emphasis was put on four elements of the project: master plan (urban and architectural solutions regarding city's needs and plans), economic viability (financial and time optimization of the project), sustainable development (use of sustainable development tools and solutions; social, environmental and economic resources) and organization (employing appropriate, experienced specialists to manage the individual parts of the project).

The project has no rigid guidelines, while many design elements provide the opportunity for further adaptation and development. The project creates new public spaces that are differing in character, around which multifunctional buildings are designed (about 50 % of the space is designed as residential, 40 % as commercial,

and 10 % as retail (Ibidem, p. 31)). Architectural forms give the space shape, and influence its functions. Besides buildings, a great deal of emphasis is placed on greenery, which also shapes urban interiors. The project also encompasses a varied height of buildings. In the southern part, the buildings of maximum height of seven floors are planned as not to disrupt the city's silhouette with the church tower as the dominant. In the northern part, it is agreed to build two 17-storey buildings, which would be a gateway to the harbour area. The southern part of the project is also more dense and compact, and has more of an urban character. Northern areas are more informal, with larger semi-private spaces or roof terraces. Designed buildings are, in principle, multifunctional, with commercial, open ground, and other functions on higher floors (e.g., office or residential). The dominant buildings of Thomas B. Thriges Street are the rebuilt museum of H. C. Andersen's House and a new concert hall. Additional public space it is the park (Lotze's Garden) at H. C. Andersen Museum. The four-lane street is reduced and the space is turned to be mostly for pedestrians. The project *Thomas B. Thriges Street – From street to city* is also a part of the city strategy to develop the cycle and rail transport (Cycling-embassy, 2017) system. In the project, an introduction of tram lines (light rail way) is proposed (Proposal of a tramline was presented as separate project). The need of people to use the cars in that area was, although significantly reduced, but taken into consideration as well. A two-level underground parking and another one of one-level were designed for this purpose (providing about 950 parking spaces) in the northern and southern parts. An underground and on ground road infrastructure has been integrated. The first underground level is not only equipped with good vertical communication, but it also facilitates skylights that provide day light and help with the orientation (Puggaard A. P. 2012, p. 19, 23, 24). The construction of the underground car park allows to get an independent support system for the architectural objects. Despite the high cost of such infrastructure construction, it was agreed to be the best solution in terms of flexibility of future structures (as for technical reasons, the buildings on the parking lot can maximum reach of nine storeys, which is within the agreed height limit).

The proposed sustainable solutions include rainwater management (green roofs, rainwater retention), transport management (reduction of car use, organization and integration of public transport, cycling and walking, electric vehicles), waste collection systems (including recycling and composting) and energy control (reduction of energy consumption, application of solar and wind energy). The solutions applied in the project are designed both to facilitate the use of space after its completion, and adapt it to future climatic conditions (such as high temperature and extreme rainfall) (Ibidem, p. 17–23). The time line for the completion of the project *Thomas B. Thriges – From street to city* is to be realized in 2020.

Fig. 2. Rebuilding of Thomas B. Thriges Street, Odense; photo by O. Gazińska, 14.07.2015

Fig. 3. A crossing at Thomas B. Thriges Street and Overgade, Odense; photo by O. Gazińska, 14.07.2015

4. Smart aspects of the project

The project *Thomas B. Thriges – From Street to City* as well as other projects run by the city of Odense are the part of the smart city idea, which is supported by the municipality. Smart city idea in Odense means not only the use of modern technology but, which is more important, a holistic approach to the development of the city. It is necessary to apply the gained knowledge into practice, so the growth of the university and its cooperation with the city is extremely important. Openness and cooperation are the main criteria of being smart in Odense. Using technology in collaboration with many different organizations leads to new solutions, tailored specifically to the needs of the city and its residents. This approach to development has many positive effects visible in the city, both in urban tissue and social changes. Odense is also at the forefront of the European Smart Cities ranking in medium-sized cities in European Union. Odense municipality, apart from the progress made towards the smart city development, supports the development of knowledge and strengthens the cooperation with the universities, creates the basis for the development towards the City of Knowledge idea. This direction indicates the development of science and culture, which has a positive impact on the city and the quality of life of its inhabitants. The knowledge-based development strategy is also aimed at encouraging young and educated people to stay in the city. Odense, due to the greater competitiveness of other urban centres in Denmark, has yet much to do to increase its potential opportunities, and become an attractive place for development. The presented project corresponds both to the Smart City and City of Knowledge ideas.

The change introduced by the project are not limited only to Thomas B. Thriges Street. The project fits into the science scheme of the city. Together with the Odense University and its campuses, University Hospital, South Denmark Technical Collage, Science Park and Harbour, the street will become the cultural centre of the city. Its task is to create a connector function for all other educational centres, thus being the centre of the so-called Axis of Knowledge (Aalborg University). Moreover, *Thomas B. Thriges – From Street to City* greatly influences the life of the whole city. With the closing of such a significant connection (it was estimated that 30,000 cars were travelling through the streets per day (Brandrup H. H.), the entire communication network has to change. In parallel with the project, public transport system of the city also changes. The novelty is seen in introduction of light rail transit, and the transformation of the existing bus network. An additional element that influences the level of movement around the city is the development of a cycling network. Planned changes, of which the project *Thomas B. Thriges – From street to city* is the part, require transformations in the functioning of the communications system throughout the city. Those changes regard both private transport and public transport, and could lead to growth of transportation quality within the city. Public transport should be put aside on the traffic ways (separate bus lanes or tram lines will result in not stucking in the traffic jam), be efficient and connect the most important points of the Axis of Knowledge as well as their connection to other parts of the city. This is a big challenge that requires strategic planning, and the described project can be a good starting point. Its task is not only to serve as a physical reconnection of the two parts of the old city, but to become a point that links the centres of knowledge and encourages social interaction, thus setting a new way of perceiving the city. Breaking the mental barriers that were perceived via the old street, and 'sewing' the city again, it is expected to improve the quality of life for its residents. An access to walking and cycling, new public spaces, multifunctional facilities alongside them, and connection to existing green spaces are not only to increase the attractiveness of the area, but also to boost its activity.

5. Conclusions

Challenges connected to road infrastructure are numerous and varying according to location, history, development, and many other factors. In a lot of cities a trend to restore pedestrian streets could be noticed, as it is popularized by the Danish architect Jan Ghel (2013). It is achieved by changing the organization of the traffic, or closing some streets for private transport. Such changes require prospective planning throughout the city to simultaneously reduce vehicular traffic and ensure transport accessibility by other means of transport – public transport and bicycles. As part of these implementations, there are projects to reconnect the urban 'broken' urban tissue through wide arteries. Examples of cities with such problems are numerous, while solutions require many

years of work, multi-annual strategy, and cooperation with many institutions, developers and future users. A described and analyzed above project *Thomas B. Thriges – From Street to City* shows the solution for reconnection of the urban tissue. The project indicates that the change requires more than just getting rid of cars from the city centre. It presents a holistic approach that characterizes both smart city and knowledge city development model. The project goes beyond the street area, affecting its immediate surroundings (by building new buildings of a varied function and creating public spaces), and whole city (by changes in road infrastructure, way of commuting and Knowledge Axis). The approach to urban changes and spatial planning in Odense shows a sustainable development path that both responds to the current needs of the citizens and enables a flexible approach to space.

References

[1] Brandrup H. H., *Thomas B. Thriges Gade – oplevelseskultur i eu-topia* [online] Available: http://static.sdu.dk/mediafiles/Files/Om_SDU/Institutter/Ilkm/ILKM_files/InternetSkrift/TeksterInternetskrift/HjordisHavsteenBrandrup.pdf

[2] Białecki T. 1999. *Encyklopedia Szczecina* Tom I, ed., Uniwersytet Szczeciński, Instytut Historii, Zakład Historii Pomorza Zachodniego, Szczecin, ISBN 83-87341-45-2

[3] Puggaard A. P. 2012. Evalueringsrapport, Udbud med forhandling Fra gade til by omadannelse af Thomad B. Thriges Gade [online] Available: http://www.arkitektforeningen.dk/sites/arkitektforeningen.dk/files/evalueringsrapport.pdf

[4] Gehl J. 2013. *Życie między budynkami*, Wydawnictwo RAM, ISBN 978-83-928610-0-3

[5] Giffinger R., Fertner C., Kramar H., Meijers E. *City-ranking of European Medium-Sized Cities* [online] Available: http://www.smart-cities.eu/download/city_ranking_final.pdf

[6] Jacobs J. 2014. *Śmierć i życie wielkich miast Ameryki*, Centrum Architektury, Warszawa, ISBN 978-83-937716-3-9

[7] Karwińska A., Brzosko-Sermak A. 2014. *Dobrze funkcjonujące miasto: koncepcje, cechy, perspektywy rozwoju*, Wydawnictwo Uniwersytetu Ekonomicznego, Kraków.

[8] Krier L. 2011. *Architektura wspólnoty,* wydawnictwo słowo/obraz terytoria, Gdańsk, ISBN 978-83-7453-054-5

[9] Laursen G., Mielby S. 2016. *Odense TU1206 COST Sub-Urban WG1 Report* [online] Available: https://static1.squarespace.com/static/542bc753e4b0a87901dd6258/t/57330a2e7da24f10a9dfdd46/1462962771253/TU1206-WG1-011+Odense+City+Case+Study.pdf

[10] Le Corbusier. 2015. *Urbanistyka.* Warszawa: Fundacja Centrum Architektury, ISBN 978-83-937716-8-4

[11] Linking Odense, 2MSC-URB2, Architecture & Design, Aalborg University. [online] Available: http://vbn.aau.dk/ws/files/51894202/RAPPORT_ENDELIG.pdf

[12] Lynch K. 2011. *Obraz miasta.* Kraków: Wydawnictwo Archivolta, ISBN 978-83-931118-0-0

[13] McGuirk J. 2015. *Radykalne miasta. Przez Amerykę Łacińską w poszukiwaniu nowej architektury.* Warszawa, ISBN 978-83-62418-48-0

[14] Filer P., Kubicki P. 2012. *Miasto w działaniu Zrównoważony rozwój z perspektywy oddolnej.* Warszawa: Instytut Obywatelski, ISBN 978-83-63874-00-1

[15] Montomery C. 2015. *Miasto Szczęśliwe.* Kraków: Wysoki Zamek, ISBN 978-83-941434-2-8

[16] Piskorki J.M., Wachowiak B., Włodarczyk E. 1993. *Szczecin Zarys Historii.* Poznań: PTPN, ISBN 83-7063-071-5

[17] Rasmussen S. E. 2015. *Odczuwanie architektury.* Kraków: Karakter, ISBN 978-83-62376-76-6

[18] Reimagining Our Streets as Places: From Transit Routes to Community Roots [online] Available: https://www.pps.org/reference/reimagining-our-streets-as-places-from-transit-routes-to-community-roots/

[19] Wejchert K. 1984. *Elementy kompozycji urbanistycznej.* Warszawa: Wydawnictwo Arkady, ISBN 978-83-4494-2

[20] [online] Available:http://gehlpeople.com/

[21] Proposal of a tramline was presented as separate project. [online] Available: http: //subsites.odense.dk/subsites2/~/media/SUBSITES%20OG%20WEBLIGHT/Letbanen/Industridag-PDF.ashx

[22] Cycling-embassy. [online] Available: http://www.cycling-embassy.dk/wp-content/uploads/2012/07/Steen-M%C3%B8ller-City-of-Odense.pdf

[23] Europeansmartcities 3.0 (2014) [online] Available: http://www.smart-cities.eu/?cid=01&ver=3

[24] Project for public spaces. 2017. [online] Available: https://www.pps.org/reference/streets-as-places/

[25] Project for public spaces. 2017. [online] Available: https HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/":// HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"www HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/". HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"pps HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/". HYPERLINK "https://www.pps.org/reference/streets-as-

places-how-transportation-can-create-a-sense-of-community/"org HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"/ HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"reference HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"/ HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"streets HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"- HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"as HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"- HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"places HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"- HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"how HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"- HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"transportation HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"- HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"can HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"- HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"create HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"- HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"a HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"- HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"sense HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"- HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"of HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"- HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"community HYPERLINK "https://www.pps.org/reference/streets-as-places-how-transportation-can-create-a-sense-of-community/"/

Ольга Газінська

ВІДНОВЛЕННЯ МІСТА НА ПРИКЛАДІ ПРОЕКТУ ВУЛИЦІ ТОМАСА Б. ТРІГЕСА – “ВІД ВУЛИЦІ ДО МІСТА”, м. ОДЕНС, ДАНІЯ

Анотація. *Багато актуальних проблем громадських просторів у містах пов’язані з поганими рішеннями минулих, 50–60 років. В основному це пов’язано з швидким зростанням важливості автомобілів протягом XX століття. Усе більше і більше міст у 50-х до 70-х рр. значно 'інвестували в дорожню інфраструктуру, з думкою, що приватний транспорт є ознакою живого, енергійного місто, яке стрімко розвивається. Ці дорожні інвестиції часто займають простір історичних частин міст, не звертаючи уваги на розрив міської тканини або виникаючі таким чином проблеми для пішоходів. Одним із гарних прикладів сучасних проектів з відновлення історичної міської тканини міста є проект реконструкції вулиці Томаса Б. Трігес – “Від вулиці до міста” у м. Оденсі, Данія. Вулиця Томаса Б. Трігеса, побудована між 1959 і 1970 роками, була вулицею з чотирма смугами руху, яка пролягала транзитом через основну частину міста. Головною метою проекту “Від вулиці до міста”, розробленого в 2011–2012 рр. у бюро Henning Larsen Architects, є пов’язання двох частин старого міста за допомогою нових громадських просторів та багатофункціональних будівель. У проекті продемонстровані проектні рішення та сформульовано дії муніципалітету Оденсе для створення кращих та дружніх міських просторів.*

Вулиця Томас Б. Трігеса була побудована між 1959 і 1970 рр. для реорганізації міста Оденсе. Ідея полягала у налагодженні автомобільного трафіка, щоб забезпечити швидше сполучення між північними та південними районами, а також швидше пересування від міста до гавані. В результаті історичне середньовічне місто було довільно поділене на дві частини. Проект “Вулиця Томаса Б. Трігеса – від вулиці до міста”, призначений для повторного з'єднання міста та зміни способу пересування людей. Проект охоплює приблизно 700 метрів чотириполосної дороги, яка проходить через історичний центр міста від Østre Stationsvej, на залізничному вокзалі, до площі Альбані. Це чудовий приклад змін не тільки в міській тканині, а й у сприйнятті міста та потреб його мешканців. У 1960-х роках першочергова потреба, яка створила шосе у центрі міста, полягала в упорядкуванні зв’язків у промисловому місті, що активно розвивалося. Вулиця, як і її назва (Томас Б. Трігес був підприємцем XIX століття, на його заводах виготовляли електромотори), став символом промислового розвитку міста. Протягом багатьох років потреби міста та його мешканців змінювались із зростанням процвітання та зменшенням важливості галузі. Вулиця, яка полегшила здебільшого автомобільне спілкування в межах міста, стала перешкодою для іншої, раптом більш важливої, форми спілкування – пішоходів. На

перший план вийшла соціальна та культурна потреба, а вулиця стала обмежувати не тільки простір, а й заходи. Звідси випливає кардинальна зміна цієї області: від транспортної зони, відокремленої від людського, в активний, культурний простір, де людина перебувають в центрі уваги. Повторне поєднання міста повинно здійснюватися відповідно до принципів сталого розвитку, бути компактним та послідовним. Очікувані громадські райони повинні стати новим центром міського життя, з'єднуючись з існуючими пішохідними та громадськими просторами, активізуючи жителів.

Описаний та аналізований приклад показує вирішення поєднання міської тканини. Проект показує, що сучасні зміни вимагають більше заходів, ніж просто позбавлення центру міста від автомобілів. Проект являє собою цілісний підхід, який характеризує як застосування моделі розумного міста, так і знання розвитку міста. Проект виходить за рамки вулиць, впливаючи на найближче оточення (шляхом будівництва нових будівель різних функцій і створення громадських просторів), а також усього міста (за рахунок зміни дорожньої інфраструктури). Підхід до міських змін та просторового планування в Оденсі показує шлях сталого розвитку, який відповідає поточним потребам громадян і дозволяє застосувати гнучкий підхід до простору.

Ключові слова: *міський дизайн, вулична інфраструктура, розумне місто.*