

Profession: architect - students' plans and ideas

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ABSTRACT: In this article, the author describes the results of the *Profession Architect* survey conducted in January 2020 among two groups of students in the Faculty of Architecture at Cracow University of Technology (FA-CUT), Kraków, Poland. Those were 1st semester Bachelor's students and 2nd semester Master's students of the architecture course. The purpose of the survey was to learn the plans and intentions of students regarding their future profession as architects, and also their opinions concerning their own predispositions for performing specific types of professional work. As the curriculum of both cycles of architecture courses is focused on the development of skills related to the design, the survey was to examine how students' plans are tied directly to the designer's profession.

INTRODUCTION

Teaching future architects and an in-depth understanding of the manner of practicing the architectural profession is associated with design. Receiving education at a university and obtaining a design licence is the start of the careers of many adepts of the profession. The Architect's Council of Europe defines the architect as a person who has an appropriate education (the European Union Professional Qualifications Directive) and has a design licence [1]. However, do all architecture course graduates become active practitioners? When analysing data from Warsztat Architekta (2010) [2], one can conclude that around 37% of graduates work in architectural design and are professionally independent:

- In 2010, there were 483,500 qualified architects in the EU, which, assuming an average of 40 years of practice, meant 12,088 practitioners per year.
- At the same time, there were 163,750 architecture students in Europe. Assuming a five-year long study period, this gives a yearly graduate count of 32,750 [2].

Thus many persons abandon their learned profession. However, there are many ways that an architect's works are closely tied to their education and are not included in general statistics.

These include direct employment in the construction sector or the construction materials industry, the real estate sector (management, sale) or various forms of consulting work. Academic and artistic activity is also an important field. How do architecture students imagine their future? To what degree does their vision of their professional future change over the course of their studies? Although their vision of the possibilities of practicing the profession is shaped by general knowledge and easily available statistics, individual career plans are also formulated on the basis of experience gained during one's university education.

This may well be affected by the course curriculum. At present, the curriculum that is taught in the Faculty of Architecture of at Cracow University of Technology (FA-CUT), Kraków, Poland, features 1,231 hours of design modules out of the total of 3,047 hours during the first-cycle course (40%) [3], while the second-cycle course features 445 design module hours out of the 1,170 hours of the entire course (38%) [4]. Diploma design contact hours are included in this number.

It should be added that Poland employs unified architecture teaching standards. Their latest edition from the year 2019 increased the number of design module contact hours [5]. For first-cycle studies, they assume a minimum of 1,325 hours per a combined minimum of 2,800 number of hours (47%), and for second-cycle studies a minimum of 430 hours per 1,000 hours of the overall number of hours (43%). The hours allotted for the diploma design module and preparation for the diploma examination - 50 and 100 hours, respectively - are not included in design module contact hours.

In addition, design modules are conducted in small groups and find support in the remaining elements of the curriculum associated with knowledge transfer and supplemental skills training (drawing, computer software operation). J. Gyurkovich discussed this issue, commenting on the curriculum taught at the Architecture course offered by the CUT [6]. Similar relationships can be observed in other schools, for instance in Bratislava [7].

METHOD

The first objective of this study was to collect information about the plans of architecture students concerning their future professional career type, as well as their opinions concerning their own predispositions for performing specific types of professional work. The hypothesis was that the plans are tied directly to the designer's profession.

The secondary objective was to compare surveys conducted among 1st semester Bachelor's students of the Architecture course studying at the FA-CUT and first-year (2nd semester) students of the Master's in Architecture course taught at the same Faculty to demonstrate differences and similarities. To this end, a survey employing a questionnaire with closed-ended questions was conducted.

SURVEY OVERVIEW

The survey was performed and analysed with the aid of sociologist D. Szklarczyk from the FURBS Foundation for the Development of Social Studies [8]. It was meant to answer two questions.

The first question concerned students' plans associated with the type of their future work. The students were presented with 28 possible choices and asked to mark between two and five options. They were also given the option to add up to three other choices.

The second question pertained to how the students envisioned their own predispositions for performing specific types of work in the future, in terms of assessing their psychosocial potential. They were presented with six different scopes concerning their role within a group of employees (manager/rank employee, individual work/work in a group), the type of business (self-employment/regular employment), substantive scope of work (theory/practice, artistic/technical) and the degree of contact with other people. They were given six possible answers to choose from (*hard to say* and a five-point scale).

Below is a presentation of the survey questionnaire (Table 1).

Table 1: Survey questionnaire.

Survey - profession architect					
This survey is intended to collect information about the plans of architecture students concerning the type of work they intend to perform in the future					
Album no.			2019/2020		
A	Gender				
	Female		Male		
B	Year of study				
	First-cycle, first semester		First-cycle, second semester		Second-cycle, second semester
C	People take up employment in various professions and for various reasons. However, the university course one graduates from is still important in taking up employment in a said profession. When studying architecture, what is the profession you intend to take up employment in? (Please select between 2 and 5 options):				
1.	Designer - architecture and urban design				
2.	Designer - planner				
3.	Designer - interior architecture				
4.	Designer - landscape architecture				
5.	Construction worker - supervisor				
6.	Public administration clerk				
7.	Real estate developer				
8.	Real estate agency employee				
9.	Construction sector salesperson				
10.	Construction material researcher				
11.	Consultant (design)				
12.	Consultant (finances, real estate)				
13.	Researcher				
14.	University teacher				
15.	Primary or high school teacher				

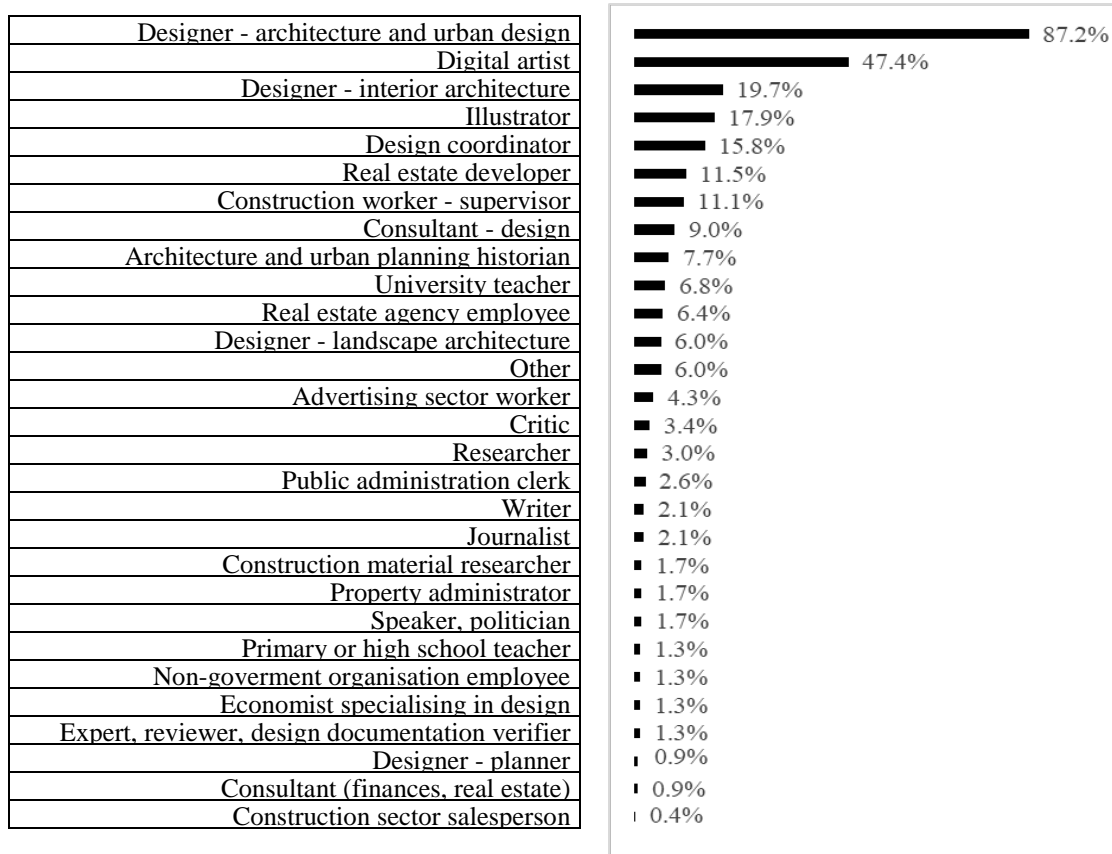
16.	Non-government organisation employee, activist	
17.	Writer	
18.	Critic	
19.	Journalist	
20.	Illustrator	
21.	Digital artist	
22.	Architecture and urban planning historian	
23.	Property administrator	
24.	Economist specialising in design	
25.	Design coordinator	
26.	Speaker, politician	
27.	Expert, reviewer, design documentation verifier	
28.	Advertising sector worker	
29.	Other - name a maximum of 3	

D	My abilities give me predispositions for: (Please rate the following positions on a five-point scale - mark X closer to the descriptions that better correspond to your abilities; marking the middle spot denotes a balanced predisposition)						
	Hard to say ▼						
D1		Work in a managerial position					Work in a regular position
D2		Individual work					Work in a group
D3		Work in my own company					Regular work
D4		Theoretical work					Practical work
D5		Artistic work					Technical work
D6		Work with people					Work alone

OVERVIEW OF SURVEY RESULTS

A total of 234 people participated in the survey, of which four persons did not list their gender. Of the remaining 230 persons, 169 were female (73.5%) and 61 were male (26.5%). For first-cycle students, the numbers were 99 (74.4%) and 24 (25.6%), respectively, while for second-cycle students, they were 70 (72.2%) and 27 (27.8%), respectively. When answering the first question, a total of 661 indications were made (Table 2).

Table 2: Planned profession - overall survey results for the first question (point C of the survey).



The highest number of indications pointed to the profession of the designer - architect or urban planner (87.2%), with the following positions occupied by the following professions: digital artist (47.4%) and designer - interior architecture

(19.7%). It was interesting that the profession of designer - planner was selected by a very small number of students (0.9%). It was one of the three most rarely chosen professions, alongside the consultant (finances, real estate) (0.9%) and construction sector salesperson (0.4%).

When divided by first- and second-cycle courses, a number of differences became visible. The profession of designer - architecture and urban design was still the most often selected options and its popularity rose slightly (from 86.5% to 88.1%). The popularity of the profession of the interior designer fell considerably (from 26.3% to 10.9%), as did that of the illustrator (from 21.8% to 12.9%).

The interest in the profession of the university teacher rose (from 3.8% to 10.9%), as did that of the researcher (from 2.3% to 4%). Interest in the designer - planner and construction materials researcher professions dropped to zero (Table 3).

Table 3: Results of the survey in respect to answers to the first question (point C of the survey), divided by study cycle.

	BA course	M course		BA course	M course
Designer - architecture or urban design	86.5%	88.1%	Writer	2.3%	2.0%
Digital artist	46.6%	48.5%	Critic	2.3%	5.0%
Designer - interior architecture	26.3%	10.9%	Journalist	2.3%	2.0%
Illustrator	21.8%	12.9%	Other	2.3%	10.9%
Design coordinator	15.8%	15.8%	Designer - planner	1.5%	0.0%
Construction worker - supervisor	13.5%	7.9%	Public administration clerk	1.5%	4.0%
Real estate developer	10.5%	12.9%	Consultant (finances, real estate)	1.5%	0.0%
Architecture and urban planning historian	9.8%	5.0%	Primary or high school teacher	1.5%	1.0%
Designer - landscape architecture	8.3%	3.0%	Economist specialising in design	1.5%	1.0%
Real estate agency employee	8.3%	4.0%	Speaker, politician	1.5%	2.0%
Consultant (design)	8.3%	9.9%	Activist, non-government organisation employee	0.8%	2.0%
University teacher	3.8%	10.9%	Property administrator	0.8%	3.0%
Advertising sector worker	3.8%	5.0%	Expert, reviewer, design documentation verifier	0.8%	2.0%
Construction material researcher	3.0%	0.0%	Construction sector salesperson	0.0%	1.0%
Researcher	2.3%	4.0%			

The second position of the digital artist profession is an interesting result. It is an appreciation of the artistic direction, instead of the technical one; particularly among first-cycle course students, who also appreciated the profession of the illustrator (fourth position). The decrease in popularity of the interior architecture designer is also interesting in light of the current employment market opportunities. At present, many apartment buyers can afford to hire an interior designer and many find employment in this profession.

Older students presented more employment opportunities listed in the *other* category (2.3% for first-cycle students and 10.9% for second-cycle students, see Table 4).

Table 4: Professions the students listed in the *other* category.

First-cycle architecture course	<ul style="list-style-type: none"> • archaeologist/heritage renovator • clothing designer • photographer of the <i>architecture</i> magazine • handicrafts (jewellery)
Second-cycle architecture course	<ul style="list-style-type: none"> • researcher of the impact of urbanisation on nature • BIM manager • IT • sector not connected with architecture • decorator • plant environment surveyor • heritage conservator/author of conservation analyses • work linking architecture and IT in the design and manufacturing process (combining IT and manufacturing technology in architecture and design) • corporate employee • game designer • furniture designer • tattoo artist

The answers to the second question in the six presented scopes displayed a high degree of variety. One interesting result was the declaration concerning predispositions for work in a managerial position in one's own company with a practical profile that also had an artistic character (Table 5). At the same time, work with people was appreciated to a greater degree than work alone. When divided by the first- and second-cycle studies, certain differences became visible (Table 6). The second-cycle students appreciated predispositions for teamwork and technical abilities instead of artistic ones. However, apart from the scope concerning individual and team work, the differences between groups were not statistically significant [8].

Table 5: Student opinions concerning their predispositions (summary results for first- and second-cycle students).

Work predisposition pair	Average*	Median**	Dominant abilities
In a managerial position - regular position	-0.3905	-1	In a managerial position
Individual - group work	-0.1688	0	Individual work
In one's own company - regular employment	-0.4739	-1	In one's own company
Theoretical - practical	0.9911	1	Practical work
Artistic - technical	-0.0917	0	Artistic
With people - alone	-0.2882	0	With people
*Average values below 0 indicate predispositions for abilities from the left column, while values above 0 indicate abilities from the right column.			
**Median values below 0 point to abilities from the left column, whereas median values above 0 point to abilities from the right column. A median value of 0 denotes an ambivalent attitude.			

Table 6: Student opinions concerning their predispositions (separate results for first-cycle and second-cycle students).

1st cycle				2nd cycle			
Work predisposition pair	Average *	Median **	Dominant abilities	Work predisposition pair	Average *	Median **	Dominant abilities
In a managerial position - regular position	-0.57	-1	In a managerial position	In a managerial position - regular position	-0.15	0	In a managerial position
Individual - group work	-0.35	0	Individual work	Individual - group work	0.07	0	Group work
In one's own company - regular employment	-0.51	-1	In one's own company	In one's own company - regular employment	-0.43	0	In one's own company
Theoretical - practical	0.95	1	Practical	Theoretical - practical	1.05	1	Practical
Artistic - technical	-0.21	0	Artistic	Artistic - technical	0.06	0	Technical
With people - alone	-0.26	0	With people	With people - alone	-0.32	-1	With people

When divided by gender, only slight differences were observed, with the only statistically significant difference being in the approach to performing managerial work. Women were more inclined to describe themselves as predisposed for work associated with a managerial position (Table 7). This type of survey can be considered the starting point for these studies.

Table 7: Student opinions concerning their predispositions by gender.

Female				Male			
Work predisposition pair	Average *	Median **	Dominant abilities	Work predisposition pair	Average *	Median **	Dominant abilities
In a managerial position - regular position	-0.26	-1	In a managerial position	In a managerial position - regular position	-0.15	0	In a managerial position
Individual - group work	-0.14	0	Individual work	Individual - group work	-0.22	0	Individual work
In one's own company - regular employment	-0.46	-1	In one's own company	In one's own company - regular employment	-0.58	0	In one's own company
Theoretical - practical	0.96	1	Practical	Theoretical - practical	1.07	1	Practical
Artistic - technical	-0.17	0	Artistic	Artistic - technical	0.15	0	Technical
With people - alone	-0.44	0	With people	With people - alone	-0.11	-1	With people

CONCLUSIONS

The survey confirmed that students plan to work primarily as designers (of architecture and urban design) and also that this belief deepens with education (from 86.5% to 88.1%).

The remaining professions associated with design, apart from architecture and urban design, were not as popular, and the designer - planner profession was not selected by any of the participating second-cycle students. It should be noted that, during the first-cycle course, planning is featured only in the form of rural design (88 hours, which amounts to 7% of design module contact hours). During the second-cycle course, it encompasses 105 hours (24% of the overall number of hours allotted to design modules).

The analysis of the assessment of the students' own predispositions for performing specific types of work demonstrates, in a broader sense, an idealised set of an architect's working conditions. These include independent decision-making (one's own company, a managerial position), work with an artistic character that also has a practical dimension, and working with other people (Table 6).

Until now, no large-scale survey studies concerning the opinions and plans of architecture students concerning the preferred manner of practicing the profession in the future were performed. These are essential studies, as they are associated with the shape of this profession in the future and the degree of professional satisfaction of future architects, including the evolution of university curricula.

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