INTRODUCTION

How are the architects of the future to be educated? This is the key discussion topic in education for architecture and urban planning. The rapid development of technology and artificial intelligence changes the profession of an architect. Today’s architectural education teaches students the necessary skills. However, according to Finnish architect Juhani Pallasmaa, living with modern technology has a negative effect on multi-sensory capabilities. It dulls our sensory experience and makes them less prominent.

The computer is usually seen as a solely beneficial invention, which liberates human fantasy and facilitates efficient design work ... computer imaging tends to flatten our magnificent, multi-sensory, simultaneous and synchronic capacities of imagination by turning the design into a passive visual manipulation, a retinal journey [1].

In particular, the rapid growth of the ever-present digital, computer images takes away from one’s ability to truly use all of our senses. As a result of this flattening effect, one is less capable of sharpening the creative aspect of our imagination.

THE WALK: MULTI-SENSORY EXPERIENCE

In the context of the sensory experience of the urban space, the process of walking and urban walks play a crucial role to explore and critically engage in city narratives. As Pallasmaa opines:

A walk through a forest is invigorating and healing due to the constant interaction of all sense modalities... Architecture is essentially an extension of nature into the man-made realm, providing the ground for perception and the horizon of experiencing and understanding the world. It is not an isolated and self-sufficient artifact; it directs our attention and existential experience to wider horizons. Architecture also gives a conceptual and material structure to societal institutions, as well as to the conditions of daily life [1].

That walk can be seen as an elementary form of experiencing the city [2]. Walking is an activity that involves studying physical space and careful observation so as to be immersed in the surrounding reality. Walking means to observe and to observe means to re-know, to emerge, to imagine [3]. Attentive and conscious observation leads to discovery anew of the little things that usually go unnoticed, but which shape daily lives [4].

THE WALK: IN THE APPROACH TO URBAN SPACE

These spatial practices and spatial tactics have been investigated since the 19th Century by, for example, the German thinkers Walter Benjamin and Georg Simmel (the idea of flâneur e.g. lounges, stroller), and later by Henri Lefebvre and

ABSTRACT: Walking is an activity that involves studying physical space and requires careful observation to be immersed in the surrounding reality. City walks are popular ways of encountering an urban space, spatial relation, its history, and recognising the problems and needs of space users, as well as future development of the city. City walks also may be educationally powerful: the exploration of certain city spaces and their associated narratives. The aim of this article is to present a city walk as an experimental tool in architectural education, in particular as a method of critical engagement with city problems and the needs of its users. City walks are an experiment, a method of studying spatial relations to raise the awareness of future architects and urban planners. The question arising from the research concerns the role that urban walks can play in creating the spatial and critical involvement of future architects and urban planners. The study was based on city walk experiments conducted by the Faculty of Architecture at Gdańsk University of Technology (GUT), Gdańsk, Poland, in collaboration with a number of partners.
Michel de Certeau. There are numerous studies in which walking is considered a practice of knowing and the transformation of urban space, such as the survey of Patrick Geddes, a pioneering town planner; the *sidewalk critic* by the architect Lewis Mumford; the *issue of perceptions of the urban environment and form* by American urban planner and author Kevin Lynch or *walking seen as a revolution* by Rebecca Solnit. One remarkable approach is the study of *walkability of the space and pedestrian space*, according to the writer and activist, Jane Jacobs [5]. It has been an innovative and challenging approach and even nowadays seems to be an inspiration for contemporary architects and urban planners.

THE WALK: IN ARCHITECTURAL EDUCATION

Within architectural education, there is a constant need to update and improve programmes to meet the changes in architectural trends and rapid technological innovation. The meaning of walking, in this context, plays a crucial role. There are various offers of additional innovative teaching ideas and forms of education (e.g. interdisciplinary student exchange programmes, practice workshops, extra curriculum international summer schools, additional professional internships, as well as the implementation of new techniques and interdisciplinary teaching). Equally, city walk can be seen as an experimental tool in architectural education, in particular as a method of critical engagement with city problems and the needs of its inhabitants. In the educational practice at the Faculty of Architecture, Gdańsk University of Technology (GUT), there is a long tradition of city walks being used. Mainly they are used as a method of studying spatial relations.

One of those educational activities is *Open Public Walks and Lectures: Gdańsk Baltic Festival of Science*. This series of walks and lectures within the festival was organised in co-operation with The Baltic Sea Culture Centre in Gdańsk. Projects were organised by The Baltic Sea Culture Centre in Gdańsk (author and curator: B. Dejna) in co-operation with the Faculty of Architecture at Gdańsk University of Technology and other institutions (L. Nyka, J. Szczepański, S. Flis and others). The public was invited to join those wanderings, intended to show different aspects of the city. Many educational walking projects have been implemented as a part of the festival since 2004 such as: *Lessons of Gothic* (2006, 2007), *Gdańsk - a city by the water* (2010), *Gdańsk - a city as a monument* (2012) among others. During those years, the experts and professors from the GUT showed the individuality of medieval Gdańsk architecture through the example of gothic churches, water routes in Gdańsk and other monuments and secrets of the city. The excursions were always enriched with lectures, multimedia presentations and exhibitions of archival materials. According to Nyka and Szczepański:

...walks were equally aimed at reclaiming water-related connectedness of public spaces, integrating urban geography, and reaching for dispersed places that contribute to Gdańsk’s identity [6].

Another example is that of Joint Studios GUT and TU/e, Gdańsk - Eindhoven: *Light City Sound - Workshops on Sound and Light* with their soundwalks. Soundwalk, according to the Canadian composer, Hildegard Westerkamp, is *any excursion whose main purpose is listening to the environment* [7]. The joint project introduced the unique perspective of looking at a space in order to teach new competences to future architects. The *Sound of the City*, conducted in Gdańsk, focused on the complex sound environment. The Gdańsk soundwalk entitled: *Listen to the City* (see Figure 1) organised in co-operation with the sound artist Krzysztof Topolski was …the type of excursion focused on listening and was a part of the experimental activity introduced to students within the soundlab during the Light City Sound Workshop [8].

![Figure 1: Soundwalks Listen to the City conducted in Gdańsk Shipyard in 2012 (Photographs by J. Borucka).](image)

Recently, numerous public initiatives: *Wandering around Wrzeszcz; Wrzeszcz’s Architecture* (within European Night of Museums), and *Welcome to Jane Jacobs*, included walks as a part of educational practice and engagement of the students. *Wandering around Wrzeszcz* was mainly a walking project where during three years (2006-2009) various thematic walks were conducted. The scientific concept, organisation and implementation of the project were undertaken by city archivists K. Szczepańska and J. Szczepański (professor at the GUT) [9]. The *Wrzeszcz’s Architecture Night*
2018 was dedicated to architecture within the European Night of Museums and included a cyanotype workshop and walk through the district. The purpose of an historical-architectural walk was to draw attention to buildings significant for the district and their interesting architectural details.

Another project aimed at showing various aspects of the history and development of the Wrzeszcz district was an event that included walks: Welcome to Jane Jacobs, 2015. The organisers of the project Welcome to Jane Jacobs 2015 and final meeting Wajdeloty Street from the Beginning were: the Wrzeszcz Local Initiatives Committee, the Urban Culture Association and the Faculty of Architecture, GUT. This educational initiative was correlated with the first Polish language publication of the groundbreaking book of Jane Jacobs entitled: The Death and Life of Great American Cities. The book was first published in 1961 and it turned out to be one of the most important architectural and urban works published in the 20th Century [5].

Jane Jacobs was a committed journalist and activist. With her publications and actions she influenced the urban development patterns of North American cities. She focused on criticising the rationalist city planning of the fifties and sixties - particularly in her book, mentioned above. She supported pedestrian walkability and neighbourhood development led by its inhabitants and stressed the importance of local residents in this process [5]. To commemorate Jacobs’ contribution to the increase in the walkability of cities, all around the world there are annual, citizen-led walking festivals and conversations named Jane’s Walk. They take place all over the world in the first weekend of May [10].

THE WALK: JANE’S WALK - GDAŃSK, ROME, GDAŃSK. JANE’S WALK ELECTIVE SEMINARS

*Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody* [5].

This quotation from Jane Jacobs was the motto of the series of workshops with this innovative teaching method.

Jane Jacobs’ concept and methodology was the starting point for implementation of a series of walking workshops within the Urban Walk/Architecture Talk and Urban Walk/Jane’s Walk elective seminars at the Faculty of Architecture, GUT in 2017 and 2018. The walking activity was the main part of the elective seminar and the final event of the programme. Walking events were inspired by the theories of Jane Jacobs and included in an international framework of the Jane’s Walk movement. This movement of citizen-led walking conversations inspired by Jacobs represents a revolutionary approach to urban design. The process supports a community-based approach to city building, which involves citizen-led walking tours. Inhabitants observe, reflect, share, question and collectively reimagine the places in which they live. Those goals are in the mission of the Jane’s Walk movement [10].

The Urban Walk teaching activities were part of subprojects of a wider programme, Move into the Open Space, within the People’s Smart Sculpture (PS2), European project [11][12]. Those subprojects were implemented by cultural and educational institutions: Gdańsk City Gallery; Faculty of Architecture at Gdańsk University of Technology and the Department of Civil, Constructional and Environmental Engineering at Sapienza University in Rome, Italy. The focus of the project was a series of lectures, workshops, seminars, discussions and study visits.

Jane’s Walk 2016, Rome as a Pilot Project

The programme was inspired by research and teaching activities carried out in 2016 in Rome during the pilot Jane’s Walk project with the title: Rediscover San Lorenzo. Remains and Transformations in a Historical City District. That early, preparatory phase of the long-term programme was the beginning of co-operation with the Faculty of Civil, Building and Environmental Engineering at Sapienza University. In the course of the programme, students with professors and local actors, used walking experiments to investigate San Lorenzo. This well-known district of Rome revealed unexpected and surprising landscapes. The walk was also an opportunity to learn about the many spatial and social identities of the neighbourhood. Participants rediscovered the physical space, as well as the history and social identity of the neighbourhood. It was an opportunity to learn of the current status of the sites, but also to imagine their future development [13].

Jane’s Walk 2017, Gdańsk/Rome, Urban Walk/Architecture Talk

A continuation of this teaching experience was the Urban Walk/Architecture Talk: an elective seminar conducted during the 2016/2017 academic year as a parallel course at both Italian and Polish Universities (i.e. Sapienza University and Gdańsk University of Technology). It was conducted in co-operation with Gdańsk City Gallery (GCG) and the City Initiative NGO (non-governmental organisation). It also constituted a base for the PS2 subproject under the same title [14][15].

The goal of the course was to familiarise students with the subject of multi-layer and multi-sensory perception of public space. The aim was to demonstrate the use of public space, the recognition of the needs of its users, and the consequences of building a more complete architectural design and urban concepts. Equally important was raising awareness among students about designing public spaces and buildings as an integral part of the built environment.
The main issue elaborated during the series of walking experiments was the transformation of public spaces in the context of social participation and the cultural institutions’ activities and engagement [14].

The elective course had two stages: preparation and implementation. In the first semester, students elaborated the theoretical and practical aspects of social participation and cultural institutional activities. During this initial part of the course, the students took part in walking activities organised by local activists and cultural institutions. One of these was the Gdańsk Wrzeszcz walk organised in December 2016 by the Wrzeszcz Local Initiatives Committee. Based on this knowledge, the students designed walking experiments. The second part of the course, during the summer semester, was dedicated to preparing the final concept of the Jane’s Walk and accompanying activities; then its implementation at the beginning of May. Finally, the Jane’s Walk entitled Crossing the Bridges - Gdańsk Osiek was prepared [15]. The concept of the walk was closely related to the collaboration with the GCG and was a part of the wider project, Move in to open space [12].

The main idea of the walk was designed around the topic of revitalisation by culture and a new cultural institution located in Gdańsk Osiek district on Sieroca Street - a future cultural and exhibition place - the Daniel Chodowiecki and Günter Grass House. Engaged in the implementation of the event were not only the students, but also professors, experts, artists and inhabitants. As with every other walk within the Jane’s Walk Festival, it was open to the public and introduced through extensive advertising on the Internet, radio and other media. Many flyers and posters with project description were distributed widely around town.

The aim of the Jane’s Walk 2017 event was to go through the city of Gdańsk finally reaching the end point at the courtyard of the House of Daniel Chodowiecki and Günter Grass. Here the Radunia Canal was the guiding line for the participants who were walking beside the canal, crossing the bridges and discovering the hidden aspect of the public spaces of Gdańsk. The final point of the walk was a discussion and summary of the future of the art institution, which may be revitalised [15] (see Figure 2). As a result, the students had an opportunity to collaborate with the main actors and users of the space. During the preparation process students became engaged in problems and issues related to the transformation of the urban space.

This elective course continued in the partner city of Rome. Students, after an intensive walking week through the Gdańsk district, spent the following week in Rome. Here they took part in activities organised by Italian students and their partners within the same worldwide project inspired by Jane Jacobs - Jane’s Walk Festival [10]. Walking through the San Lorenzo (Rome) district consisted of participation in Jane’s Walk 2017: San Lorenzo e la sua rete di spazi pubblici including workshops and discussions [16].

The major part of the project and the elective seminar, Urban Walk/Architecture Talk, was the post workshop exhibition with its accompanying events that took place after the walks at the end of the seminar. At the opening of the exhibition the Italian street artist Ozmo gave a lecture about his inspirations and work. Moreover, his art piece, which was created just before vernissage, has become part of the permanent exhibition in the cultural institution of the GCG in the Daniel Chodowiecki and Günter Grass House. The post workshop exhibition showing findings and outcomes of the Urban Walk/Architecture Talk project was prepared by the students who were guided by the curators. It was presented to the broader public from June until August 2017 in the GCG at the House of Daniel Chodowiecki and Günter Grass.

![Figure 2: Jane’s Walk, Crossing the Bridges, conducted in Gdańsk in 2017 (Photographs by I. Uhlenberg, courtesy the GCG).](image)

Jane’s Walk 2018, Gdańsk, Urban Walk/Jane’s Walk

As a result of the experience of previous years and fruitful co-operation with cultural institutions and other partners, the next project began to evolve. In the 2017/2018 academic year the next elective seminar, Urban Walk/Jane’s Walk has been proposed to the students. It was also a part of the complementary project implemented within the Grassomania 10 project, which was an event organised by the Gdańsk City Gallery in collaboration with Gdańsk University of Technology, City Initiative NGO and invited artists [17].
*Fizz Powder on the Tongue*, a quotation that is drawn from a book by Günter Grass, was a slogan for the 10th edition of the Grassomania festival. The topic was:

*...experiencing the city through the senses. It was the taste, smell and touch of hissing sourdough powder on the tongue that carried Grass and his literary heroes to the magical world of childhood, invoking priceless memories* [17].

That walk event followed the previous concept of the walks. The first meeting within Grassomania 2018 in the form of Jane’s Walk entitled *Fizz Powder on the Tongue* took place at the beginning of May. It was focused, as was the whole idea of Grassomania that year, on experiencing the city through the senses. The concept behind the 2018 Jane’s Walk in Gdańsk combined three projects realised over several years by the Gdańsk City Gallery in co-operation with the GUT. These were: the Inspiration Bank project initiated in 2015 [18][19]; the Grassomania 10 festival; and Jane’s Walk project, as a part of Grassomania 10 [17].

The elective seminar concentrated first on elaboration of all those subprograms, then the theoretical investigation, complemented by examples of workshops dedicated to active mobility in the historical city centre of Gdańsk. It included presentations and discussions on the findings, and an opportunity to meet experts, artists and inhabitants, as well as collectively creating the concept for the next Jane’s Walk project.

For the final event of the elective seminar, designed as a Jane’s Walk in Gdańsk city centre, the Inspiration Bank project has defined the places of intervention. During the course of several stops, the participants of the walk were invited to experience their senses and the city. The invitation for the walk, which was available on the Web page of the gallery and in other advertised materials, was as follows:

We will walk together in the city center of Gdańsk finding new places that creatively stimulate our senses. Walk participants will be invited to (inter) active/interactive/participate in discovering and experiencing the space of Gdańsk [17].

Professors, students and guests together walked the centre of Gdańsk and tried to stimulate their senses in an interactive manner, getting closer to the history and atmospheres of particular places (see Figure 3). Everyone was encouraged to save their experiences in different forms: notes in special notebooks, photos, recordings, comments and others. At the end of the walk, the final discussion and picnic took place in the centre of Gdańsk, in the park in front of the gallery (Gdańsk Günter Grass Gallery). Selected, collected materials from the walks, provided by the participants, supplemented the Bank of Inspiration - *an interactive map of spaces that are artistically interesting created together with the local community* [18] - and served as inspiration for future artists of the main final part of Grassomania 10 [17].

Figure 3: Jane’s Walk *Fizz Powder on the Tongue* conducted in Gdańsk in 2018 (Photographs by J. Borucka).

CONCLUSIONS

The long-term practice of using walking in education leads to a key question: what role can urban walks play in creating the spatial and critical involvement of future architects and urban planners? It was tested and elaborated during the recent educational experience of the above-mentioned seminars: Urban Walks.

The data for the study were gathered during several preparation workshops, practice on location, investigation and interviews with neighbours, as well as members of the public, and was concluded with an event in an inner city area. The case studies presenting this innovative method in teaching architectural and urban design were based on city walk experiments. These were conducted during several workshop and elective seminars in the Faculty of Architecture at Gdańsk University of Technology in collaboration with the partner universities and institutions. The city walks and associated activities took place in both autumn and spring semesters of the 2016/2017 and 2017/2018 academic years.
They followed Jacobs’ advice: ...please look closely at real cities. While you are looking, you might as well also listen, linger and think about what you see [5].

The city walk is an opportunity to learn about various social identities of the neighbourhood. It allows note to be taken of the strong heterogeneity and different atmospheres of places and activities. The rediscovery of the physical space, the history, the social identity of the neighbourhood, means not only knowing the present state of the sites, it makes it possible to find their potential and imagine its future development. With this perspective in mind it becomes apparent that local actors are fundamental to the regeneration processes of cities.

The use of this innovative teaching method was designed to familiarise students with the issue of multi-layer and multi-sensory perception of public spaces. In particular, it demonstrates the use of public space, the recognition of the needs of its users, and the consequences of creating a more complete architectural design and urban concept. The main advantages of this approach to the education of architects is to place emphasis on the increased awareness of future architects and planners, particularly to teach students how to get in touch with, and to face, real space and its users with all their problems. The purpose of such an approach was to awaken critical thinking and creativity, to create more comprehensive architectural and urban design proposals, and to improve the qualifications of future architects and urban planners.

The complexity of a contemporary built environment is associated not only with architecture and urban planning. Those issues are situated on the crossroads of many other discplines and involve a wide range of social activities. Therefore, the education process looks for innovative methods of teaching in an interdisciplinary manner. In this respect, the city walks are an effective tool, which can be adopted into various educational contexts. It is critical to discuss innovative approaches to architectural education, and it is the only way to directly face the challenges regarding complexity in the constantly changing built environment: not only the challenges of today, but the challenges of the future.

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