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NATALIA PRZESMYCKA*

TEACHING OF FREEHAND DRAWING IN THE CONTEXT OF CULTURAL DIFFERENCES

NAUCZANIE RYSUNKU ODRĘCZNEGO W KONTEKŚCIE RÓŻNIC KULTUROWYCH

A b s t r a c t

Architectural drawing is a kind of practical tool for recording thoughts and working through design problems, a method of presenting our vision or explanation of things which are impossible to describe with words. The paper summarizes the problems concerning teaching freehand drawing to foreign students. Teaching drawing involves not only sharing information and understanding the process of recording ideas but aesthetic sensibility as well. Students from countries with different cultural backgrounds are demanding pupils. The article is an attempt to answer the question how the cultural background influences the students of architecture in their use of freehand drawing as a tool.

Keywords: *architectural freehand drawing*, *Erasmus Program*, *foreign students*

S t r e s z c z e n i e

Rysunek architektoniczny to jedna z metod zapisu myśli, szkic idei, metoda przekazania swojej wizji odbiorcy lub objaśnienia tego, czego nie da się opisać słowami. W artykule przedstawiona została problematyka związana z nauczaniem rysunku odręcznego studentów zagranicznych. Nauczanie rysunku odręcznego wiąże się z przekazywaniem informacji i rozumieniem zapisu idei, ale również z wrażliwością estetyczną. Studenci z krajów o odmiennych wzorcach kulturowych są wymagającymi uczniami. Artykuł jest próbą odpowiedzi na pytanie, jak uwarunkowania kulturowe wpływają na studentów architektury w zakresie posługiwania się narzędziem, jakim jest rysunek odręczny.

Słowa kluczowe: *architektoniczny rysunek odręczny*, *Erasmus*, *studenci zagraniczni*

* Ph.D. Arch. Natalia Przesmycka, Department of Architecture and Urban Planning, Civil Engineering and Architecture Faculty, Lublin University of Technology.

1. Introduction

Due to growing popularity of international student exchange programmes, teaching architectural drawing becomes a new challenge for those who teach this subject as a part of architecture courses. Foreign students who stay in Poland under scholarship programmes, including the Erasmus programme which is the most popular of them all, willingly include freehand drawing in their curricula. The number of students participating in the Erasmus programme keeps growing. Students from Turkey and Spain constitute two biggest foreign groups arriving at Polish universities[1]. Different levels of the foreign students' skills and short periods of their studies in Poland lead to differences in the ways in which freehand drawing is taught to them and to their Polish classmates. Worth considering are the cultural determinants that influence the ways in which objects are perceived and represented, as well as traditions of teaching architectural drawing in the students' countries of origin. The following paper is based on the experience gathered in the period between 2009 and 2015, while teaching Erasmus students of the Architecture and Urban Planning course at the Lublin University of Technology.

2. Drawing as an architect's tool in the twenty-first century

Teaching architectural drawing is an essential part of education in the field of architecture. It is of immeasurable importance, not only in the design process but also in documenting the legacy of the past. Its value manifests itself especially in the works of European architects of the turn of the 20th century which was the period of development of national styles. Thorough graphical studies also led to a deeper understanding of the characteristics of materials and the craftsmanship involved in the construction process. After the First World War, architects started producing bolder drawings. In that period, the differentiation of styles of architectural drawing originating from different schools of architecture or typical of particular countries, became noticeable[2]. Freehand drawing was the main tool for tracing designs until the 1980s. The wide use of computer graphics software made it possible to create shapes that, due to their complexity, had been virtually impossible to trace by hand.

In the early 21st century, all stages of education are undergoing constant modifications and reforms, and higher education becomes more and more accessible. The master-apprentice relationship, cultivated by architects for centuries, was the basis of artistic continuity [4]. It remains visible in the drawings of the architects trained in the 20th century and earlier. In the last several years, the philosophy of education at all stages has been changing: the relationship centred on the teacher has been evolving into a model of education focused on the student, who should be inspired and encouraged by the teacher to develop solutions independently [14, 18]. Given the very large numbers of students and relatively shorter time of studying particular issues, the master-apprentice relationship is slowly disappearing.

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[1] In 2012, there were 2495 Spanish and 1965 Turkish students, [20].

[2] Expressionism and Academism in Germany, Abstract Expressionism and Constructivism in Russia.

Architectural drawing is also a form of answer to the questions "why?" and "how?" that architects ask themselves while looking at the reality around them. The similarity of the thought process and the psychic and emotional engagement while drawing from nature to the processes that take place while designing was noted by Eric Jenkins [8]. By sketching the things that we are seeing, while consciously analysing the changing perspective, we become involved with the building that we are observing. Architectural sketches from nature are not only transferences of the things that we see onto sheets of paper. They are also acts of involvement with observed objects. Hence drawings from nature made by architects are often supplemented with additional information in forms of schemes, projections, drawings of details and notes. It is not only about the view of the object but also the understanding of relations between shapes, bodies, functions and structures.

Before computer graphics became widespread, perspective drawings were produced mostly with the intention of establishing communication between the architect and the client, while working drawings were intended to be used at the construction site or to produce a detail of the building in the workshop. The basic feature of architectural drawing – the proper use of perspective, enabling the observer to understand the proportions of different parts of a building and the relations between them – still holds. Although it is the software that "controls" the right application of perspective at the stage of working on a project using computer, when it comes to tracing the initial concept sketch, presenting the idea to the client or solving a problem at the construction site, the ability to correctly draw what one wants to present remains a matter of essential skills of an architect. Teaching freehand drawing in the context of the development of communication skills is one of the goals of contemporary education in the field of architecture.

A survey conducted among the architects running the biggest architecture firms in the United Kingdom, regarding the use of freehand drawing as a tool in the design process, brought some very interesting conclusions. All surveyed architects admitted that linear freehand drawing is a vital element of a project idea at the initial stage of its development. Asked about their favourite tool for making the initial sketches, they pointed to the permanent techniques, like drawing with fountain pen or felt-tip pen of various sizes. According to Edward Cullinan, black ink is "difficult to erase and makes you think well"[3]. It is also an effective tool for working with the client, who can see the confidence of the architect's thought and their lack of hesitation.

Teaching of drawing became the subject of numerous publications. Most of them are handbooks. There are also studies of works of individual architects or particularities of different "schools of drawing" which developed at different architecture faculties[4].

[3] The survey involved the biggest UK architectural practices, with 492 architects interviewed. [7].

[4] [3]. The achievements of the drawing school at the Warsaw University of Technology were summarized in the book by M. Orzechowski [10] and the history of the drawing school at the Wrocław University of Technology was described in a monograph by R. Natusiewicz, [11].

3. Teaching drawing to foreign students

Studying abroad, even for one semester, is becoming more accessible and more popular. The practice of architecture evolves in a similar way. A research conducted in 2014 by the Architects' Council of Europe concluded that the profession of architect has a transnational character. 18 per cent of the interviewed architects had international experience in the course of their education or professional work, and 35 per cent admitted that they considered working abroad[5]. Other very interesting findings come from a survey regarding the additional training of architects. In Turkey such practices are virtually unknown, while Spanish architects spend an average of €300 on additional courses, dedicating around 50 hours a week to supplementary professional training[6].

Teaching architectural drawing to foreign students is especially difficult due to big differences in initial skill levels. Training in the field of drawing has distinct forms in different countries of Europe but the differences reach deeper than the higher education programmes.

Freehand drawing classes for international students at the Lublin University of Technology were taught both in mixed groups (where foreigners joined Polish classmates) and in groups consisting solely of Erasmus students. The range of topics studied in the winter semester included: composition in drawing, still life studies (training in measuring proportions, observing the properties of a given material) and communicative aspects of an architectural drawing meant to present a certain issue (e.g. a design created by the student in another subject). In the summer semester, the scope of the classes was extended through the addition of drawing from nature (plein-air painting classes in the Old Town of Lublin and the Lublin Village Open Air Museum, drawing human figures). Students were encouraged to try various techniques, in order to develop a convenient individual method that would make drawing enjoyable and give the most satisfying effect.

Unlike in the case of their Polish classmates, the assessment of works by international students is rather a delicate matter: it is difficult to compare the works of people that never dealt with drawing tasks before with the output of relatively skilled drawers, that is, the students that had previous training in the field. The language barrier poses another problem, especially in the case of Turkish students, who often take part in the Erasmus Programme despite the lack of sufficient foreign language competence. Facing these issues, teaching of architectural drawing aims at acquainting the students with drawing as a tool for transmitting ideas, encouraging them to look for means of artistic expression on their own, and raising their self-confidence. The last part is especially important in the case of the students who have no previous experience in freehand drawing. **The recognition of that special kind of "pleasure" that comes from creating autonomous worlds or imaging reality on a piece of paper is just as important as the spectacular results achieved by "highly trained" students.**

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[5] The research involved 18,000 architects from 26 countries of the European Union. Poland was not included, [18].

[6] Bulgarian architects dedicate the biggest amount of time to additional training (over 90 hours a week). Apart from Turkey, also French architects do not take supplementary training, [18].

There are interesting differences in the methods of drawing from imagination employed by students from Turkey and Spain, who constitute the majority of international students that enrol in this subject:

- Turkish students most often struggle to represent still lifes, capture the proportions of their elements and use the perspective correctly,
- Turkish students have a special liking for drawing human figures (although the results are not very good),
- drawings from imagination by Turkish students often feature symbolic elements that amplify the dramatic effect of the work. The favourite motifs are birds, trees and hands,
- Spanish students draw quite slowly, linearly and carefully, often preceding the drawing with several sketches,
- Turkish students do not make preliminary sketches on their own accord,
- drawings by Spanish students are very communicative,
- Spanish students have problems when it comes to applying the chiaroscuro technique,
- Spanish and Turkish students (most of the latter group having never participated in any painting classes) have totally different approaches to using colour: the Spaniards try to represent the real colours as realistically as possible, filling the empty spaces in their drawing slowly and carefully. The Turks, on the other hand, apply colours in a spontaneous manner, rarely mixing them. Interestingly, among the Turkish students there is a difference in the methods of work employed by girls and boys while creating colour paintings. The ladies try to paint gently, not to "spoil" the work by using pure colours, discovering the possibility of mixing them only after being instructed and encouraged. The male students frequently mix colours on the paper on which they are painting and finish their work ahead of time. Beginners have a common tendency to meticulously close the outlines of the drawn objects, use the rubber, striving to produce a "neat" drawing.

The author's signature is what crowns a drawing. Turkish students very often include a huge, flamboyant signature in the composition of their works. Interestingly, it is done only by male students.

In order to understand the reasons of the aforementioned differences in drawing skills and ways of looking at reality, it is worthwhile to look at the context to education in the field of architecture in Turkey and in Spain.

4. Turkey – the context of the tradition of education in architecture

The 1997 reform of the education system extended the period of compulsory primary education from 5 to 8 years. One can say that the reform of the educational system, intended to bring Turkey into the 21st century, is still under way and affects all stages of education [14]. The tradition of architectural studies in Turkey dates as far back as the 19th century, with Istanbul being the first Turkish academic centre to launch courses in this field[7]. In 1847,

[7] Before the Republic of Turkey was proclaimed, the future builders of state and royal buildings were trained in the *Hassa Mimarlar Ocagi*. This institution, established in the 16th century by an architect named Sinan, operated until 1881, when it was transformed into the *Ebniye'i Hassa Müdürlügü.* After the westernisation of most institutions in the 17th century, a technical military school was established in 1734, under the name of *Askeri Humbarhane ve Handesane*.

the Royal School of Military Engineering was transformed into country's first construction engineering faculty [1]. Initially, the education was oriented towards engineering, including courses in general construction, as well as road and bridge construction. Later on, the Civil Service School of Engineering (*Hendese-i Mülkiye Mektebi*) was opened, offering a course in architecture among other fields of study. In 1883, the Fine Arts School (*Sanay-i Nefise Mektebi Alisi*) was established in Istanbul, with architecture courses that followed the Western model of education [13]. Architects Kemalettin Bey and Vedat Tek, who worked as teachers at both schools, were the founders of the style called the Turkish neoclassicism. Since the 1970s, the style has been referred to as the national movement. The Young Turkey period in arts and the national movement came to an end in the first decade of the existence of the republic. The early years of the Republic of Turkey brought enthralment to the Western lifestyle spreading among ever wider circles. The past was often identified with backwardness.

For almost 20 years the Turks were eager to invite European architects, who introduced the principles of modernism in the country. European ideas, especially those of the Bauhaus and CIAM, quickly reached Turkey. The first independent faculty of architecture was established in 1937, based on the German model of technical school (Bruno Taut was one of its professors)[8]. In 1944, it was renamed as the Istanbul Technical University, and has remained the largest school offering architecture courses.

1937 was also the year of the foundation of the Academy of Fine Arts. Ernst Egli, one of the Academy professors, is believed to have introduced a new approach to teaching history of architecture. He added elements of vernacular architecture, including that of the pre-Islamic period, to the course programme, emphasizing the importance of the cultural context and the local aspect of architecture. Nevertheless, in the 1930s, most Turkish architects created in the spirit of modernism, using reinforced concrete as the main material and remaining under the influence of the international style (e.g. the Ankara Exhibition Hall (Şevki Balmumcu, 1933), the Istanbul University Observatory (Arif Hikmet Holtay, 1934), the *Florya* Sea Pavilion (Seyfi Arkan, 1934), café on the Taksim Square and the *Yalova* Spa Hotel (Sedad H. Eldem, 1935-38). In 1940, there were 150 architects practising in Turkey [22]. Today, courses in architecture are offered by 22 Turkish universities [21].

Delayed industrial revolution and rapid population growth led to intense and chaotic urbanization. Contemporary Turkish architecture reflects the very powerful economic and social growth, as well as the increase in country's population and its cultural disintegration. Housing shortage and failure to take necessary economic and administrative precautions resulted in numerous houses and apartment buildings being erected lawlessly, without architectural design. Land speculation and lack of sufficient protection of valuable natural areas within cities are other problematic issues. As a result, most urban areas lack regional features that would attest to their local identity. They are full of buildings of low aesthetic and technical quality. Undiscerning subjection of the economy and urban aesthetics to the needs of the tourism industry is one of the effects of globalization [22]. The reasons of this situation may also be related to education in the field of architecture, which nowadays meets with criticism in the Muslim countries. Higher education programmes are not sufficiently

[8] Other architects working there as teachers and creating their own designs, were Clemens Holzmeister, Ernst Egli, Martin Elsaesser, Paul Bonatz.

close to the social and cultural context, which leads to "mindless eclecticism", often noticeable in the contemporary Muslim architecture [2]. Little by little, the Turkish academia is gaining conscience of the importance of recognizing one's own cultural background and learning the history of the local architecture. The understanding of our own history, of traditional methods of building and developing architecture, boosts our self-confidence in expressing the cultural identity through architectural designs. It is particularly important for the developing countries in the times of globalization [12].

In this aspect, architectural drawing appears as one of the tools for studying other subjects, especially history of architecture. It should be mentioned that in the Ottoman world, unlike in the Western culture, history of architecture was not investigated until the 19th century. The Usul-u Mimari-i Osoman-i, (Written by Edhem Pasha, Montani Efendi and Boghos Efendi) a document published in 1837 for the Vienna World exposition, was the first Turkish attempt to summarize the legacy of the Ottoman architecture. Already at that time, it was noticed that copying Western styles can put an end to the uniqueness of the Ottoman architecture.

Most architectural courses at Turkish universities do not include freehand drawing classes. Teaching of freehand drawing is generally limited to geometrical and technical topics. Some universities introduce freehand drawing as one of the subjects in the second year of studies [23]. However, drawing skills are required already in introductory design classes taught from the first year. So how do the students deal with this situation? Conversations with the students show that their performance depends mostly on their talent, while the teachers complain that they do not know how to draw. At some universities, additional freehand drawing courses for architecture students have gained much popularity. They are considered extra-curricular activities and paid extra. Nonetheless, they are regarded rather as a hobby. Students admit that they often struggle to present their ideas and designs because, not knowing how to draw perspective, they do not have appropriate tools for doing this.

5. Spain – the context of tradition and culture

In Spain, education is compulsory for children between 6 and 16 years of age (primary school: between 6 and 12 years of age, secondary school: between 12 and 16 years of age). Tradition of higher education in Spain originated already in the times of the Muslim rule in the Iberian Peninsula. It is claimed that the first Spanish universities were the schools established by the royal court: the *Estudio General* in Palencia (1212) which was later transferred and transformed, giving origin to the University of Salamanca (1215). Others include Valladolid (1260), Alcala de Henares (1293) and Lleida (1293), [5]. Spain's oldest school of architecture was opened in Madrid in 1752. It was later incorporated into the Technical University of Madrid.

Spanish universities rank among World's best schools of architecture[9]. Last few years have seen growing attractiveness of course programmes and teaching methods, as well as

[9] The Institute for Advanced Architecture of Catalonia, (IaaC) in Barcelona ranked 8th in the 2012 Graduate Architecture ranking, [21].

increasing competition between higher education institutions. In Spain great emphasis is put on the use of modern technologies in the process of education [9]. Interestingly, the modern methods of teaching, for example, history of architecture, include modelling of historic buildings, introduced in 2012. The role of drawing in teaching history of architecture is also appreciated [6, 15].

Today, people interested in studying architecture can choose between 31 universities [16]. Only some of the Spanish architecture schools offer freehand drawing classes. The subject is usually taught during 1 or 2 semesters, and the exercises mostly involve drawing still lifes (architectural details, plaster casts) in the first semester and urban plein-air classes in the second. Students mostly use felt-tip pens, the use of pencils is less frequent. The rules of perspective drawing are explained in the technical drawing classes, taught at most universities. Therefore students can enrol in an architecture course without any previous training in drawing. Freehand drawing is popular and liked in Spain. There are associations of drawers whose members pursue their interest during thematic and plen-air sessions[10].

6. Conclusions

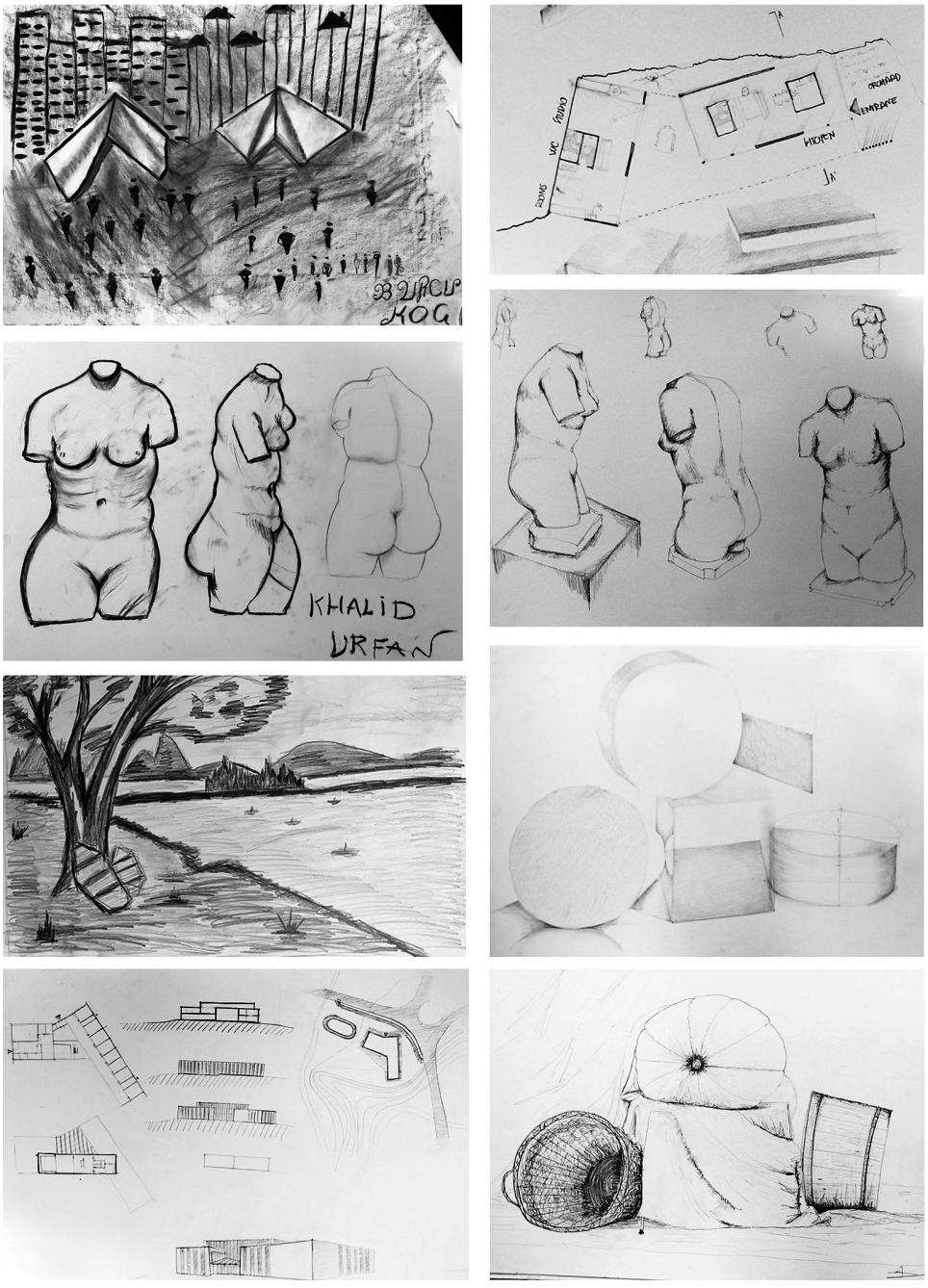
Teaching drawing is a constant process of learning. One of the reasons for that are the differences between the education systems in different countries. In the 21st century, freehand drawing is no longer a tool for presenting the final version of the design, and this is unlikely to change in the future. Drafting equipment has been replaced by the computer. Yet that does not mean that freehand drawing is no longer needed. Its role has simply changed. The important thing is the ability to sketch, to compose, to look for a form and, above all, to communicate. Students quickly notice that they need architectural drawing to present their ideas and communicate with other people. It is interesting that a survey among students of architecture showed that most of them consider painting classes less important than drawing classes. Students also point out that drawing stimulates the development of imagination, thus influencing the design process itself.

The Turkish students that choose to enrol in the freehand drawing classes at the Lublin University of Technology are not only those who took the architecture course. There are also spatial planning, urban planning and construction, and engineering students. It is clearly visible that they enjoy drawing, and many of them start their own sketchbooks. The criteria applied in the assessment of works by international exchange students should be different than in the case of their Polish classmates. It is important to remember that for many of them, it is the first contact with freehand drawing.

The answer to the question: "Why is it so difficult to teach architectural drawing to Turkish youth?" is very simple: this type of drawing was not present in their country's culture, while in Europe it has been a part of culture since the Middle Ages, only evolving throughout the centuries.

Participant of the project: "Qualifications for the labour market – employer friendly university", cofinanced by European Union from European Social Fund.

[10] The Urban Sketchers collective is an example of such organization



Ill. 1. Examples of works performed within the subject *Drawing and Painting* by the students of the Erasmus Programme in years 2013–2014 (photo by author, 2015)

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