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## FREEHAND DRAWING AS AN ARCHITECTURE "ESPERANTO" FOR STUDENTS OF ARCHITECTURE AND BUILDING ENGINEERING

# RYSUNEK ODRĘCZNY JAKO ARCHITEKTONICZNE "ESPERANTO" STUDENTÓW ARCHITEKTURY I BUDOWNICTWA

#### Abstract

The paper describes the process and effects of two open-air drawing sessions organised by Department of Civil Engineering, Opole University of Technology. The open-air drawing sessions took place in 2013 in Opole and Gliwice, and in 2014 in Pavia. The aim of the sessions was to improve the ability of synthetical and analitical freehand drawing, a comprehensive communication tool, which also simplifies the work with computer. Furthermore, young architecture students had the possibility to broaden their knowledge about buildings and complexes in a wide range of revaluation and revitalization. Students and teachers from architecture and engineering studies from Poland, Italy, Denmark, Spain and Finland took part in those open-air drawing sessions. In this European Union project called "Let's Exchange **HER**itage of our **CUL**ture – Drawing as a Communication Tool of Students of Architecture/ Engineers from European Universities – HERCULES" freehand drawing was means of cognition and the main goal was to broaden the knowledge of cultural heritage.

Keywords: freehand drawing, drawing teaching

#### Streszczenie

Artykuł ujmuje przebieg i efekty dwóch plenerów rysunkowych zorganizowanych przez Katedrę Budownictwa i Architektury Wydziału Budownictwa Politechniki Opolskiej. W 2013 plener odbył się w Opolu i Gliwicach, w 2014 w Pavii. Celem było podniesienie umiejętności syntetycznego i analitycznego rysunku odręcznego, będącego wszechstronnym narzędziem komunikacji, ułatwiającym także pracę z komputerem. Ponadto młodzi adepci sztuki mieli możliwość poszerzenia swojej wiedzy na temat obiektów i zespołów historycznych w szeroko pojętym zakresie rewaloryzacji i rewitalizacji. W plenerach udział wzięli studenci i nauczyciele kierunków architektura i budownictwo z Polski, Włoch, Danii, Hiszpanii i Finlandii. W unijnym projekcie "Let's Exchange **HER**itage of our **CUL**ture – Drawing as a Communication Tool of Students of Architecture/Engineers from European Universitie**S** – HERCULES" nośnikiem poznawczym był rysunek odręczny, natomiast wiodącym tematem poszerzenie wiedzy o dziedzictwie kulturowym.

Słowa kluczowe: rysunek odręczny, nauczanie rysunku

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#### 1. Intensive Programme – guidelines

Intensive Programme (IP) is a project financed by European Union within the framework of Lifelong Learning Programme/Erasmus Programme. It is a short cycle of didactic activities which last between 10 days and 6 weeks and gather students (between 10 and 60) and teachers of at least three different universities from three different European countries. The universities taking part in the IP have to be holders of the Erasmus card.

Intensive Programme entitled "Let's Exchange HERitage of our CULture - Drawing as a Communication Tool of Students of Architecture/Engineers from European Universities - HERCULES" was organized by Department of Civil Engineering and Architecture at the Faculty of Civil Engineering, Opole University of Technology. The two editions of IP were held in 2013 and 2014. The first one took place from 28th July until 10th August 2013 in Poland (Opole and Gliwice), the second edition took place from 13th July till 26th July 2014 in the Italian city of Pavia. Apart from Opole University of Technology which was a coordinator of the programme, the following universities took part in the IP: Silesian University of Technology (first edition only); Universidad Politécnica de Valencia and Universitat Jaume I from Spain; VIA University College from Denmark and Hämeen Ammattikorkeakoulu from Finland. 36 students and 12 teachers were involved in the first edition of the project and 30 students and 13 teachers in the second one. The teachers to students ratio was high, so frequent and individual contact with teachers was possible during the whole day drawing session, which is consistent with the "master-student" principle of teaching. Polish students represented the "classical" architectural studies, where the freehand drawing is one of the essential components of education.

Students of University in Pavia also graduate with the title "architect" but the program of studies does not include freehand drawing classes. The other universities taking part in the IP educate in the faculty "architect-engineer". This is a combination of creativity and engineering which can be compared to the effects of education in Center of Engineers Education in Silesian University of Technology in Rybnik.

The organizers of the IP selected the task for students so that they could improve the skills they already had and gain some new knowledge. Therefore students of the Polish universities were creating perspective sketches of the buildings and their details, while engineering students were complementing them with proportion studies, construction drawings and material information mostly in orthogonal projections (III. 1).

The drawings and sketches made during each drawing session were used by the students to create a poster, which was supposed to give as complete as possible information about the drawing topic.

#### 2. The organization and process of Intensive Programme HERCULES

During the Intensive Programme, students had a different drawing topic each day and series of lectures related to it. The drawing locations of the first edition of the IP were: city hall in Opole; The Opole Open-Air Museum of Rural Architecture (III. 2); the Młynówka river in Opole; Moszna Castle; Old Town in Nysa; urban areas in the center of Gliwice;

Nikiszowiec housing estate in Katowice; Old Town in Gliwice; Palace in Pławniowice and the Nowe Gliwice district. In the second edition the area of students' activity was limited to the Renaissance city of Pavia: Piazza della Vittoria; Romanesque church San Michele; monastery complex in Certosa di Pavia; cathedral (presumably designed by Leonardo da Vinci); the Ticino River and its surroundings; university complex and Castello Visconteo. Furthermore students were drawing the silhouette of the city visible from the other bank of the river and the new university complex.

The locations and buildings for drawing sessions were carefully chosen to give students a chance to get acquainted with the cultural heritage of the place and country where the IP was held and to enable students to draw buildings and complexes of buildings in different scale, different contexts and built in different periods. The drawing locations from IP HERCULES can be divided into several topic groups: historical sacred buildings (e.g. San Michele church; cathedral in Pavia; Certosa di Pavia), historical city buildings (e.g. city hall in Opole; Old Town in Nysa; Old Town in Gliwice; Nikiszowice housing estate; Piazza della Vittoria in Pavia; Castello Visconteo in Pavia), contemporary buildings (e.g. Nowe Gliwice district; new university in Pavia), buildings located in rural area (e.g. The Opole Open-Air Museum of Rural Architecture; Moszna Castle; Palace in Pławniowice), complexes of buildings - urban topics (e.g. Gliwice - urban areas in the center; complex of buildings by the Młynówka river in Opole - river as a part of the cityscape; silhouette of the city Pavia visible from the other bank of the river Ticino (III.3); the Ticino river and its surroundings). It is worth mentioning that the IP in Pavia was opened with a practical lecture about applied perspective, so the students of engineering could start the classes with this knowledge.

Each day of IP HERCULES was started with a short lecture about the drawing location for that day. During this approximately half an hour lecture students had the opportunity to get to know the history of the place or object they were drawing. Students were divided into workshop groups of six. In each group there was one student from each university taking part in the programme. Each university taking part in the Intensive Programme has a slightly different profile and education system, therefore in each group there were students with different drawing skills and techniques. This way of composing the workshop groups allowed students to work together, look for their strengths and use them in creating the collective poster, learn from each other, exchange experiences and communicate through drawings. Students would spend the whole day collecting the information, sketching and drawing. Afterwards they had time for group work during which they were choosing the drawings for the poster. Every evening the best poster was chosen, and their authors were awarded with a special diploma. At the end of each day a "National Day" was organized during which students and teachers from each country were presenting their culture, customs and traditions.

Apart from the everyday drawing sessions the Intensive Programme was complemented with sightseeing tours. During the IP in Poland students spent a weekend in Cracow and had the opportunity to visit Old Town and Rynek Underground permanent exhibition while the programme in Pavia included a one day excursion to Milan.

#### 3. Didactic process

The basic didactic technique applied during the IP was the "master-student" approach. Relatively high number of teachers (teachers to students ratio was 1:3) enabled individual work with each student and frequent comments and consultations during the whole drawing session. Apart from the corrections of students' works teachers had the opportunity to make their own drawings. Therefore students could also learn by observing their teachers during drawing and their final work. On the other hand, group workshops allowed to improve communication skills between students and enabled the mutual learning process. While composing the poster students were forced to choose only some of the drawings they made on a particular day, so they had to reason and explain their choice to the rest of the group. The everyday drawing contest for "Winner of the Day" (Ill. 4) and the end contest for "Superwinner" of the whole programme introduced the element of competition and raised the motivation to work. The best drawings from the IP were published in the calendars for 2014 and 2015 issued particularly for the programme. The drawing evaluation, discussion, choosing the best poster and explaining the choice by teachers allowed students to learn from their mistakes and improve their work every day. For the teachers from the involved universities it was an excellent opportunity to observe and compare the level of teaching and exchange the experiences about teaching drawing.

#### 4. The effects of Intensive Programme HERCULES

The two editions of the Intensive Programme HERCULES resulted in students' works exhibitions: in 2013 at the Faculty of Architecture Silesian University of Technology and at the Faculty of Civil Engineering Opole University of Technology and in 2014 at the Faculty of Civil Engineering Opole University of Technology and teachers' works exhibition in 2014 in Broletto Building on Piazza della Vittoria in Pavia and in Opole Philharmonic Hall. During both programmes, 60 posters of students' works were created, from which best 10 were used for creating the calendars each year (Ill. 5). The calendars were sent to all the participants of the events and were used to promote the programme itself and its effect in Opole University of Technology and outside of it. The effect of the Intensive Programme is also a brochure with teaching drawing guidelines for students of architecture. It consists of the basic drawing exercises for students. The IP HERCULES allowed to improve the international cooperation between Opole University of Technology and other partner universities involved in the project. For students it was an attractive opportunity for a foreign trip, getting to know new country, students and teachers from different universities. It is resulting already in an increased number of foreign students coming to Opole University of Technology to study as an Erasmus student and Polish students going to partner universities. This is particularly important for the new major: Architecture and Urban Design created at Opole University of Technology in 2009.



III. 1. Set of drawings made during the IP HERCULES showing different approach for the same drawing topic (Piazza della Vittoria, Pavia) by students from different universities (photo by Mariusz Tenczyński, 2014)



Ill. 2. Poster made during the first edition of IP in The Opole Open-Air Museum of Rural Architecture (photo by Robert Krac, 2013)



III. 3. Poster made during the second edition of the IP showing the silhouette of Pavia city seen from the other bank of the river (photo by Mariusz Tenczyński, 2014)



Ill. 4. Poster showing the old university in Pavia. Example of the work awarded with "Winner of the Day" title (photo by Mariusz Tenczyński, 2014)



Ill. 5. The title page of the calendar for 2015 (designed by Anna Szczegielniak, 2014)

### References

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