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ASSESSING TRICITY'S URBAN DEVELOPMENT WITH THE NEW EUROPEAN BAUHAUS: ALIGNING WITH YOUNG RESIDENTS' ASPIRATIONS FOR A SUSTAINABLE, INCLUSIVE, AND AESTHETIC CITY

Abstract

The European Commission has proposed the 'New European Bauhaus' initiative as part of 'The European Green Deal' roadmap, it is a cultural initiative that is envisioned as a platform for collecting and disseminating innovative projects, ideas, and solutions to assist in achieving the zero net emissions goal by 2050 to face the challenge of the climate crisis. In this manner, proposed projects under the 'New European Bauhaus' must adhere to three fundamental principles: sustainability, inclusiveness, and aesthetics. In this article, we examine whether a recently developed urban area in Tricity successfully embodies the principles of the New European Bauhaus and investigates the alignment between the New European Bauhaus' principles (beauty, sustainability, inclusivity) and the aspirations of Tri-city's young residents for their urban environment. We conducted a descriptive qualitative study that translated these abstract concepts into tangible elements by reviewing existing literature and conducting surveys using non-probability sampling. By analyzing the survey, we establish key factors such as multi-dwelling units (MDUs), mixed-use urban areas, sustainability and livability, strategic location and multimodal transportation networks, inclusivity and accessibility,barrier-free design, accessible public spaces, and diverse housing options while from literature review findings, we establish a set of characteristic values ("Parameters") such as social Innovation, local enterprises, and urban transformation.

Keywords: New European Bauhaus, Tricity, housing, mixed-use development, Gdansk Garnizon, Gdynia Zachód.

OCENA ROZWOJU MIEJSKIEGO TRÓJMIASTA Z „NOWYM EUROPEJSKIM BAUHAUSEM": ZGODNIE Z ASPIRACJAMI MŁODYCH MIESZKAŃCÓW NA RZECZ MIASTA ZRÓWNOWAŻONEGO, INKLUZYWNEGO I ESTETYCZNEGO

Streszczenie

Komisja Europejska zaproponowała inicjatywę „New European Bauhaus" w ramach planu działania „The European Green Deal". Jest to inicjatywa kulturalna wyobrażana jako platforma gromadzenia i rozpowszechniania innowacyjnych projektów,

pomysłów i rozwiązań, które pomogą w osiągnięciu zerowej emisji netto do 2050 r. w celu stawienia czoła wyzwaniu, jakim jest kryzys klimatyczny. W ten sposób projekty proponowane w ramach „Nowego Europejskiego Bauhausu" muszą być zgodne z trzema podstawowymi zasadami: zrównoważonym rozwojem, inkluzywnością i estetyką. W artykule autorzy zbadali zgodność zasad Nowego Europejskiego Bauhausu (piękno, zrównoważony rozwój, inkluzywność) z aspiracjami młodych mieszkańców Trójmiasta wobec środowiska miejskiego oraz, czy niedawno zagospodarowana przestrzeń miejska Trójmiasta skutecznie realizuje zasady „Nowego Europejskiego Bauhausu". Przeglądając istniejącą literaturę i przeprowadzając ankiety przy użyciu doboru nieprobabilistycznego przeprowadzono badanie jakościowe, które przełożyło te abstrakcyjne koncepcje na namacalne elementy. Analiza ankiety pozwoliła na ustalenie kluczowch czynników, takich jak: jednostki wielomieszkaniowe, obszary miejskie o mieszanym przeznaczeniu, zrównoważony rozwój i komfort życia, strategiczna lokalizacja i multimodalne sieci transportowe, inkluzywność i dostępność, projektowanie bez barier, dostępne przestrzenie publiczne i różnorodne opcje mieszkaniowe, natomiast na podstawie wyników przeglądu literatury ustalony został zestaw charakterystycznych wartości („parametrów"), takich jak: innowacja społeczna, lokalne przedsiębiorstwa i transformacja miejska.

Słowa kluczowe: New European Bauhaus, Trójmiasto, mieszkalnictwo, zabudowa wielofunkcyjna, Gdańsk Garnizon, Gdynia Zachód.

Introduction

Global warming is a problem that can no longer be denied. The need for change in how people live and relate to the planet is imperative for future generations. Our current actions and decisions, such as lifestyle, community activity, housing, and mobility, will be reflected in the future. Housing policies have an impact on climate, which is closely related to health. In 2010, housing practices were responsible for one-third of global emissions of black carbon and 19% of global emissions of greenhouse gases[1].

Given this context, in conjunction with the crisis caused by the COVID-19 pandemic and multiple crises faced by the European Union in terms of climate change and global warming, the European Commission has proposed a set of actions for a circular economy that is set for reducing CO2 emissions, protecting biodiversity, and using resources efficiently. This roadmap, known as 'The European Green Deal, is a cultural initiative that aims to fund all the projects and ideas that will assist in achieving the zero net emissions goal by 2050[2].

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[1] Intergovernmental Panel on Climate Change. 2014, Climate Change 2014: Synthesis Report, Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, (edited by) R.K. Pachauri and L.A. Meyer, Geneva, Switzerland: IPCC, 151, https://www.ipcc.ch/site/assets/uploads/2018/02/SYR_AR5_FINAL_full.pdf [accessed: 09.01.2024], p. 46.

[2] Volgger P., *The new european bauhaus—a fatal affair?*, 2022, p. 2.

Declared by President Ursula von der Leyen, the European Commission introduced in September 2020 the 'New European Bauhaus' initiative[3]. This ambitious undertaking embraces a transdisciplinary approach, which aims to bring together architects, urban planners, engineers, researchers, artists, designers, and students to collaborate and implement a new vision for sustainable, inclusive, and aesthetically living environments. The initiative provides a space for co-creation, fostering meaningful dialogue and collaboration among diverse stakeholders to address the complex societal issues brought to light by the pandemic and climate change. This article aims to investigate the convergence between the recent urban developments in the Tricity region with New European Bauhaus principles and the aspirations of its communities. We seek to understand whether the urban expansions in Tricity align with the principles of New European Bauhaus and whether the New European Bauhaus initiative can serve as a framework for evaluating Tricity's evolving urban landscape and its residents' expectations, particularly the younger generation.

1. NEB Ideas and Importances

The 'New European Bauhaus' was envisioned as a platform for collecting and disseminating innovative projects, ideas, and solutions concerning the climate crisis. The key to this 'open library of examples' lies in the emphasis on replicability across any part of Europe, engaging communities to collaborate and make common decisions for a shared purpose[4]. In this manner, proposed projects under the 'New European Bauhaus' must adhere to three fundamental principles: sustainability, inclusiveness, and aesthetics.

The European Union has outlined the three fundamental pillars that underpin the 'New European Bauhaus' as follows[5]:

a) Sustainability highlights the importance of being responsible for our actions, which should have a minimal impact on the natural environment, the way resources are used, and how to make this process circular and resource-efficient,
b) Aesthetics recognizes the need to create a harmonious and aesthetically pleasing built environment, but not forgetting the practicability of it,
c) Inclusion aims to underscore the importance of creating and promoting spaces that cater to the needs of a diverse population; accessibility and affordability must be the focus of this design approach.

Given these guiding principles, the 'New European Bauhaus' serves as a dynamic 'prototyping engine', translating the EU's Green Deal concept into tan-

[3] https://ec.europa.eu/commission/presscorner/detail/ov/SPEECH_20_1655 [accessed: 19.04.2024].
[4] Volgger P., op.cit., p. 2.
[5] https://new-european-bauhaus.europa.eu/ [accessed: 19.04.2024].

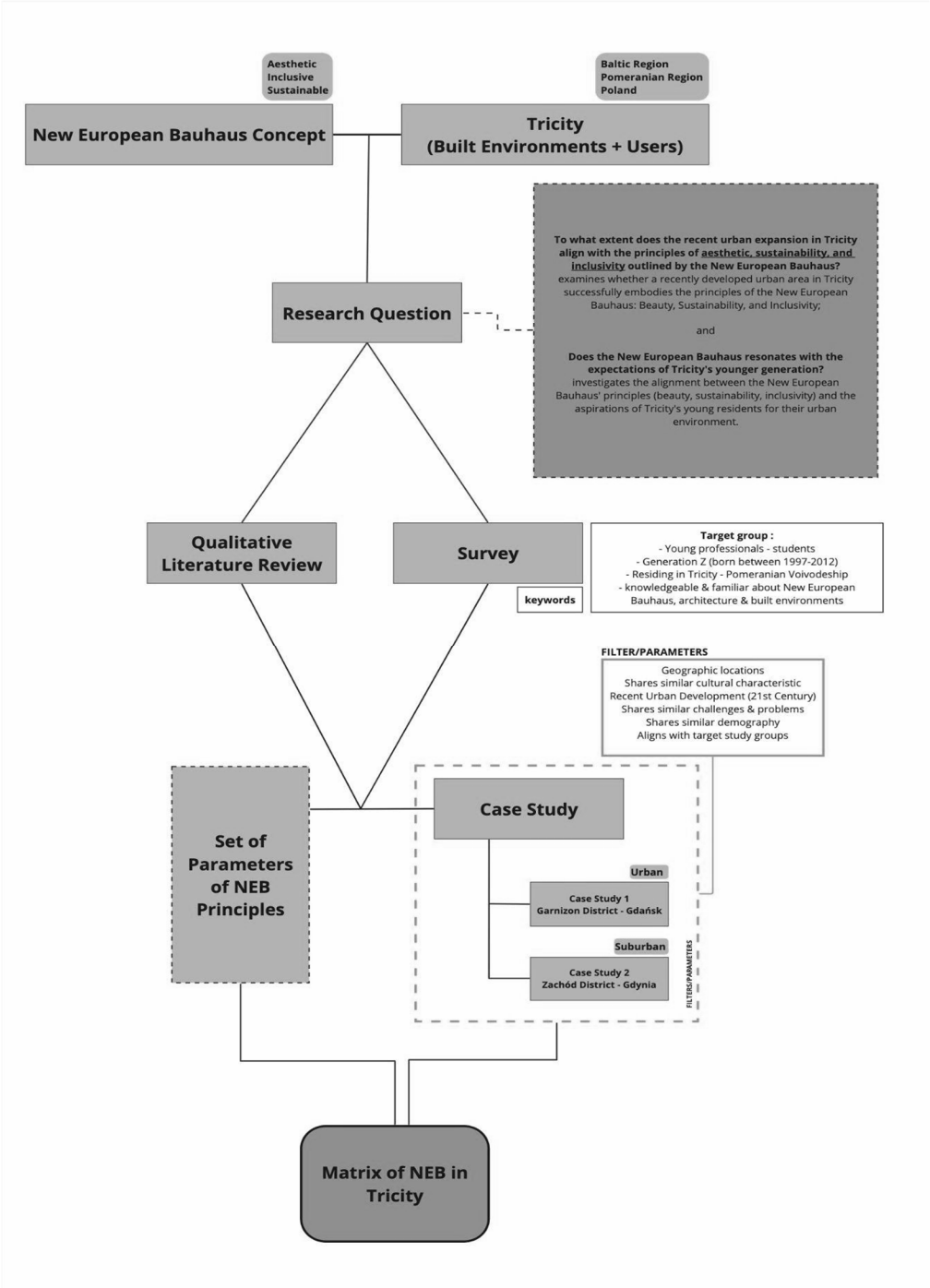
gible and impactful initiatives[6]. Furthermore, with the fundamental pillars of the New European Bauhaus and some principles related to the initiative, it needs to be evaluated if the New European Bauhaus will meet the expected hope of the users, especially young generations, as the current and future residents of this project.

2. Methodology

To delve deeper into the New European Bauhaus and understand its three core principles – beauty, sustainability, and inclusivity – we conducted a descriptive qualitative study that translated these abstract concepts into tangible elements. We focused on the characteristics that define New European Bauhaus by reviewing existing literature and conducting surveys using non-probability sampling (see Figure 1). By analyzing the survey and literature review findings, we will establish a set of characteristic values ("Parameters") that can be used to assess our chosen case studies. These values will then be organized into a replicable and reproducible matrix, serving as a tool for future analysis of similar case studies.

[6] Volgger P., op.cit., p. 2.

Figure 1. Research methodology diagram



Source: own elaboration.

3. Result

3.1 Literature Review

Since the New European Bauhaus was just initiated in 2020, it is essential to learn and analyze some of the examples of projects related to it. One of them is Venecia as one of the five pilot projects for The New European Bauhaus in 2022[7].

Social innovation is a pillar that must be established, together with Artisan enterprises, as the agent of social innovation to create an urban transformation in the city. Social Innovation combines two different interventions: the activation of civil society and the transformation of social relations. To activate social innovation, artisan enterprises rely on the creative process, supported by technology, to enhance creativity and activities for sharing ideas and resources, activating multiple actors potentially involved in the project. For this initiative to get more actors involved, it must broaden the awareness of the opportunities that can be acquired and ensure trust in the mechanism of cooperation, which could also emerge during the process.

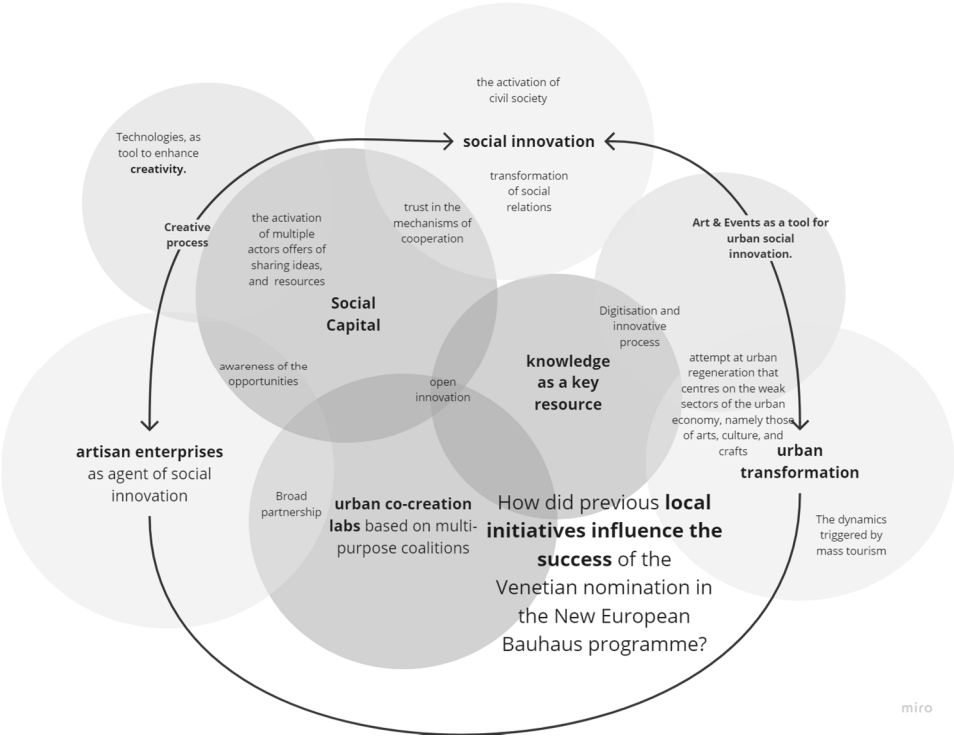
Engaging different actors with strong awareness and trust in each other creates a social capital that could be one of the strengths of The New European Bauhaus Program. In addition, the broad partnership of artisan and local enterprises with the wide variation of stakeholders can be a base to establish an urban co-creation lab with knowledge as a key resource to open innovations that could be useful to ensure the sustainability and adaptability of the projects in the future.

In the case of Venice, art events are the product and tool of urban social innovation, supported by digitization and innovative processes to attempt urban regeneration, which focuses on strengthening arts, cultures, and crafts as the weak sector of the economy. Furthermore, these regenerations also engage the urban transformation of areas disturbed by the dynamics of mass tourism in Venice.

Figure 2 shows how social innovation, local enterprises, and urban transformation are related to each other to shape the success of The New European Bauhaus Program at Venecia.

[7] Maurizio B., Paladini R., *Creativity and Social Capital: The Pillars of Venice's Success in the New European Bauhaus Programme*, "Social Sciences", 11, no. 12 (2022): 545, p. 1–6.

Figure 2. Diagram of the relationship between social innovation, local enterprises, and the transformation of New European Bauhaus



Source: own elaboration.

3.2 Qualitative Data Collection: Survey

To capture relevant perspectives, dr. hab. inż. arch. Justyna Martyniuk-Pęczek conducted a descriptive survey on December 6th, 2021. We employed a non-probability sampling strategy to recruit 66 participants who mirrored the target demographic we were investigating – young professionals within the architecture industry. We specifically chose architecture students from the Faculty of Architecture at Gdańsk University of Technology, primarily belonging to Generation Z (born 1997-2012), for several compelling reasons. Their exposure to contemporary architectural trends and movements increases the probability of familiarity with concepts like New European Bauhaus and the European Green Deal, enhancing the relevance of their perspectives. Additionally, their academic background cultivates a keen awareness of the built environment, fostering a critical lens for evaluating the New European Bauhaus principles' practical application in urban spaces.

Furthermore, focusing on students residing near the Tricity case study area ensured their responses were directly connected to the local context and potential New European Bauhaus implementation strategies. This deliberate

approach not only yielded participants aligned with the study's objectives but also guaranteed the gathered data held specific value and applicability within the Tricity context, contributing directly to understanding the New European Bauhaus's potential impact on this specific region.

The survey was conducted using Menti, an interactive platform allowing real-time polls, surveys, and Q&A sessions. It used a diverse questions format: 4 open-ended questions, where respondents were encouraged to write their answers; 1 multiple-choice question, in which respondents had to select a single answer; 1 ordinal scale question, in which respondents were presented with multiple choices answers but had to select provided options and rank them by importance.

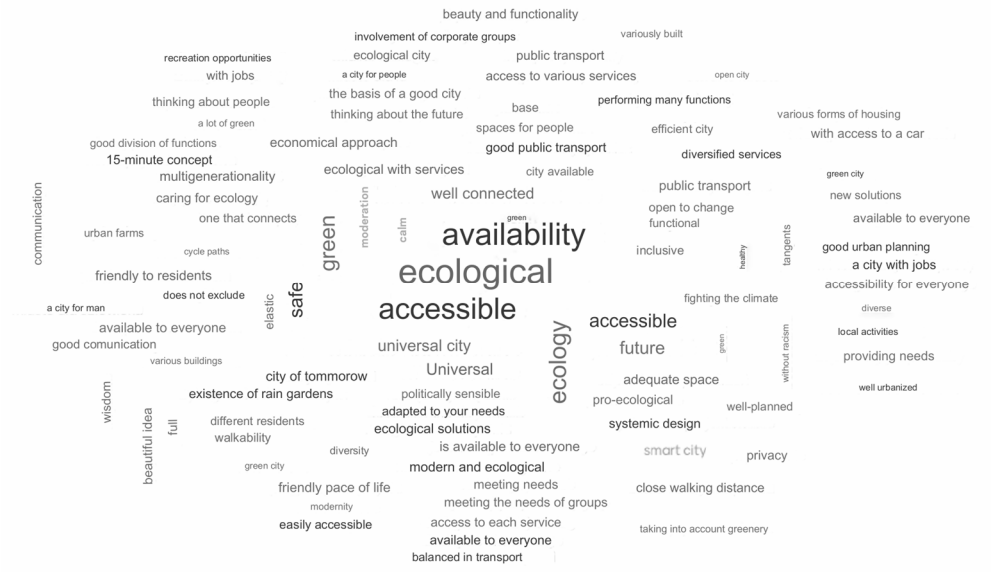
The survey was structured into two sections. The first section (questions no. 1-3) assesses the participants' understanding of the underlying concepts of New European Bauhaus – Aesthetic, Sustainable, and Inclusive. The second section (questions no. 4-6) assesses individual perspectives on supplementary factors affecting their decision to settle in their current and future immediate built environments.

3.2.1 Qualitative Survey Findings

The participants' responses are visualized as word clouds, where larger words indicate more frequent mentions. See Appendix A to examine the qualitative questionnaires and responses further.

The opening question was formulated to understand participants' perceptions of sustainable cities and to define a sustainable city in their own words. Participants were allowed to write more than one answer. With over 127 responses, a word cloud analysis (see Figure 3) revealed the most frequently mentioned sustainability themes: ecological, accessibility, safe, green, well-connected, universal city (inclusive).

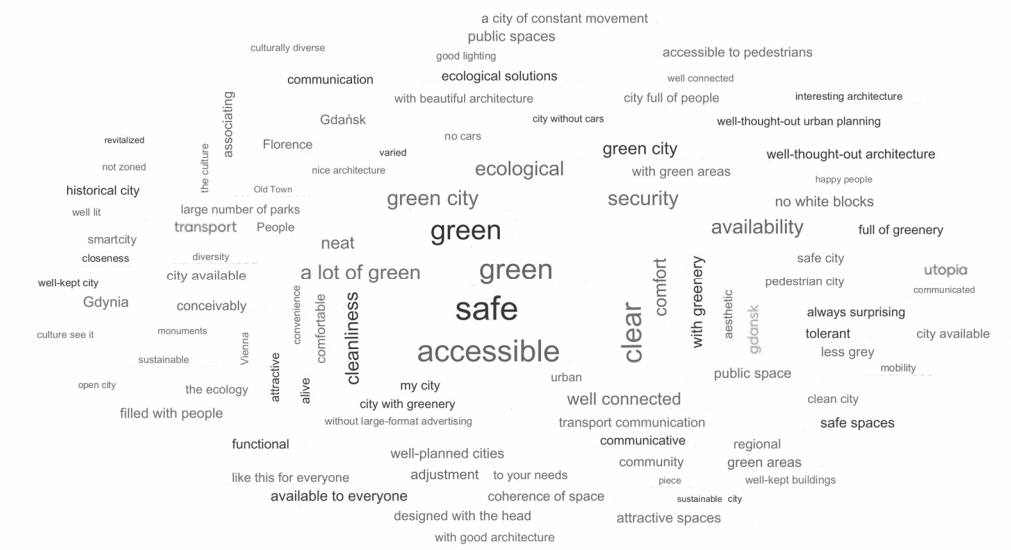
Figure 3. Illustration of word cloud showing the result of respondents of questionnaire no.1: description of a sustainable city



Source: own elaboration.

Moving to the second question, participants were invited to share their thoughts on what makes a city beautiful. Participants had the freedom to provide multiple responses, resulting in over 134 answers; a word cloud analysis (see Figure 4) revealed the key themes that resonated most with them, including lots of green space, safe, accessible, green city, clean, comfortable, ecological, neat, and tidy.

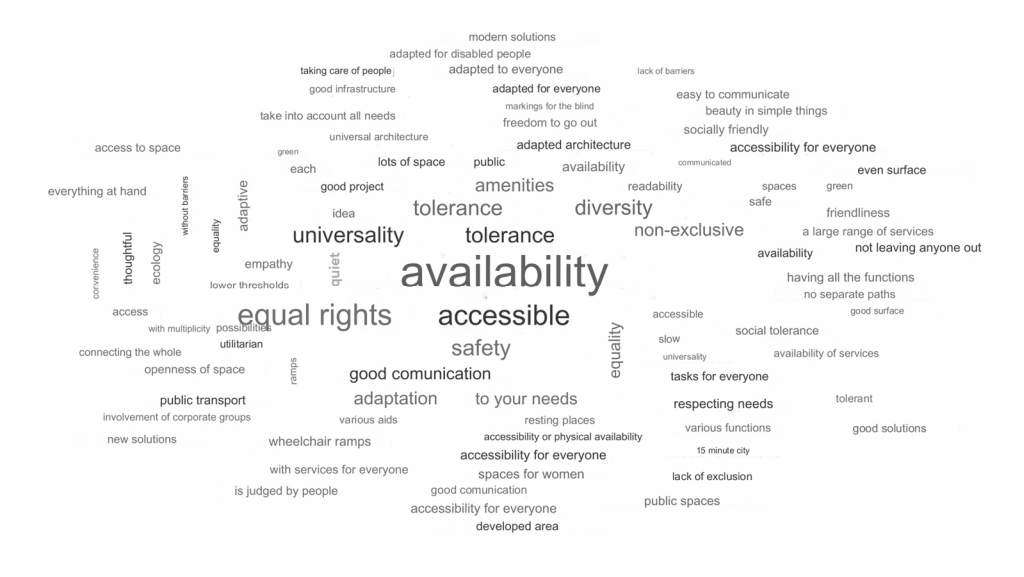
Figure 4. Illustration of word cloud showing the result of respondents of questionnaire no.2: description of a beautiful city



Source: own elaboration.

To delve deeper into participants' perceptions of inclusivity, the third question asked them to describe what makes a city inclusive. Multiple responses were allowed, and the analysis (see Figure 5) of over 126 entries revealed the most frequent themes through a word cloud. These themes included: tolerance, universality, accessibility, non-exclusionary, diversity, equal rights, well-equipped with facilities/amenities, safe and secure, adapting to our needs, and well-connected.

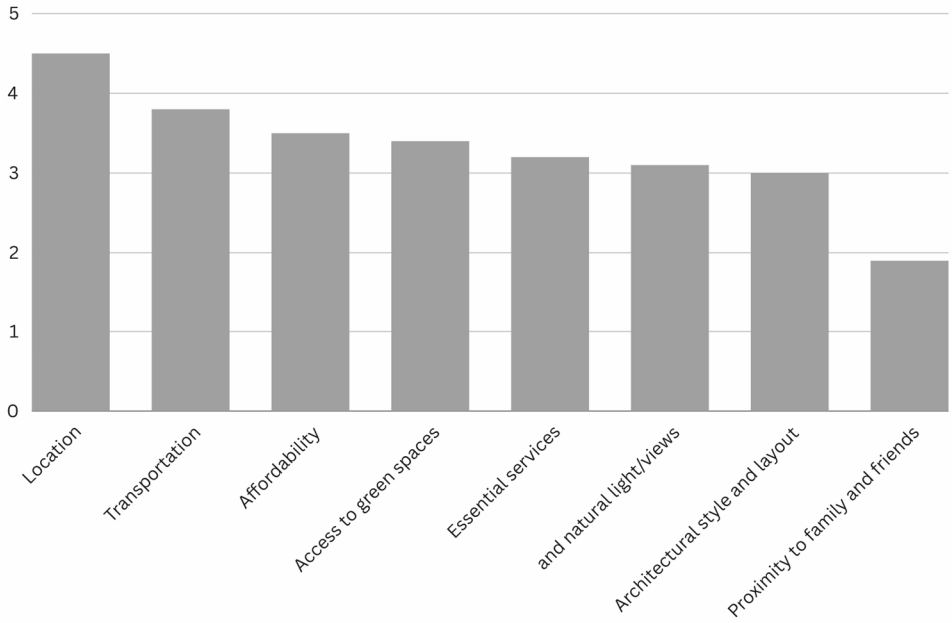
Figure 5. Illustration of word cloud showing the result of respondents of questionnaire no.3: description of an inclusive city



Source: own elaboration.

The fourth question is to understand what factors most influence where people choose to live. participants were given eight options and instructed to rank them based on their perspectives using a Likert-scale instrument. A 5-point Likert scale was used, with 5 indicating strong agreement/favorability and 1 signifies strong disagreement/unfavorability. Participants could only choose one rank for each option. Location (4.5) emerged as the top factor influencing preferred living areas, followed by transportation (public transportation + road network) at 3.8. Affordability (price and cost of living) ranked third at 3.5. Access to green spaces (3.4), essential services and amenities (3.2), and natural light/views (3.1) were also important considerations. While architectural style and layout (building forms and morphology) held some value (3.0), proximity to family and friends played a lesser role (1.9) in residential choices. The results are visualized in Figure 6.

Figure 6. Bar chart showing the result of respondents of questionnaire no.4: primary driving factors of individuals' preference for a place to live

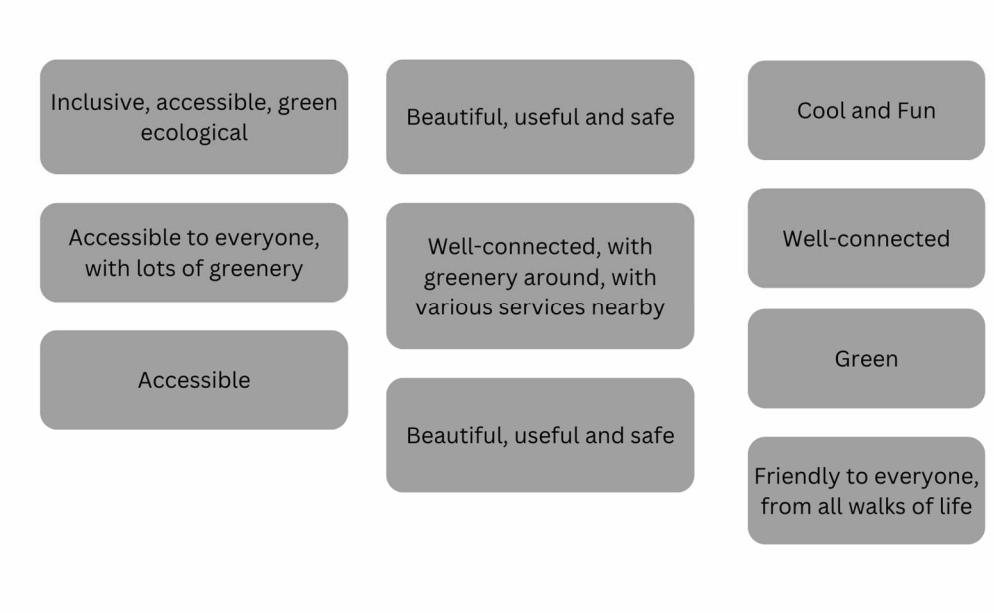


Source: own elaboration.

Respondents were invited to share their visions for their city's future for the fifth question. With multiple responses allowed, 73 entries were collected (see Figure 7). While some ideas recurred, several key ideas emerged, including:

a) inclusive, accessible, green, ecological,
b) accessible to everyone with lots of greenery,
c) beautiful, useful, and safe,
d) well-connected with greenery around, with various services nearby,
e) friendly to everyone from all walks of life.

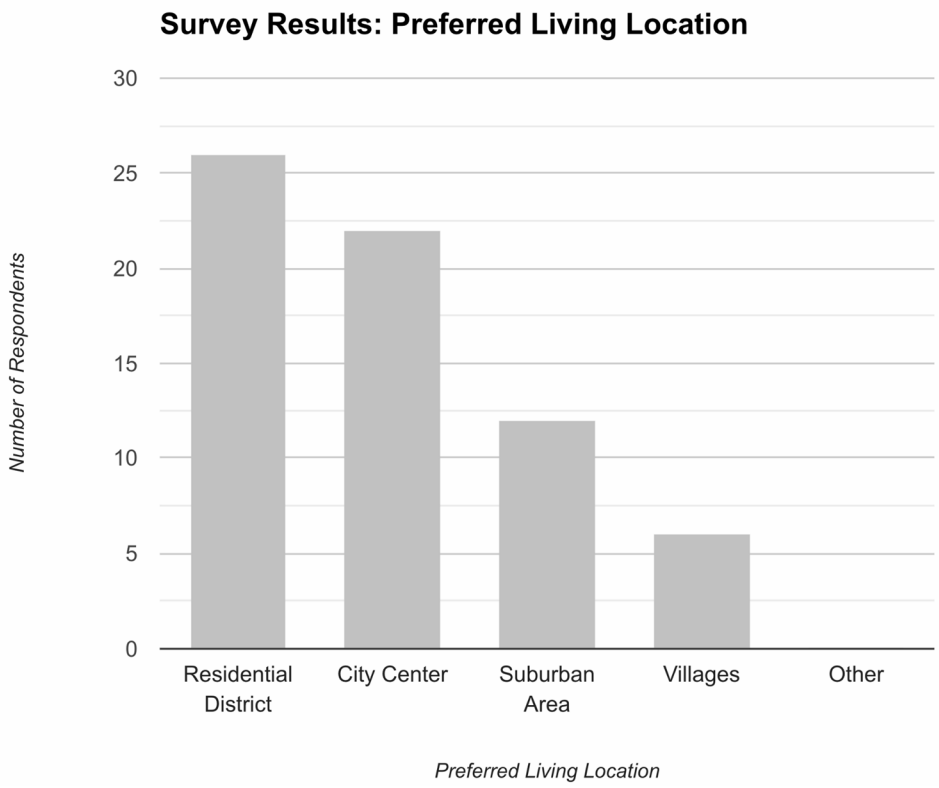
Figure 7. Visualization of the responses to questionnaire no.5: aspirations of respondents about their city



Source: own elaboration.

The final question inquires about the respondents' favorable locations of residence after completing their studies. Participants were presented with five options and could choose only one. The survey revealed a preference for city living, with 26 respondents favoring residential districts and 22 favoring the city center. Suburban areas attracted 12 respondents, followed by villages with 6. No respondents chose "Other" as their preferred living location. The results are visualized in Figure 8.

Figure 8. Bar chart of the responses to questionnaire no.6: preferred locations for residence after graduation



Source: own elaboration.

3.3 Case Study

3.3.1. Garnizon District – Gdańsk

The Garnizon covers an area of 23 ha in the northwestern part of Gdansk city, with good aspects of major traffic and mobility, such as the airport and the connection to the other parts of the Tricity area. Its history came from the early 19th century as an important military and administrative center with several buildings with the function developed for The Corps of the Prussian Army, such as canteens, stables, residential units, offices, shops, and more, which can support the population 16.000 people or 18% of the population of Gdansk at that time. Currently, the area is being developed by a private company with the vision to transform inaccessible areas into modern districts by maintaining the connection with the preserved historical buildings and monuments.

3.3.2. Zachód District – Gdynia

Gdynia is a young city in terms of history, only receiving civic rights in 1926[8]. Despite being the youngest of the Tricity – Gdansk, Sopot, and Gdynia – it faces similar urban development challenges as any city in the world, namely suburbanization. The western part of Gdynia, the so-called Zachod district, became a primary focus for the public authorities due to its chaotic suburban sprawl and strategic location. In 2012, an initiative (the Charrette workshop) was launched in collaboration with representatives from the Gdynia Municipal Office, urban planners from the Gdansk University of Technology, specialists from a development company named Hossa S.A. and local community members to redesign the existing neighborhood into one focused on the principles of New Urbanism. The new district has been under development since 2017, when the new legal plan for the area in question was finally approved. The project aims to create a polycentric neighborhood for 40,000 residents, offering a walkable district with attractive public spaces, daily services within a 5-minute walking distance, and reduced reliance on cars.

3.3.3. The reasons why we selected these examples

The two case studies were selected based on several factors. Firstly, both examples are in geographical proximity to the Baltic Sea, situated in two cities that are part of the Tri-City metropolitan area and share similar cultural characteristics and perspectives regarding their coherent urban development. Secondly, both cases represent large-scale urban projects implemented after the 2000s that aim to address challenges related to accessibility, both within them and concerning the city, proximity to green spaces, and daily services provision to create a high-quality living environment. Additionally, as new residential areas, they attract young residents who align with the sample of respondents of the analyzed survey. The final aspect of the choice of the examples is that they have been designed by the same developer, sharing the same approaches, visions, and objectives.

3.3.4. Analyzing the first example – GDANSK GARNIZON

The biggest strength of Garnizon comes from the successful idea of urban regeneration of the old barracks complex, with the main objective of establishing housing estates accompanied by facilities and infrastructures for both public and recreational use. In terms of greeneries, the characteristics of urban blocks that accommodate the internal green squares and courtyard are characterized by a large number of natural elements and furniture, which are commonly accessible by the residents and form a bond in the neighborhood and local community. Based on Bednarz[9], it is possible to create a group of

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[8] Rydén L.. *Building and re-building sustainable communities: reports from the superbs project,* 2003.

[9] Bednarz M., *Zieleń jako istotny element tworzenia przestrzeni społecznych*, "Środowisko Mieszkaniowe" 2018, 22, p. 46–53.

neighborhoods with around 100 people in the internal squares of Garnizon. In addition, greeneries play an important role in adapting each characteristic of the area, both the modern and historical elements, combined with urban furni-furniture and the function of the building and spaces. In terms of function, Garnizon has been developed for multifunctional use. The historical part in the southwest is developed for public uses, both for cultural and community centers and commercial, & recreational areas, and the southern part is developed for education and workshop spaces for the young community. The modern part on the eastern side is developed with mixed-use characters in function and architectural forms. Overall, there are five parts of function in Garnizon development: apartments & lofts, offices, utility & commercial premises, Garnizon of Culture, and Garnizon for Creative. The Table 1 diagram shows several aspects from Garnizon that are related to the main criteria of The New European Bauhaus, which are Sustainability (S), Aesthetic (A), and Inclusion (I).

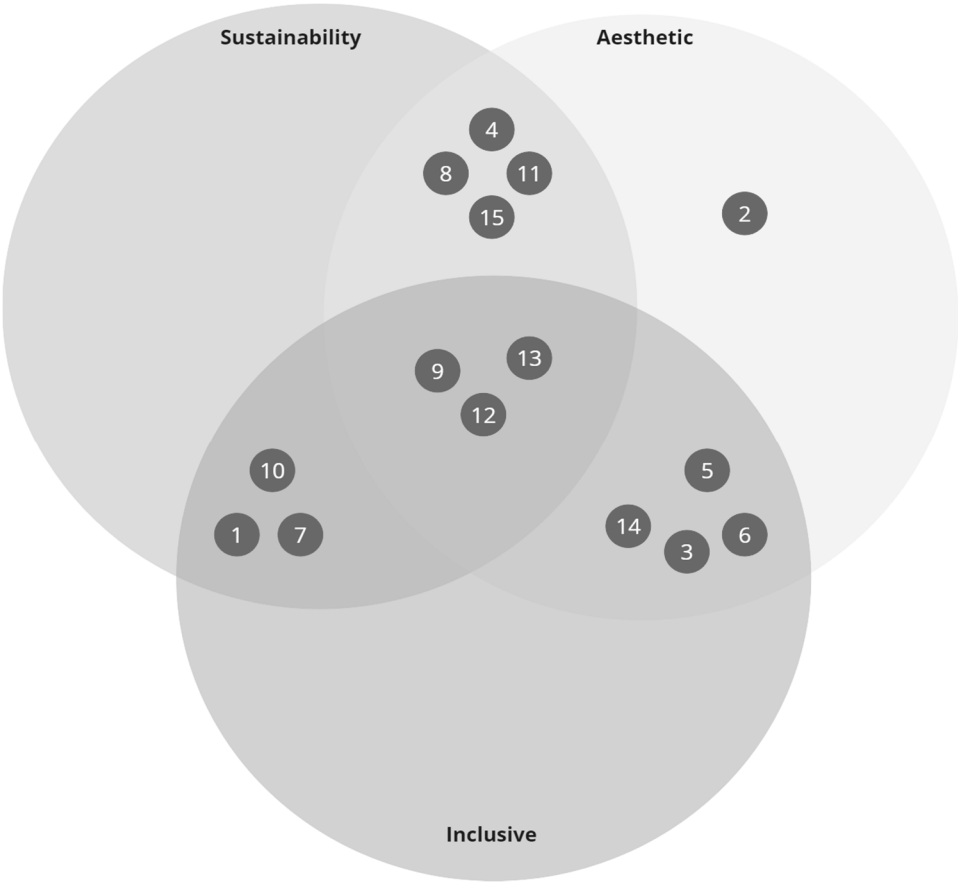
Table 1. Matrix of Garnizon Aspects in relation to The New European Bauhaus main criteria, sustainable, aesthetic, and inclusive

No	Aspects	S	A	I
1	Regeneration of historical areas for public and recreational uses	✓		✓
2	Integrate the design of the modern part with the old part		✓	
3	Internal open square and courtyard for bonding the neighborhood		✓	✓
4	Abundant elements of the natural environment in the open space combined with urban furniture	✓	✓	
5	Multifunctional uses of the southwest area for both cultural & community centers and commercial & recreational areas		✓	✓
6	The Eastern part with modern design as the mix-uses function for the young community with education and workshop facilities		✓	✓
7	Accessibility to the various public transport which can support mobility without using private cars	✓		✓
8	The important role of greeneries is to adapt each characteristic of the area, both modern and historical part	✓	✓	
9	The mixed development of the area creates a liveable condition for the area	✓	✓	✓
10	The strategic location with the other parts of the city makes easier access for both residents and users outside the area of Garnizon with the 15-minute principles	✓		✓
11	The natural elements make a good integration with the greeneries in the surrounding part of Garnizon	✓	✓	

12	Supporting creative projects in science, art, and culture in collaboration with students in tri-city Universities	✓	✓	✓
13	Create partnerships with other organizations, partners, and businesses for developing the Garnizon of culture to implement a new center of entertainment and culture in Tri-city	✓	✓	✓
14	All residents have access to the nearest green open spaces and services		✓	✓
15	Limited car traffic and accessibility of parking spaces to ensure the comfort of residents	✓	✓	

Source: own elaboration.

Figure 9. Diagram of Garnizon Aspects in relation to The New European Bauhaus main criteria, sustainable, aesthetic, and inclusive



Source: own elaboration.

3.3.5. Analyzing the second example – GDYNIA

The Zachód District in Gdynia demonstrates notable strengths regarding the New European Bauhaus principles through its emphasis on sustainability and inclusivity components. This achievement arose from a collaborative approach, where residents, urban planners, architects, entrepreneurs, and representatives from local administration participated in a workshop to define the vision for the new development. The workshop focused on solutions for efficient transportation systems, sustainable development, job creation, and quality public spaces for residents (Trojanowska, 2022)[10].

The outcomes of the workshop were translated into tangible solutions. The neighborhood is connected through seven bus lines to the entire Tricity area, and further expansion plans are proposed to integrate it with the existing transport network and railway seamlessly. Furthermore, the publication Anywhere.pl reports the opening of a new educational complex with a primary school, high school, and kindergarten for 900 children, which complements the existing educational facilities[11]. Future investments in this sector, including an indoor swimming pool, are planned for the new district. These amenities are accessible to all residents, reinforcing the project's inclusivity. Creating green connections through landscape spaces, corridors, and paths, which strengthen the accessibility to the forest, meeting, and recreational areas, contribute to a pleasant and friendly living environment.

Another significant aspect of the project lies in the diverse range of services and facilities offered and housing price options that cater to diverse income levels and ensure affordability for various social categories. This diversity of functions and amenities is achieved without overburdening Gdynia's existing network with the expected influx of new residents. The aesthetic component of the project is mainly highlighted through the public and green spaces. However, one of the conclusions from Trojanowska's work is that the architectural design of the buildings is repetitive.

The following Table 2 analyzes the Zachód District's alignment with the NEB criteria:

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[10] Trojanowska M. *Assessment of New Sustainable Housing Project in Gdynia Using Justification Tools for Health-Promoting Urban Design and Architecture*, "European Journal of Sustainable Development Research" 6, no. 1 (2022): em0179. https://doi.org/10.21601/ejosdr/11581.

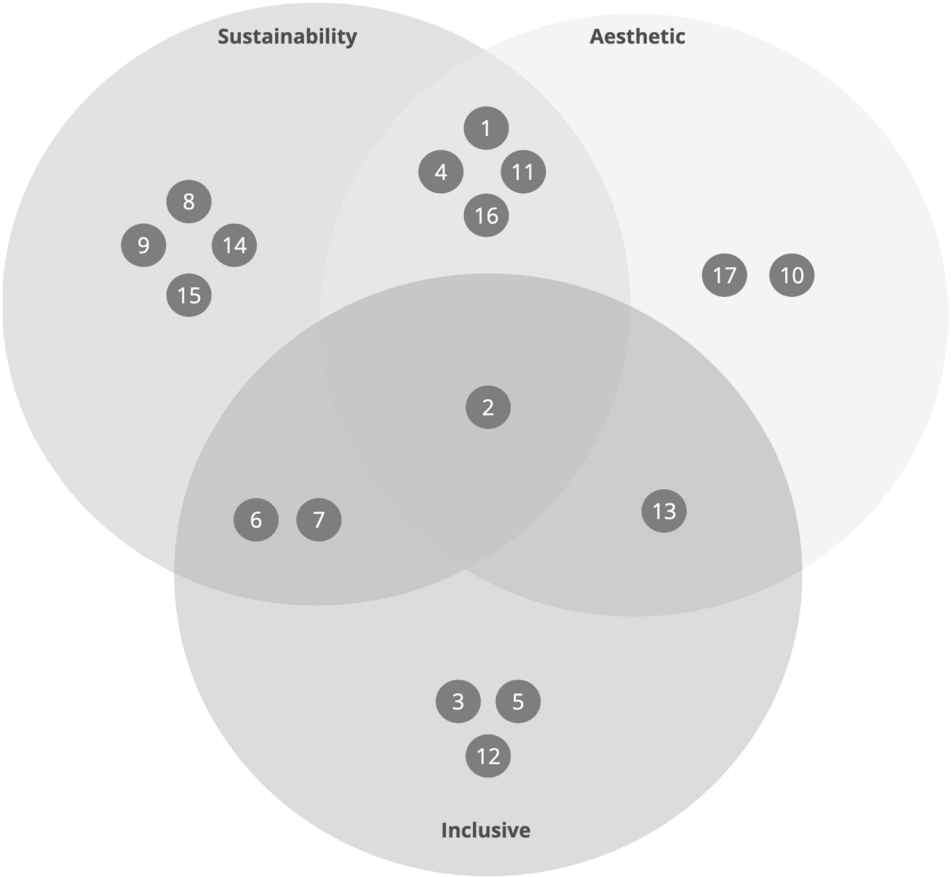
[11] *Big And Modern Investment in Chwarzno-Wiczlino in Gdynia,* 2019. Anywhere.Pl. November 15, 2019. Retrieved from: https://anywhere.pl/en/27599/big-and-modern-investment-in-chwarzno-wiczlino-in-gdynia/ [accessed: 09.01.2024].

Table 2. Matrix of Zachód district in relation to The New European Bauhaus main criteria, sustainable, aesthetic, and inclusive

No	Aspects	S	A	I
1	Forest integration in new development through green corridors or green buffers	✓	✓	
2	Well-developed public transportation system facilities that support mobility without using private cars	✓	✓	✓
3	Collaborative participation of the citizens, administrative bodies, university, and other relevant stakeholders within the development process for the new district			✓
4	Abundant elements of the natural environment in the open space combined with urban furniture	✓	✓	
5	Designing the development plan for the Zachód district based on the visions, ideas, and needs of the residents and stakeholders derived from the workshop			✓
6	Wide range of functions and facilities, which minimize the dependence on the city infrastructure	✓		✓
7	The new district is planned in line with the 15-minute city principles, optimizing land use, promoting a healthy and vibrant lifestyle through active mobility	✓		✓
8	Strategic location in the city and very well connected with the other parts of the city	✓		
9	New development is planned to ensure minimal disruption and alteration to the surrounding forest	✓		
10	The project incorporates materials such as wood and glass that resonate with the existing landscape		✓	
11	Elements of green and blue infrastructure are integrated into the plan of the project	✓	✓	
12	All residents benefit from proximity to green areas and services			✓
13	Numerous places for social contact in the neighborhood		✓	✓
14	Sustainable solution for water, soil, and air protection	✓		
15	Solutions that do not affect the biodiversity within the area	✓		
16	Rural areas preserved and integrated into the new development	✓	✓	
17	Development offers a diverse range of housing options at varied prices, ensuring affordability for residents from diverse socioeconomic backgrounds			✓

Source: own elaboration.

Figure 10. Diagram of Zachód district Aspects in relation to The New European Bauhaus main criteria, sustainable, aesthetic, and inclusive



Source: own elaboration.

4. Discussion

Recognizing the diverse challenges faced by cities due to unique geopolitical, geographical, and climate contexts, we hypothesized that the New European Bauhaus wouldn't be universally applicable in all aspects; therefore, New European Bauhaus principles might require adaptation to address the specific needs of different cities, resulting in varying degrees of applicability. This research investigated the relevance of the New European Bauhaus initiative to Polish cities, particularly in the Tricity area of the Baltic region. Furthermore, it investigated whether the initiative's principles aligned with the future city visions held by young architecture and built environment professionals in the area.

The survey data indicates that participants, namely students and young professionals, can describe and categorize concrete instances that link the key characteristics of the New European Bauhaus (see Appendix A for survey questions and responses). This information can subsequently be utilized to establish a parameter set for further investigation. There are several overlapping parameter keys (see Figure 11), notably **accessibility & safety,** which are shared among each of the three core principles of New European Bauhaus. In this regard, we may interpret the key parameter of accessibility in two dimensions: tangible accessibility, which includes physical barriers and infrastructure, like ramp access and sensory aid, and intangible accessibility, which addresses social and cultural barriers to participation, encompassing aspects such as equal rights in the workplace, access to healthcare, and social security. It shows that the participants are aware and mindful that having equal access to opportunities, whether it's navigating a building, securing a job, or receiving quality healthcare, is fundamental. This commitment to accessibility ensures a more **inclusive and equitable environment for all**.

Safety and security are other prominent parameter keys across the three core principles of New European Bauhaus. In terms of measurable risks, one could claim that safety is objective, yet it's also subjective, as it is all influenced by individual context and perception. This emphasis might seem self-evident, yet it's worth exploring why safety resonates strongly among the respondents. We have collectively experienced major global events in the past 5 years, from COVID-19, an unprecedented global health crisis that led to global economic recession, loss of countless lives, and social isolation, to the 2022 Russian invasion of Ukraine.

Framing within these contexts, the survey was conducted amidst the global pandemic in December 2021, likely capturing the heightened vulnerability respondents felt. This heightened sense of insecurity may have significantly influenced their views on safety, making it a core concern in their perspective on the New European Bauhaus. Furthermore, the ongoing war in Ukraine, with its disruptions to European supply chains and inflationary pressures across Poland and the European Union, mirroring the anxieties highlighted in the pre-war survey, further emphasizes the respondents' view of safety as a core parameter of the New European Bauhaus, underscoring the critical need for a more secure and resilient future.

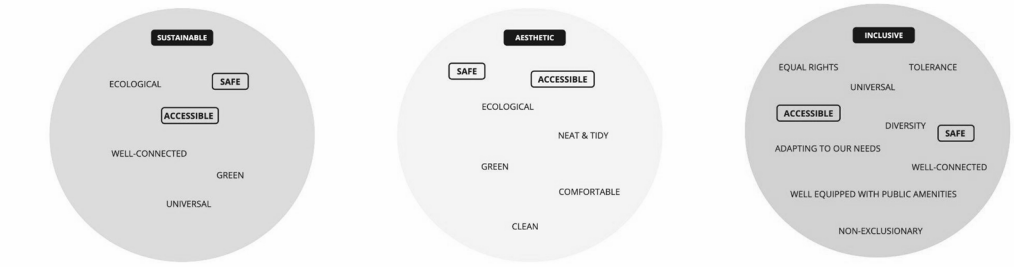
The New European Bauhaus faces a crucial question: how does the New European Bauhaus respond in the face of uncertainty like global pandemics, famine, and war? We may concur that the New European Bauhaus is an initiative that emerged from The European Green Deal, aiming for a carbon-neutral Europe by 2050, and in recognition of the construction industry's significant environmental footprint – being a major source of pollution and consuming vast amounts of energy and resources – the New European Bauhaus prioritizes three principal aspects within the built environments and well-being

of its users. Is it possible for the New European Bauhaus to reach beyond its original conception? and acts as a robust framework in which it could adapt to our society's dynamic and ever-changing conditions and challenges, a mitigation plan for unknown threats.

In the face of war, famine, climate change, and global economic recession, one would not think about the aesthetic, inclusiveness, or sustainability aspects of their surroundings; undoubtedly, immediate survival and well-being should be the priority. Could initiatives like the New European Bauhaus can still play a role? The New European Bauhaus should approach holistically and recognize the interconnectedness of environmental, social, and economic factors. The importance of building communities that can withstand adversity, as safety is not just about physical well-being; it also encompasses various aspects like infrastructure resilience, preparedness for unforeseen threats, social stability within communities, and economic security. Therefore, further research and development are needed, and more robust frameworks and policies are required.

These findings suggest that the New European Bauhaus offers a promising path forward, and its principles extend beyond superficiality and subjectivity, demonstrating their potential for objective application through adaptation to the specific needs and aspirations of diverse communities, promoting well-being and resilience, and empowering communities to thrive even in the face of challenges.

Figure 11. Based on the survey findings – Parameter keys within New European Bauhaus principles: sustainable, aesthetic, and inclusive



Source: own elaboration.

Questionnaire results (4-6) highlight key factors influencing the future Tricity built environment as envisioned by its demographics: a picture of a vibrant, connected, and inclusive urban landscape. **Multi-dwelling units (MDUs)** emerge as the preferred choice for living, suggesting a desire for compact, efficient living spaces that foster community interaction. These MDUs are ideally situated within **mixed-use urban areas**, teeming with shops, services, and cultural offerings. This preference aligns with principles of **sustainability and livability**, creating a vibrant tapestry of residential, commercial, and

recreational spaces within walking distance, eliminating the need for long commutes and offering convenient access to daily necessities. Furthermore, convenience extends beyond the immediate vicinity, highlighting the importance of **strategic location and multimodal transportation networks,** from cycling and walking paths to efficient public transit systems. This interconnectedness fosters a sense of community while promoting environmental sustainability and reducing reliance on personal vehicles. Finally, the concept of **inclusivity and accessibility** emerges as a crucial thread throughout the responses. Ensuring everyone, regardless of ability or background, feels welcome and empowered to navigate the city easily. This emphasis on inclusivity extends to the very fabric of the neighborhoods, fostering a sense of community and belonging for all residents, and translates into tangible features such as **barrier-free design, accessible public spaces, and diverse housing options** catering to different needs and preferences. These findings offer valuable insights for urban planners and policymakers in shaping Tricity's future, which aligns with the desires of its younger residents. This vision holds immense potential to foster a thriving and vibrant community for generations to come.

4.1. Discussion about Garnizon Gdansk

In terms of the literature review, three sets of parameters can be compared to the aspects of the case study. They are **social Innovation, local enterprises, and urban transformation**. Based on a case study of Garnizon Gdansk, the most valuable aspect is urban transformation. This can be seen from the main idea of development, which is to revitalize historical objects into communal public facilities combined with modern residential areas. This transformation is also supported by abundant green elements integrated with the surrounding buildings. In addition, Garnizon also has well-established local enterprises that are accommodated by the developer. According to the website of Garnizon.pl, there is a program called “Garnizon of Culture” as part of the revitalization of historical barracks with the goal of creating urban space for culture, entertainment, craftsmen, and recreation[12]. They are diverse in art, culture, coffee making, science and technologies, brewery, and commercial. These local enterprises have accommodated places concentrated mostly at the historical barrack, increasing the site's attractiveness. In addition, there is also a program of “Garnizon for Creative” that acts as an initiative of collaboration between Fahrenheit University (University of Gdansk, Gdansk University of Technology, and Medical University of Gdansk) and students in the realization of creative projects in the field of science, art, and culture. Although the developer fully supports social innovation through combined projects, providing networks, workshop spaces, supporting residential participations, and some substantial

[12] Garnizon – New District, n.d. Garnizon.pl., https://garnizon.pl/garnizon-of-culture.html [accessed: 09.01.2024].

support for the projects, the number of integrations is still low, which might increase in the future.

4.2. Discussion about the Zachód District in Gdynia

Regarding the Zachód District case study, through the literature review, the primary focus of the discussed project is social innovation. This emphasis stems from the district's development process, which concentrated on the social component and its needs and preferences collected during the workshop. Involving the community and relevant stakeholders to cooperate in the designing and planning process for the new project, the initiative aligns with the core principle of the New European Bauhaus: to establish a collaborative space where ideas are shared to address common challenges and creatively achieve shared objectives.

Furthermore, the new district fulfills the requirements of the young generation when queried about the 'What are the three determinant factors that drive individuals' choices when selecting a place to live?'. In order of importance, young individuals considered location, transportation options, and affordability (price and cost of living) as the three most relevant characteristics desired for a future place to live. Access to greenery, services, facilities, natural light, window views, quality building architecture, and proximity to family/friends (indicating a preference for established communities) are other important factors influencing the young generation when choosing a new home.

It is noteworthy that the project largely meets the needs expressed by the young respondents, which were the criteria upon which the project's concept was based. However, it is important to acknowledge that the development is ongoing, and certain aspects can be improved before completion. The architecture of buildings, public spaces, and community formation, can be one of the aspects that can be refined and solidify the project's success in achieving its intended goals.

5. Conclusion

This study explored young professionals' and students' understanding of the New European Bauhaus (NEB) in shaping Tricity's future. Their ability to identify real-world examples demonstrates the NEB's adaptability to diverse communities. Key factors shaping Tricity's future built environment include **Sustainability and livability** – Compact MDUs in mixed-use areas promote efficiency, while strategic location and multimodal networks foster community and sustainability; **Inclusivity and accessibility** – Barrier-free design, accessible spaces, and diverse housing options underscore the importance of inclusivity. A comparative study utilizing existing NEB projects and case studies offers valuable and promising research findings. These districts already demonstrated success in achieving some key NEB principles: sustainability,

aesthetics, and inclusivity. For instance, Garnizon Gdansk's revitalization of historic sites into mixed-use developments and its partnerships with creative ventures in science, art, entertainment, and culture all contribute to these three NEB principles. In Zachód District, the well-developed public transportation system is the primary factor that aligns with NEB's core principles. By embracing and implementing NEB-aligned strategies, Tricity can ensure a future built environment that is inclusive, sustainable, and livable.

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APPENDIX A

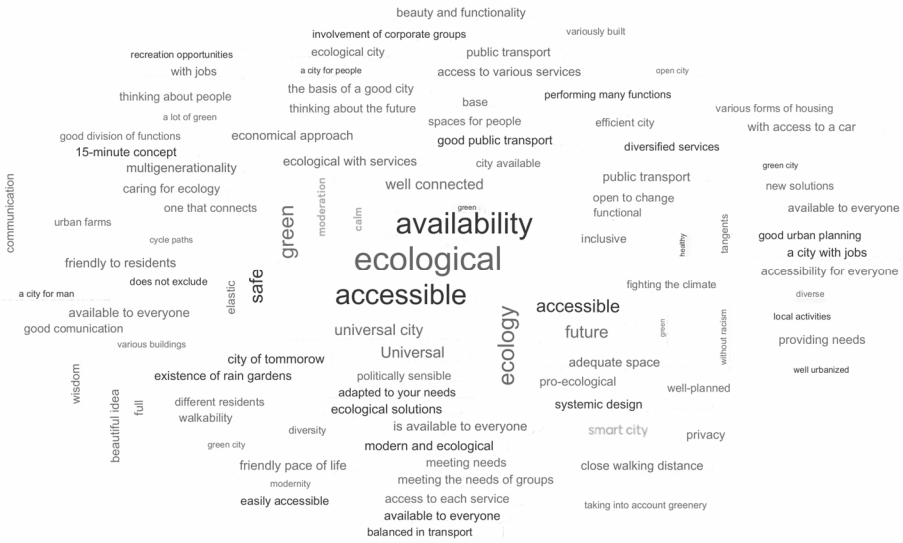
QUALITATIVE SURVEY QUESTIONS AND RESPONSES

The survey was structured into two sections. The first section (questions no. 1–3), assesses the participants' understanding of the underlying concepts of New European Bauhaus – Aesthetic, Sustainable, and Inclusive. The second section (questions no. 4–6), assesses individual perspectives on supplementary factors affecting their decision to settle in their current and future immediate built environments. The participants' responses are visualized as word clouds, where larger words indicate more frequent mentions.

(open-ended question – inquiring about the underlying concepts of New European Bauhaus)

1. a sustainable city is…

Figure 12. Illustration of word cloud showing the result of respondents of questionnaire no.1: description of a sustainable city



Source: own elaboration.

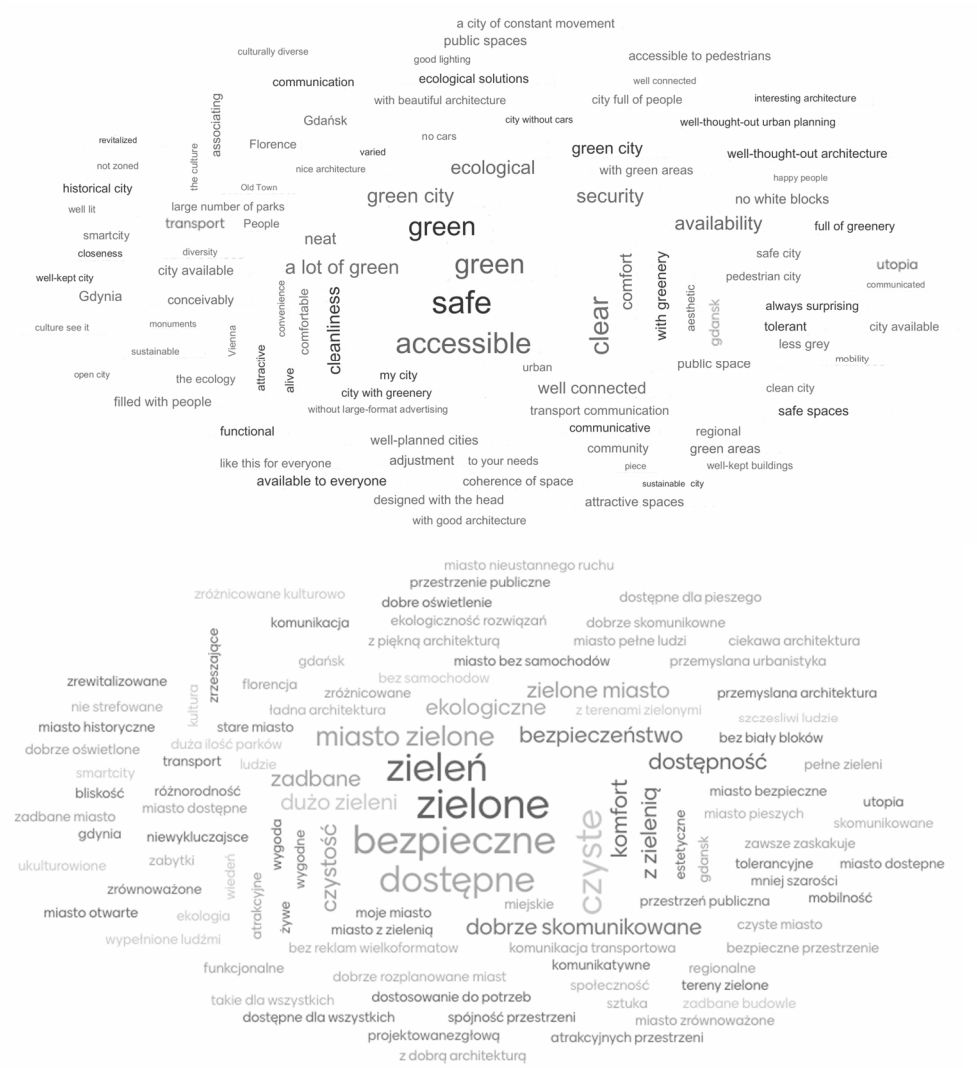
127 responses, based on the word cloud, the most prevalent answers are:

- Ecological,
- Accessible,
- Accessibility,
- Universal City (inclusive),
- Safe,
- Green,
- Well connected.

(open-ended question – inquiring about the underlying concepts of New European Bauhaus)

2. a beautiful city is…

Figure 13. Illustration of word cloud showing the result of respondents of questionnaire no.2: description of a beautiful city



Source: own elaboration.

134 response, based on the word cloud, the most prevalent answers are:

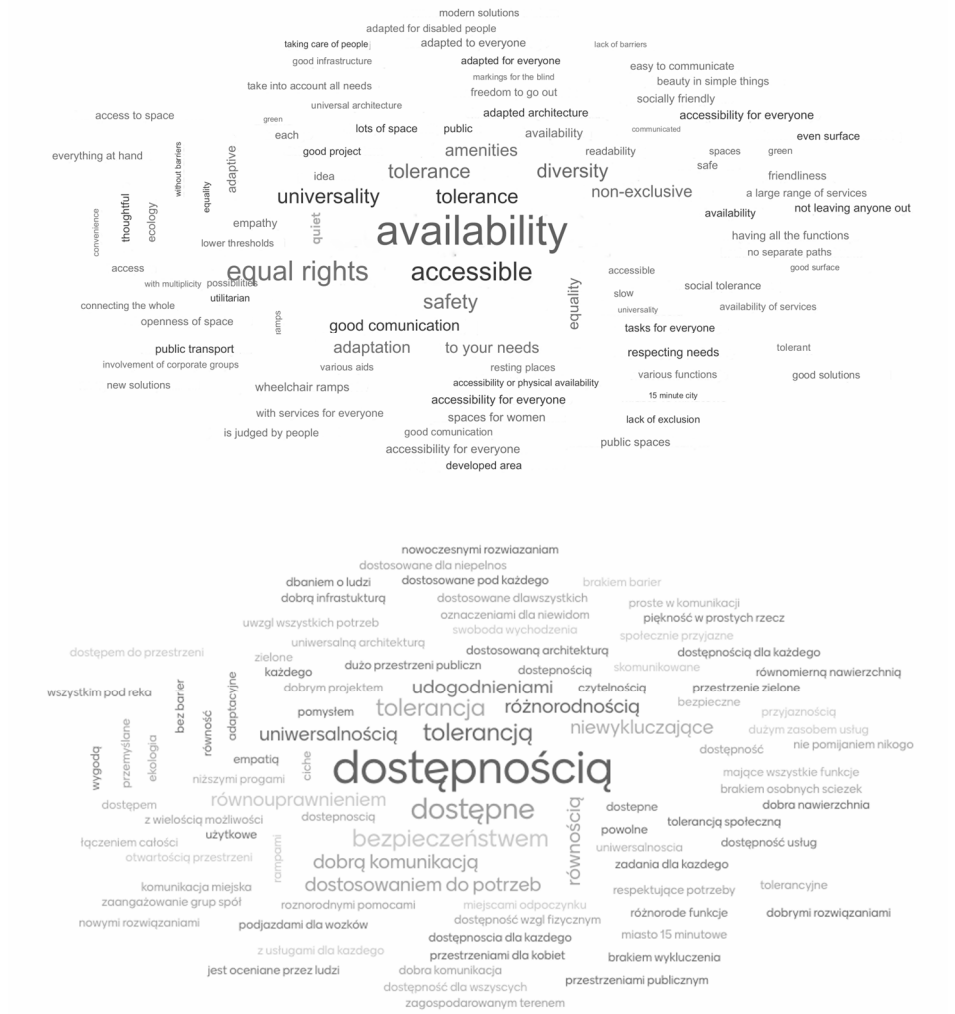
- Lots of green space,
- Safe,
- Accessible,

- Green City,
- Clean,
- Comfortable,
- Ecological,
- Neat, and tidy.

(open-ended question - inquiring about the underlying concepts of New European Bauhaus)

3. an inclusive city is characterized by…

Figure 14. Illustration of word cloud showing the result of respondents of questionnaire no.3: description of an inclusive city



Source: own elaboration.

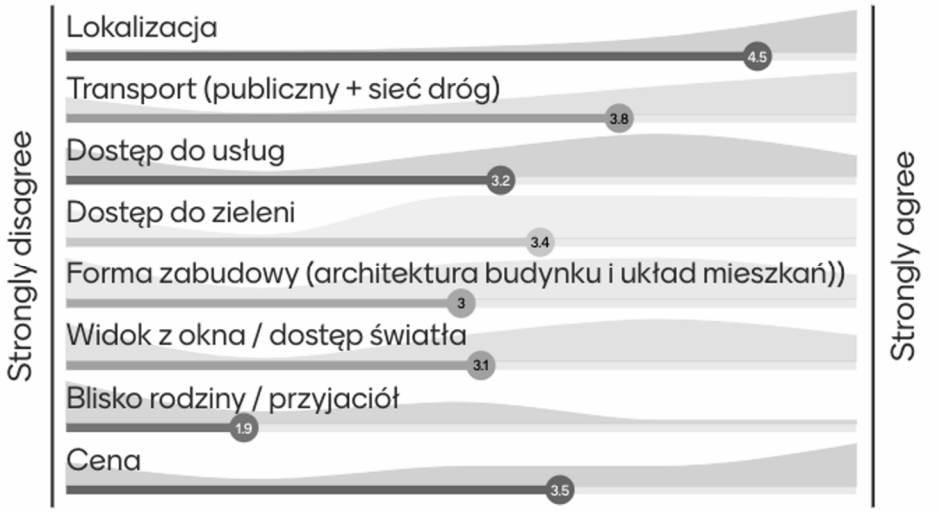
126 response, based on the word cloud, the most prevalent answers are:
the most prevalent answers are:

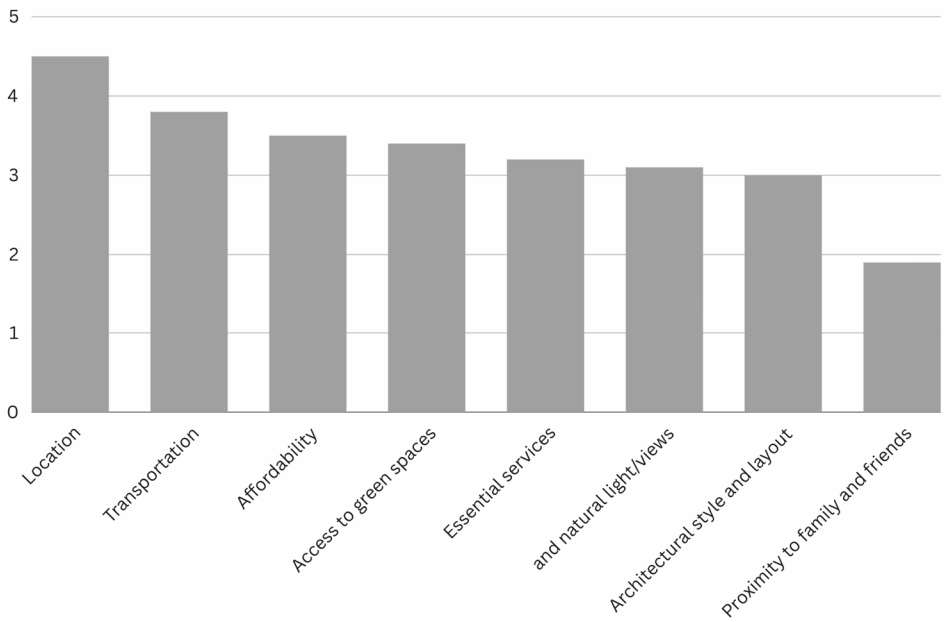
- Accessible,
- Tolerance,
- Universality,
- Accessibility,
- Non-exclusionary,
- Diversity,
- Equal rights,
- Well-equipped with facilities/amenities,
- Safe and secure,
- Adapting to our needs,
- Well connected.

(ordinal scale question – assessing individual perspectives on their immediate built environment. Eight options were presented and participants were instructed to rank them based on their perspectives using a Likert-scale instrument. A 5-point Likert scale was used, with 5 signifying strong agreement/favorability and 1 signifying strong disagreement/unfavorability)

4. *What are the three determinant factors that drive individuals' choices when selecting a place to live? Please rank them in order of importance from 1–5 scale.*

Figure 15. Bar chart showing the result of respondents of questionnaire no.4: primary driving factors of individuals' preference for a place to live





Source: own elaboration.

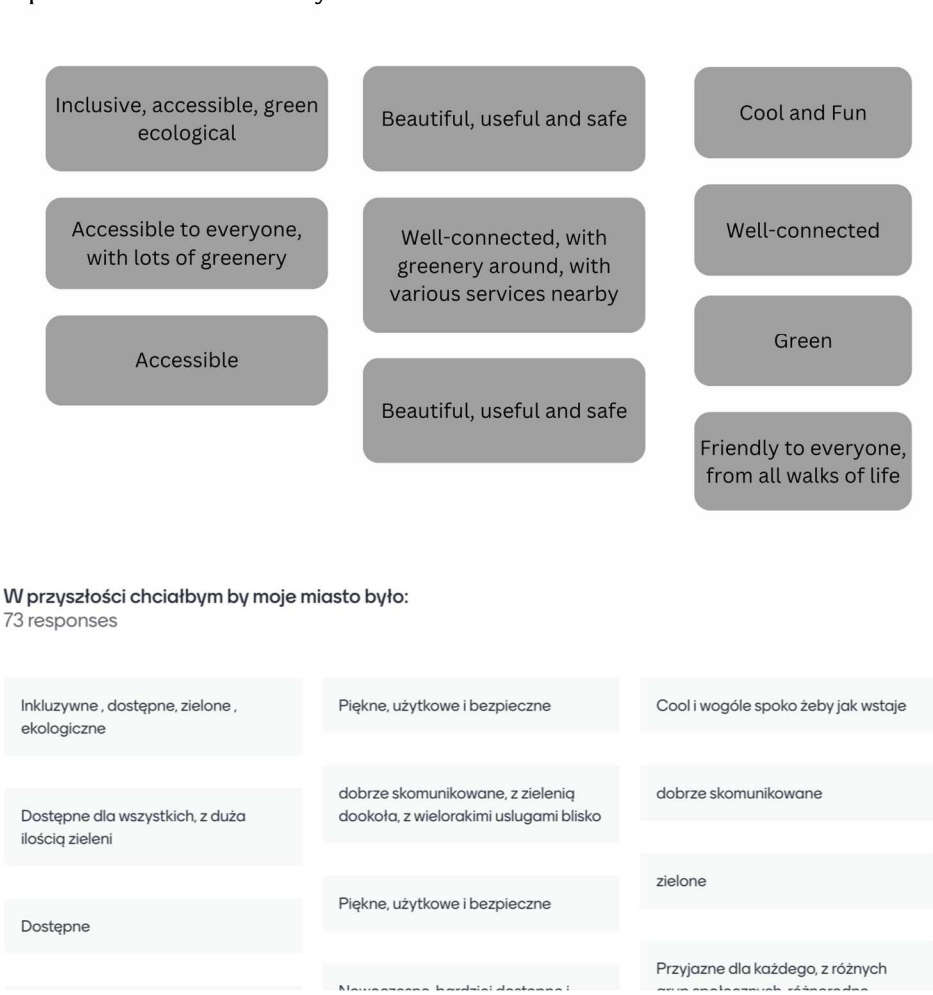
Options and response:

- Location **(ranked 4.5 by respondents),**
- Transportation (public transportation + road network) **(ranked 3.8 by respondents),**
- Price and cost of living **(ranked 3.5 by respondents),**
- Access to greenery **(ranked 3.4 by respondents),**
- Access to services and amenities **(ranked 3.2 by respondents),**
- Access to light and view from windows **(ranked 3.1 by respondents),**
- Building Forms and Morphology (Architectural style of the building and apartment layout) **(ranked 3 by respondents),**
- Close to family/friends **(ranked 1.9 by respondents).**

(open-ended question – assessing individual perspectives on their immediate built environment)

5. In the future, I would like my city to be:

Figure 16. Visualisation of the responses to questionnaire no.5: aspirations of respondents about their city



Source: own elaboration.

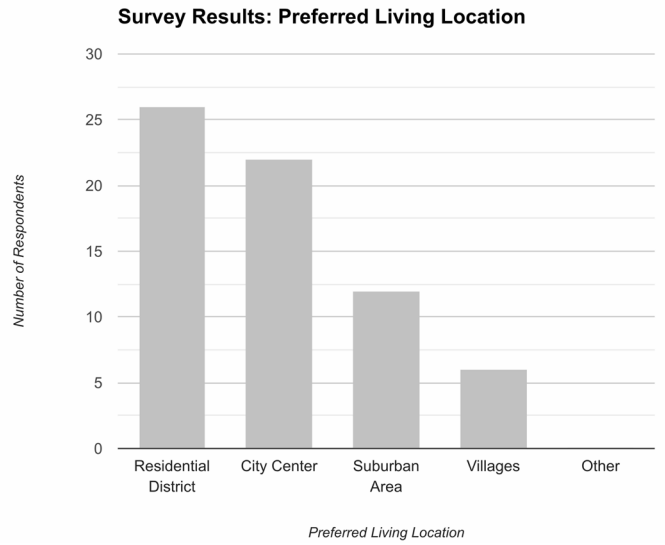
73 response. Some of them:

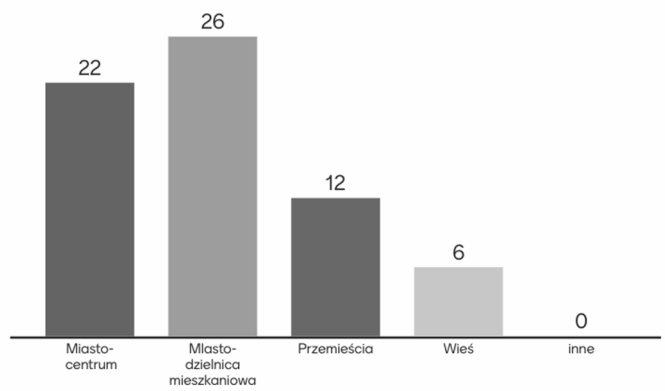
- Inclusive, accessible, green, ecological,
- Accessible to everyone, with lots of greenery,
- Beautiful, useful, and safe,
- Well-connected, with greenery around, with various services nearby,
- Friendly to everyone, from all walks of life.

(multiple-choice question – assessing individual perspectives on their immediate built environment)

6. What kind of community environment do I envision myself living in after I finish my studies?

Figure 17. Bar chart of the responses to questionnaire no.6: preferred locations for residence after graduation





Source: own elaboration.

Answer:
- 26 respondents – City, in residential district,
- 22 respondents – City, in the center,
- 12 respondents – Suburbs,
- 6 respondents – Villages,
- 0 respondents – Other.