

International architectural - urban - landscape design workshops to strengthen students' education, capabilities and mobility

Aleksandra Sas-Bojarska & Magdalena Rembeza

Gdańsk University of Technology
Gdańsk, Poland

ABSTRACT: Five international architectural/urban/landscape workshops in Poland and Portugal between 2011 and 2015 are discussed in this article. The general aims of the workshops were to plan to connect divided city spaces, to harmonise them and make them attractive for different uses. The main task was to create in multicultural groups of students the vision of sustainable development in the context of architecture, urban and landscape design, with special attention to the environmental, social, spatial and transportation issues. The case studies could be good examples of academic co-operation that supports the mobility of students and academic teachers. Both groups benefited from the exchange of views, new ideas and trends, co-operation and the building of professional and personal relationships.

INTRODUCTION

The ideas and benefits of organising five international architectural - urban - landscape workshops are presented in this article. These were: Towards the Eco-city, Gdańsk Seashore Area Development, Gdańsk, 2011; Limits and Interface: Designing the In-between Spaces of an Urban Ring Road in Lisbon, Lisbon, 2012; From Splinters to Parks, Lisbon, 2013; Connecting City Spaces, Kwiatkowskiego Route in Gdynia, Gdańsk, 2014; Esmoriz 109 - the Urban Meaning of National Road 109, Aveiro, 2015.

Workshops are one of the paths taken in architectural education, and constitute an important element in the development of the competence and skills of students. They also can enrich the didactic and scientific competence of teachers [1]. Workshops differ from regular courses and are an important element in architectural education. A feature that makes workshops stand out is the time taken, which is much less due to the nature of the work. Workshops often last only several days and predominantly focus on the development of main ideas. The work usually is performed in teams, which implies the need for close co-operation among participants [1].

The topics of the workshops were referred to as the urban and landscape problems of contemporary cities in Poland and Portugal, especially relating to fragmented cities. The general aims of the workshops were to solve existing problems by creating attractive, functional and safe city areas with regard to the current theories of town planning and best practice. Specific tasks were: to identify the existing situation and threats; to assess the values and potential of the areas; to look for suitable alternatives in the process of town planning; and to create a vision for connecting the separated areas and to design some urban spaces.

Stressed was the avoidance of disintegration, aesthetic disturbance and ugliness, and the implementing of urban, architectural and landscape planning to connect the divided city spaces, to harmonise them and make them attractive for different uses. The main task of each of the workshops was to create by multicultural groups of students a vision of sustainable development of the chosen area, with special attention to the environmental, landscape, social, spatial and transportation.

URBAN PROBLEMS: CHALLENGES IN TEACHING

Teaching urban planning to students from various cities and countries is an interesting and valuable experience, but it brings also many problems and challenges. Students participating in international workshops come from various countries, cities and universities. They often have been exposed to various teaching curricula and are at different stages of education. Another problem is the short, time-limited duration of the workshop. However, the workshop organisers knew that bringing together people with such different skills and approaches, motivates them to work by participating in

an international event which can produce highly interesting results. This happened in each of the workshops. This required the workshops be well-planned with appropriate cases, that there was discipline in achieving the objectives and flexibility to overcome obstacles.

Each of the selected examples presented different problems of a contemporary city. These included: investment pressure; new housing estates appropriating the most valuable natural and landscape areas; city fragmentation, cutting the city's fabric with communication arteries, hindering access to services and recreation through congested roads; adverse visual changes of appearance in the city's fabric; multiscale engineered objects; fragmentation of a forested ecosystem; degradation of landscape; destabilisation of geological structures (pits, slopes, bridgeheads, pillars); erosion processes; landscape changes, deforestation; changes in underground water level, pollution (air, noise, vibrations); negative effects on flora and fauna; chaotic-mix/use and architectural banality.

To solve these problems theory and best practices for urban development were presented during the workshops. The most important were connecting city structures, environmental protection, creating sustainable ecological and infrastructural networks, stressing the role of open spaces, protection/shaping of the urbanised landscape and local scale interventions as catalysts of change. Every year, these general challenges and trends were discussed, with the aim of implementing them into specific case studies. Below, two of the workshops that were planned, organised and conducted by the authors are described in more details. However the findings, results and discussion relate to all five workshops.

WORKSHOP 1 - TOWARDS THE ECO-CITY, GDAŃSK SEASHORE DEVELOPMENT

The theme of the workshop was connected to the development of the seashore in Gdańsk: an undeveloped, semi-natural multiscale green area, between Gdańsk and Sopot. It is highly valuable, because of environmental, landscape and cultural values associated with it. It is a popular place for recreation for habitants of the Gdańsk agglomeration and for tourists, having great potential as a multi-functional public space. Some parts of the strip are still undeveloped and neglected. They are the subject to strong development pressure as a most attractive investment area. There is a risk the area will attract chaotic, environmentally harmful development, which is already occurring - new development estates are being built in this area, causing fragmentation of space and appropriation of recreational public space.

The general aims of the workshop were: a) to present the potential threats to the city eco-systems, which may be caused by new developments; b) to stress the necessity of preserving environmental and landscape values; and c) to implement urban, architecture and landscape planning in open spaces to create attractive, multifunctional public spaces. Therefore, the main task for students was to assess the value of this area and the real threats, to identify the potential of the area and to develop new ideas for the Gdańsk seashore development.

The results were to show the spatial development possibilities of this area, diversified in terms of programme and space, respecting and emphasising its values, as well as creating a concept for developing the Seaside Belt in Gdańsk by an international, interdisciplinary groups of students. *Think global, act local*: this idea, formulated in Agenda 21 (the UN *action plan* on sustainable development), was the message of the workshop. Students were expected to incorporate this idea in results generated from the workshop. The new, fresh ideas were expected to support a concept created by the Polish Ecological Club and influence future decisions concerning this area, by minimising conflicts and implementing sustainable development.

Many lectures were held during the workshops to broaden students' knowledge of the issues raised: a presentation by the Gdańsk Ecological Club and the history of a non-profit project related to the Gdańsk seashore area; environmental values of the Gdańsk seashore area; cultural circumstances related to the Gdańsk seashore area; the presentation of a non-profit project related to the Gdańsk seashore area; contemporary trends in urban design; circumstances and threats related to the *Green Bypass*, the border of the Gdańsk seashore area; urban issues related to the Nowy Port area; previous students' ideas related to the Gdańsk seashore area; and threats related to high rise buildings in coastal areas (Figure 1).



a)



b)

Figure 1: a) Cultural heritage site visit; b) lectures and seminars (Source: Authors).

The results of the workshop were presented during the final session (Figure 2). Also participating were invited guests: tutors from the University of Gdańsk, Faculty of Geography; teachers from the Faculty of Architecture at Gdańsk University of Technology (FA-GUT); and representatives of the Polish Ecological Club.



Figure 2: a) and b) final presentations of students' projects (Source: Authors).

WORKSHOP 4 - CONNECTING CITY SPACES - KWIATKOWSKI'S ROUTE IN GDYNIA

The workshop topic referred to the problem of dividing the city by new roads and to the need to connect city spaces. Kwiatkowski's Route: an important road connecting Gdynia Port and the highway system, crosses different fragments of the city structure, such as multi-housing estates, neglected areas, a commercial area, an extensive housing district and forested hills of the Tri-City Landscape Park (a popular place for recreation).

Chaotic development can be observed along the route; an accidental mixture of different functions and forms, architectural banality and the landscape park partly destroyed by the new road. These features are becoming a serious threat to city image and function. In these areas, there is a need to implement urban, architecture and landscape architecture planning and design to improve the quality of space. The need for complex planning, and long-term thinking about the city environment and the consideration of the urban context in design and decision making - as a key element of designing all infrastructural objects - were emphasised. It was stressed that new, fresh ideas may influence future decisions about this area, to minimise the conflicts and implement attractive sustainable development.

The general aims of the workshop were: a) to present potential threats to the city structure, which may be caused by new roads; b) to stress the necessity of looking for alternatives in road planning; c) to present the possibilities of avoiding and minimising negative impacts, leading to disintegration, aesthetic disturbance and ugliness; and d) to look for mitigation measures, to implement urban, architecture and landscape planning to connect the divided city spaces, to harmonise them and make them attractive for different uses.

The main task for students was to create, within multicultural groups of students, a vision of sustainable development of the area surrounding Kwiatkowski's Route in the context of architecture, urban and landscape design, with special attention to the environmental, social, spatial and transportation circumstances.

To introduce the students to issues related to the workshop, several lectures were given by teachers from different universities; the Vice-President of Gdynia; and experts from the Spatial Planning Office of the City of Gdynia. Subjects of the lectures were (Figure 3a): the aim and idea of the workshop; introduction to Gdynia; strategy of Gdynia development; Kwiatkowski's Route in Gdynia: history, urban context, temporary problems and challenges; creation of the modernistic city core of Gdynia; reconstruction of the areas under existing viaducts; and city road infrastructure in the context of Gdynia Port accessibility - chances and challenges.



Figure 3: a) the Vice-President of Gdynia gave a lecture on city development; and b) study visit in Gdynia, Sea Towers (Source: Authors).



Figure 4: a) studio at the FA-GUT, group work, consultations; and b) study visit: teachers explain the problems related to the Gdynia Port development (Source: Authors).

METHODOLOGY

Sample

The details of teachers, students, the workshop held, partners and sponsors and teaching programme content are:

Teachers:

- Faculty of Architecture, GUT;
- University of Lisbon Faculty of Architecture, Department of Project in Architecture, Urbanism and Design, Section Urbanism;
- University of Aveiro, Portugal, Department of Social, Political and Territorial Sciences;
- Fumec University, Belo Horizonte, Brazil;
- HCU Hafencity Universität Hamburg, Germany;
- Izmir: Dokuz Eylül University, Faculty Of Architecture, City and Regional Planning Department;
- City Council of Gdynia, Spatial Planning Office of the City of Gdynia, Gdańsk University;
- Polish Ecological Club.

Students:

- Workshop 1: 15 foreign students, 15 Polish students, 4 PhD students. The sample comprised 34 students: 25 females (73.5%) and 9 males (26.5%).
- Workshop 4: 19 foreign students (University of Lisbon, Faculty of Architecture, Department of Project in Architecture, Urbanism and Design, Section Urbanism; Istanbul Technical University, Urban and Regional Planning undergraduate programme, Turkey; Dokuz Eylül Üniversitesi, Faculty of Architecture, Izmir, Turkey; University Polis, Urban Planning Department, Albania; Artistic High School Jordan Misja, Tirana, Albania; University of Newcastle, Australia) + 2 Polish Erasmus students (Wrocław University of Technology, Universidade de Lisboa and Aalborg University Denmark) + 24 Polish students (Faculty of Architecture, GUT, + 4 PhD Polish students, GUT + Sopot High School, Department of Landscape Planning, Sopot, Poland). The sample comprised 49 students: 37 females (75.5%) and 12 males (24.5%).

Partners and sponsors:

Workshops were held under the auspices of the Rector of Gdańsk University of Technology and the International Society of City and Regional Planners (ISOCARP). The sponsors were the President of Gdynia and the Spatial Planning Office of the City of Gdynia (financial, organisational support) and, due to them, the leaflet promoting the workshop was issued before each workshop. The Polish Ecological Club gave organisational and scientific support. Extremely important for the workshop was the participation of specialists from the Spatial Planning Office. Their participation, enriching the studio and discussions, allowed the feasibility of the solutions proposed by the students to be checked.

Content of the teaching programme:

The teaching programme covered lectures, study visits, studio at university, seminars, brainstorming, discussions, working sessions, presentations, consultations (Figure 3 and Figure 4), final session (presenting design proposals, discussion and findings). During the studio, students were engaged with analysis, defining purpose, making sketches, preparing the concept and vision of development, defining the general idea and designing details (for example, a detailed plan, sections and sketches).

Design

Students were prepared for the workshops in advance, because they received information about the topics by e-mail before the start of the event. In this way, they could prepare; for example by downloading databases from the Internet. Students were divided into international groups of several people. Participants were provided with all information on the existing circumstances of the area development and the maps. Each workshop began with introductory lectures. Subsequently, a study visit was held, combined with lectures and discussions, during which teachers talked of further problems related to design. The days following included the studio at the FA-GUT.

The students' first task was to systematise and evaluate the problems, and to relate them to the functioning and image of the entire city. During the work in interdisciplinary groups, they engaged in discussions with the lecturers. Individual and group analytical and design tasks were performed, and presentations were given for the whole group. The results were supplemented with charts and text, photographic documentation and drawings, as well as diagrams showing the search for possible methods of solving the problems noted, to obtain urban solutions that meet modern functional, spatial, environmental and social requirements. Students were encouraged to include in their studies and designs various phases, strategies, levels and disciplines (urban planning, architecture; landscape design and architecture; traffic engineering; sociology; economy; conservation of monuments).

Questions to Answers

To find proper solutions, students had to answer many questions about urban landscape, public spaces, connectivity of city structure, and so on. Questions asked were:

- What are the main problems of the study area?
- Where are the most important places in the study area, critical for the functioning of the wider city structure?
- What use of the land is the best for the different fragments of the area?
- How to connect the city structure, which has been separated by the new road?
- How should these areas be designed?
- What is the role of public spaces in contemporary urban planning and how should they be treated and planned?
- Why is the problem of connecting spaces so important for habitants?
- How to plan and design new roads in the city structure to balance the new roads and the existing values to create better cities?
- Where and how to build new roads to fulfil the social needs and to avoid fragmentation of space at the same time?
- What areas should be excluded from the development, because of environmental and landscape values?
- Where should new developments be created? How should these new developments be created?

Specific Tasks

Students had to solve many specific tasks. They had to:

- identify the existing environmental, social, spatial and transportation circumstances and threats;
- assess the values and potential of the area;
- create the vision of connecting the separated areas and sustainable development of the whole area;
- design several urban/architectural/landscape objects.

Exchanging knowledge and ideas was necessary to finding proper solutions. Participation in working sessions and seminars related to regional role and local meaning of cities and new uses for areas surrounding the roads helped students fulfil specific tasks.

RESULTS AND DISCUSSION

An important objective of the workshop was to implement the idea of interdisciplinarity and multiscale in teaching. Both are implied in the new challenges faced by architects and urban planners, as set out in The New Charter of Athens 2003 [2]. Specified in this document is a new interpretation of the role of the architect as creator, administrator, leader, manager, advisor, mediator and educator, encountering new tasks resulting from social, political, economic and technological changes, as well as changes in the environment and urban structure [3]. The knowledge and skills of the architect and urban planners account for the processes and phenomena characteristic of globalisation, as well as local conditions that allow unique architecture to be shaped and urban works to be undertaken [3]. *Architectural workshops, both domestic and international, can be important for cross-curricula integration. Quick and effective holistic teaching means the teaching is not broken down into separate dissimilar items* [4].

Mobility of Students and Academic Staff

The mobility associated with the programme was designed to enhance educational skills by participation in a teaching process within the international workshop, study visits and consultations. Added value expected from mobility

(for example, the results for the host institution, for the staff member carrying out the assignment and for the home institution) were: improvement in the educational process, didactic methods and knowledge in teaching contemporary city planning in the home institution; presenting new ideas connected with the educational process and the results of individual scientific research to the participants of the workshop at the host institution; exchanging experience in advanced educational tools and techniques; comparing teaching methods; improving the planning of the students' projects and enhancing communication skills; and gaining new teaching competencies.

The results expected were: to broaden knowledge connected with sustainable city planning; exchanging knowledge and experiences connected with the educational process; increasing the interest of students in sustainable city planning, especially connected with green/public spaces and transport systems; increasing the interest of students and academic staff in road and public space planning and strengthening educational co-operation between universities.

Subsequent workshops showed that local problems, which students had the opportunity to observe and evaluate during the event, often turn out to be common problems occurring in all cities, especially European ones. This is because design areas have been chosen each time due to the complexity of problems, the challenges and potential for creating new city values. The idea was to present to students the problems that may occur in every city.

Workshop Results

Workshop 1: the measurable result was the sharing of the results with the Polish Ecological Club (PEC) to use in public debates about the Gdańsk Coastal Strip, to show the city authorities and society the possible development options as a field for discussion and potential for professional studies. Thanks to the work of the students exposed during the debates held by the PEC, extensive social education of the inhabitants of Gdańsk was initiated, and the impulse was given for further actions of the city authorities in the development of the Gdańsk Coastal Strip.

It was planned that the results of the workshop were to be presented to invited authorities of Gdańsk, but no representative came to listen to the new, fresh ideas. This fact was a symbol, portraying the conflicts between ecological groups and city authorities. It was a great lesson for students, how difficult urban planning is, how important public participation is and the type of problems they may meet in their professional work.

Workshop 4: the results were presented locally and internationally. At the FA-GUT, tutors and invited guests, especially from the Gdynia Spatial Planning Office, participated in the final presentation and discussions. It was a memorable occasion for the exchange of concerns and new ideas between students and practitioners. The practitioners asked many questions and provided interesting feedback on the proposals. Discussion about the merits of the ideas presented demonstrated to the students the relation between design and practice. The opportunity to discuss the possibilities of implementing the concepts was useful for students and a significant chance to understand urban planning practice. The practitioners promised to take into consideration several of the students' most feasible proposals when planning the development of chosen fragments of cities. The results, in the form of posters, were presented also during the 50th ISOCARP Congress in Gdynia, Poland, in September 2014. It was a grand occasion to present and discuss the effects of education in the engineering field with such a wide international body of experts.

To summarise the most significant results of the workshops for students:

- The exchange of experiences, and the latest knowledge and views of new needs, trends and challenges in urban planning thanks to the co-operation in international groups, and thanks to the lectures on theory and consultations of an international body of teachers and scientists.
- The raising of consciousness of urban planners, especially in relation to controversial issues.
- The observing and the understanding of difficulties in solving real, actual and controversial urban problems.
- The understanding of how important an interdisciplinary approach and consultations are in urban planning.
- Showing students how necessary it is to have the co-operation and involvement of many entities in the city planning process: authorities, planning offices, urban planners, developers, society, ecological organisations and experts; in this case bringing the students closer to the realities and challenges of the professional work of an urban planner.

Emphasis should be placed also on the idea of workshops as referring to a broader context of the teaching of future architects. There are many discussions and controversies about the vision of architecture professionals, as these influence teaching methods and topics [5]. One of the ways of bringing new ideas and challenges into traditional teaching curricula could be workshops as tools of change. This could lead to improvement and development both in education and society. *There is a complex interrelation between education and society. Education is in some ways a mirror of society, but at the same time a factor influencing its development* [6]. That is why it is so important to ...*lay the foundation for change and at the same time to maintain the best qualities of the present* [6].

CONCLUSIONS

Contemporary cities are changing rapidly. New threats and problems are emerging that must be solved immediately, because they can cause cumulative, long-term and permanent effects, leading to a drastic reduction in the quality of life

in cities. That is why the international exchange of theoretical knowledge, views and design experiences among specialists is an invaluable source of inspiration for subsequent generations of urban planners. They will soon face the problem of coping with new, and even more serious urban planning challenges. By working with people having different education, specialties and views, learning about urban issues unknown in their city and country, studying the latest theoretical trends and listening to proven practical experience, they will be able to meet the challenges of the urban profession.

The great value of the workshops described here was a systematic attitude to analysing urban problems and the open, flexible attitude to solving them, on the basis of the newest theories and knowledge. What should be emphasised is that both teachers and students gain not only professional benefits, but also soft or social skills, which constitute a firm basis for their professional futures. Co-operation with other people broadens horizons and enables a specific topic to be perceived from a different perspective. All elements of workshops, such as brainstorming, teamwork and the short time for preparing visions, produced the results.

In summary, international workshops seem to be one of those activities that cannot be replaced by typical university lectures and seminars. Foreign exchange and co-operation widen students' knowledge and horizons.

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