

# What About Education?

An Exploration of Educational Transformations  
in Europe

Gilles Benjamin Theo Gasser



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An Exploration of Educational Transformations  
in Europe

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# TABLE OF CONTENTS

PREFACE	11
INTRODUCTION	13
PART I / RADICAL PEDAGOGIES AFTER MAY 68	
INTRODUCTION	19
DESIGN & POLITICS	
<i>"Political Influence on the Curriculum of UP6 &amp; UPAN"</i>	25
MULTIDISCIPLINARITY	
<i>"Towards Multidisciplinary Teaching at UPI in Paris"</i>	31
COLLECTIVE WORKING	
<i>"Research through Collective Working at ETH in Zurich"</i>	37
HIERARCHY	
<i>"Overthrowing Hierarchical Structures in Florence"</i>	43
PART II / THE BOLOGNA PROCESS AND ITS IMPACT ON HIGHER EDUCATION	
INTRODUCTION	53
DESIGN & POLITICS	
<i>"Understanding the Relation between Education and the     Market Economy"</i>	59
MULTIDISCIPLINARITY	
<i>"The Need for Traditional Research Disciplines"</i>	65
COLLECTIVE WORKING	
<i>"Cooperation to Perpetuate the Entrepreneurial System"</i>	69
HIERARCHY	
<i>"The Shift of Hierarchical Structures at Universities"</i>	75

PART III / CURRENT EDUCATIONAL SITUATION AT EPFL	
INTRODUCTION	81
DESIGN & POLITICS	
<i>“Student Activism at EPFL”</i>	87
MULTIDISCIPLINARITY	
<i>“Different Multidisciplinary Pedagogies at EPFL”</i>	95
COLLECTIVE WORKING	
<i>“First and Last-Year Design Projects at EPFL”</i>	103
HIERARCHY	
<i>“An Uncertain Future of History of Architecture at EPFL”</i>	109
CONCLUSION	115
ACKNOWLEDGEMENTS	121
BIBLIOGRAPHY	123
WEBOGRAPHY	129
ILLUSTRATION CREDITS	133





## PREFACE

### “WHAT ABOUT EDUCATION?”

After a total of five years of studying architecture, three of them at EPFL, an exchange year in Trondheim at NTNU and two six-month internships in Zurich and Basel, I began to reflect back on my education. It turned out that I never questioned my own academic education and just accepted it as it is. From that moment on, I became interested in architectural education. In my master's degree, I started as an assistant in the first-year design course at EPFL, where I gained insights into teaching. I also started to get involved in student associations, such as MAP (Master Architecture Projects). In autumn 2020, I also got involved in the preservation of the History Laboratory at EPFL. It was on this issue that I first realized the blatant hierarchies and power structures that prevail at a university, which further encouraged me to write my master's thesis on the topic of architectural education.



## INTRODUCTION

### “WHAT ABOUT EDUCATION?”

Our world is changing, and this at a pace unprecedented in the history of mankind. Just in the last ten years, the world has seen a multitude of changes happening at such a fast rate that it has been difficult to follow them all. Not only do we have to accept the fact that we have radically and irreversibly damaged our planet, despite having been warned by scientists for almost eighty years, we are also starting to actually feel this damage. As global carbon emissions fail to decline, we are on our way to break new temperature records every year, while just having finished the hottest decade ever measured. Furthermore, the last decade has seen drastic political transformations. In 2017, the United States of America and with them the whole world was in shock to see that Donald Trump, a notorious liar with no political experience, got elected as president. Activism became a common thing around the world, especially among younger people. A young Swedish girl started to strike on Fridays against the government decisions regarding climate change until becoming a global phenomenon. MeToo shed light on the sexual abuses and harassment amongst the world's most famous people and started important discussions about inequality that are still going on.<sup>1</sup>

At first, this has nothing to do directly with Architecture or architectural Education, but the discipline has had a long history of dealing with social and political changes and transformations. Therefore, architectural education today faces urgent global challenges, such as climate change. Moreover, since the end of the last millennium, a European educational reform has reshaped the landscape of higher education completely. We will see how this reform has shifted the idea of the mass university and formation of the “good citizen” to a strong tendency towards entrepreneurialism pushed by the market economy.

To thoroughly understand the current educational situation this text analyses two moments that had a great impact on architectural education: the radical pedagogies that emerged at universities after the student protests of 1968 and the impact of the Bologna Reform on higher education in 1999. Drawing from the latter, we will further on look at the current educational situation at EPFL. All three parts are scrutinized through four key aspects which are not bound to a certain era and that are inherently linked to one another. In its essence, architecture is an inherently political act as it expresses a society’s relationship to power. As such, the first aspect will look at the relationship between design and politics. The second aspect will focus on the multidisciplinary approach in education, as architecture is a practice fundamentally reliant on other disciplines such as civil engineering and, more since the 60s, social sciences which have gained an increasing impact, as we shall see. The third one will consider collective working experiences. Indeed, making architecture is a collective effort, and this is especially true in architecture schools, where students work together, a collaboration that shapes them and their understanding of how to create architecture. Finally, we will look at the fun-



damental question of hierarchy in teaching. For centuries, the master-apprentice model was present up until the 1960s when hierarchical structures at schools got challenged. Today, we are faced with yet another situation with a growing administration that is creating new power relations at universities. The analysis of these three moments, the protest of 1968, the Bologna reform of 1999 and the current educational situation at EPFL, through the lens of the four mentioned key topics, should help find answers to the fundamental questions of this thesis:

Could the heated political situation of today be used to help with the emergence of a new architectural project or movement? Is it possible, in a complex pluralistic system such as EPFL, to have a strong pedagogical project emerge from within the school? And especially: What is the role of the students and how can they understand the current situation in order to act?

The first part will look at what can happen when architectural education takes on risks and students radically form a unity to fight for their demands. It will then give us some clues to deal with the current situation at universities. The second part, which treats the impact of the Bologna Process, is necessary to understand the mechanics of today's landscape in higher education and to clarify the role that students, professors, administration and politics take on in the complex construct of the university. Lastly, the current situation at EPFL will be analysed to give an overview of what is happening already and where change is still needed. The combined information of the three parts should help answer the raised questions.

<sup>1</sup> VAN GERREWEY, *Higher Knowledge*, 7-9.



# **PART I**

## **RADICAL PEDAGOGIES AFTER MAY 68**



## INTRODUCTION / RADICAL PEDAGOGIES AFTER MAY 68

The events of 68 are often depicted in a manner of a homogenized retrospective vision when in reality we should refer to them as a multitude of trajectories more than precise moments. A more accurate approach is to expose the processes of transformations that the events generated as well as the ambiguity and contradictions of the demands of the student protests. This part analyses the transformations in pedagogy and epistemology of architecture that were set up internationally in the aftermath of 1968. While France and especially Paris are more displayed than other countries, it is irrefutable that other states played a major role in reinventing pedagogical strategies and epistemological tools of architecture. For this reason, this chapter will focus not only on one country, but mainly on Italy and France and eventually the United Kingdom. Many students and teachers were formed in a country then left to teach or study elsewhere. This is why the examples may not stop at the border as there will always be an important connection to the main countries analysed.<sup>1</sup>

In France, the first struggles happened at the École des Beaux-Arts in 1966. The demands of the students were to receive an education that is less academic, detaching itself from the outdated architecture based on composition, and thus more centred around the real profession as well as better working conditions.<sup>2</sup> The students wanted to liberate the practice and education of architecture from the aesthetics of the finished product, the reproduction but also the technical

mastery. Essentially, they started to question the very meaning of architecture itself. Instead of asking, “what kind of architecture should be made?” the question shifted to “how, with whom and for whom it should be made”. This manifested itself in questioning the social and societal role of architecture.<sup>3</sup> The movement is undoubtedly political but also intellectual, it aimed for a theoretical renewal based on the humanities that crashed into the discipline of architecture in the 1960s. Even before 1966 the authorities identified the inevitable necessity for change and tried to restructure education with a reform in 1962. This movement was eventually overshadowed by the events that followed in May 1968. On the 8th of May 1968 the École nationale supérieure des Beaux-Arts in Paris was occupied by the student body. The protest found its apotheosis in the denunciation of the image of the “noeud-pap”, the symbol of the pride and arrogance of an architect at the time. A decree passed on the 6th of December 1968 reorganised the architectural education system, with the discipline no longer being part of the École des Beaux-Arts. It led to the creation of eighteen autonomous UPs (Unité Pédagogique) spread across the whole country, with five of them situated in Paris. This transition opened up the possibility for the creation of new curricula and thus experimental pedagogies. The ambition of practising architecture differently can clearly be seen through the reinvention of forms and pedagogical contents, the virulent refusal of the heritage of the Beaux-Arts system, the commitment and finally the hypotheses formulated for society and architecture.<sup>4</sup>

The Italian context was slightly different and even more focused on the change of hierarchical structures at Universities that can be seen when analysing how the occupations spread across the country. The first university to be occupied was in

Turin. Starting on November 27 with a sit-in of a few hundred students that rapidly turned into an occupation of more than a thousand students that lasted for a whole month. The students occupied the Central Building of the University where they also held student assemblies and “counter-courses”. This eventually led to the definition of the “Turin Charter” which could be called the “philosophy of the occupation”. Turin was the spark that started the student movement throughout Italy. The protests usually started with a provocation by a small group that would get repressed, causing the reaction of a big body of students and eventually leading to the surrender of academic authorities. After Turin came Pisa and Florence, which will be analysed further in the chapter on Hierarchy. At both places encounters between students and the police were seen. The next chapter of occupations hit the capital, Rome. It was an alternating pattern of occupation and liberation that extended from the Faculty of Architecture to the city in front of the Court House. The battles between students and policemen were heavily mediatised and spread the conflict around the country. Slowly more universities in other cities got occupied, first Trento and Milan, where even the generally reluctant students of the Catholic Sacred Heart University participated as well. Finally, the origin of higher education, Bologna, the seat of the world’s oldest University was hit and the central building of the university was occupied for over a month.<sup>5</sup>

The context in the United Kingdom was radically different from Italy and especially France, which can be seen with the example of the Architectural Association School of London (AA). In January 1971, students from the AA visited the newly formed UP6 in Paris. An installation of three screens showed the extreme differences between the two schools. The first

screen showed scenes of street fights between policemen and the students of Paris, burning cars and a famous poster of the “Atelier populaire” with the slogan “la lutte continue” (the struggle continues). On the other two screens, pictures of Archigram’s pop culture were shown. Young women in bikinis on inflatable rafts, mobile houses and airplanes dropping houses.<sup>6</sup> The encounter between the two schools was subsequently described in the magazine *Architectural Design* in 1971:

*“We too are in a political situation ...’ begins Peter Cook - but he is wrong, we are all wrong; compared to those UP6 students who work on building sites, go to prison for spraying slogans on walls, build community centres for immigrant labourers, float newspapers demanding ‘EVERYTHING’, invade the offices of government ministers, hold lectures in the Louvre, department stores, or the street - we are not political. We do not know what the word means.”<sup>7</sup>*

This statement demonstrates the impact the French students had on their English counterparts and how they reacted to the different political context. From then on, small protests started to appear but never comparable to the dimension of what had happened in France. An explanation for this different situation is given by the historian Bertrand Lemonnier. He states that the democratisation of higher education undertaken by the government under Wilson (1964-1970) offered a higher flexibility to the students’ demands and wasn’t as antagonistic as it was the case in France. Furthermore he describes how pop culture helped to calm the situation as it offered the students a possibility to experiment and express themselves in a contemporary way. The comparison thus shows how in France, architecture was used for social and political causes while in Eng-



land, architecture was looked more as an autonomous practice since their reflections turned around intellectual activities internal to the discipline.<sup>8</sup>

The aim of this chapter is not to produce a timeline of the three countries but rather seeks to create a template to navigate through four pedagogical strategies that are analysed thanks to a variety of examples. The four strategies discussed in this chapter are Design and Politics, Multidisciplinarity, Collective Working and Hierarchy in the Design Studio. The first subchapter treats the question of how political ideologies influenced the design studio and its work. Multidisciplinarity discusses the renewal of the teaching committees away from the classical disciplinary beaux-arts patron while the third subchapter scrutinises the reconfiguration of the student body within the design studio. The last subchapter discusses the newly created hierarchies in the design studio and how it changed the work of the students.

<sup>1</sup> CHARITONIDOU, 'Between Urban Renewal and Nouva Dimensione: The 68 Effects Vis-à-Vis the Real', 2.

<sup>2</sup> MANIAQUE BENTON, Mai 68: L'architecture Aussi!, 7.

<sup>3</sup> Idem, 8.

<sup>4</sup> Idem, 7.

<sup>5</sup> MANCINI, 'The Italian Student Movement', 427.

<sup>6</sup> ANDRÉ-GARGUILO, 'LES REVUES COMME ENGAGEMENT L'Architectural Association School Dans Les Années 1970', 67.

<sup>7</sup> "THE OLD SCHOOL. A SHOCK", Architectural Design, n.9, 536.

<sup>8</sup> ANDRÉ-GARGUILO, 68.

1

# **3 MORTS PAR JOUR SUR LES CHANTIERS**

## DESIGN & POLITICS / POLITICAL INFLUENCE ON THE CURRICULUM OF UP6 & UPAN

After the passing of a decree on December 6, 1968 in France, eighteen new Unité Pédagogique (UPs) were formed. Each of these UPs formed their own identity and defined what topics they wanted to emphasise. UP1, which will be discussed more into detail in the next chapter, was founded by teachers that had a strong link to the French Communist Party. They focused on three main topics, “the growing production forces”, “the need for architecture for the greatest number of people” and “the scientific and technological needs”.<sup>1</sup> This goes hand in hand with what Jan Silberberger wrote about the demands of the students in the book “Against and for Method”:

*“... Students argued that studio education should get out of the ivory tower, deal with real-world problems, and seek interaction with the public. Instead of withdrawing from public life, students demanded design studios to strive for ways of engaging with public discourse and interfering with burning issues - from a perspective not required to submit to commercial demands or exploitability.”<sup>2</sup>*

Other UPs were still linked to the Beaux-Arts system as their teachers still believed in the “Patron” system, such as Louis Arretche, who founded UP3 in Versailles. While most of the UPs were searching for authenticity and reinventing the discipline of architecture, two Unités Pédagogiques, UP6 and Unité Pédagogique d'Architecture de Nantes (UPAN), clearly stood out as they question the fundamental purpose of the ar-

chitect.<sup>3</sup> Jean-Louis Violeau resumes the political influence of UPAN as follows:

*“The UPAN was influenced by a so-called “Mao-spontex,” a spontaneous political current that avoided the characteristic seriousness of the Proletarian Left and advocated instead for a return to the grassroots, and for listening to the masses’ speak out.”<sup>4</sup>*

This political activism showed itself as the schools became a hub for activist groups to form and to hold meetings. Amongst these groups was the VLR (Vive la Révolution!) which not only used its grounds for their meetings but also founded the left-wing magazine “Tout! Ce que nous voulons: TOUT!” that focused on urban struggles. The activism went even beyond architecture and set up two major political movements after 1968: the FHAR (Front Homosexuel d’Action Révolutionnaire) and the MLF (Mouvement de la Libération des Femmes). The former fought for the recognition and integration of homosexuals while the latter was a feminist movement that also published their first dossiers in the magazine “Tout!”. Furthermore the political involvement of the faculty was demonstrated at the so-called “wild course” (cours sauvage) on 18 November 1969. The “wild course” was used to protest against educational reforms planned by the Ministry of Culture, less than a year after the foundation of the UPs. For the manifestations, speeches were held in front of the Louvre in Paris. Amongst the speakers was the sociologist Bruno Queysanne who held a speech called “Capital in Construction and Public Works”. The students themselves presented several slogans, such as “Urbanism = Speculation”, “No construction teacher” and “3 deaths a day on construction sites”.<sup>5</sup>

At UPAN from 1971 to 1974, a radical pedagogical experiment took place. As the school needed a new building, the entire faculty worked for three years on proposals for functional distributions of space and program. For this project the group “Nouvelle École” was founded and acted as the Center for the Operational Study and Research in Architecture.<sup>6</sup> The final project was according to Jean-Louis Violeau:

*“Defined by metallic girders: the beams featured a geometry typical of the early 1970s, a framework with a 45° angulation, creating sections of 25 square metres—each intended for work groups of 25 students.”<sup>7</sup>*

The force of the project lies in the possibility of having radically different working atmospheres within a few steps. This functioning was in strong contrast with the enormous Beaux-Arts workshop that was commonly used previously. To go even further with the mentality of 68, the school was never inaugurated, as it was instead directly occupied by the students. The faculty understood how to use architecture as political activism in the public realm. Interestingly, the spirit is still present as an example of 2012 shows. Students built wooden shacks to support local “ZADists” (ZAD stands for Zone to defend) who occupied a large agricultural terrain to protest against the construction of an airport. In 2018, the French government announced that the plans for the airport will be shelved.<sup>8</sup>

The case of the UPs revealed the importance and influence of the teachers in schools and how they shape it. The example of the Unité Pédagogique d’Architecture de Nantes shows the political influence and the resulting use of architecture as a ve-

hicle for political activism. The example of the recent protest against the construction of an airport shows that the impact of the pedagogical experiments didn't stop in the 70s but can still be felt today.

<sup>1</sup> MANIAQUE BENTON, Mai 68: L'architecture Aussi!, 82.

<sup>2</sup> SILBERBERGER, Reimagining the Crit. In *Against and For Method*, 226.

<sup>3</sup> MANIAQUE BENTON, 82.

<sup>4</sup> VIOLEAU, Unité Pédagogique No. 6 Paris UP6 and Unité Pédagogique d'Architecture Nantes. In *Radical Pedagogies*.

<sup>5</sup> Ibid.

<sup>6</sup> Ibid.

<sup>7</sup> Ibid.

<sup>8</sup> <https://freedomnews.org.uk/2018/01/17/france-zad-declares-victory-as-airport-plan-dropped/>, accessed on 04.01.22



## I - UNITÉ PÉDAGOGIQUE D'ARCHITECTURE N°1 - LE D. U. A.

Le D.U.A. (vers un Département Universitaire d'Architecture dans le cadre d'une Faculté de l'Environnement) a été créé en août 68 par un groupe d'enseignants, d'étudiants et de praticiens qu'unissaient :

- Une attitude critique et pragmatique face aux problèmes de l'environnement
- Le souci de répondre aux besoins du plus grand nombre, dans une société de mutation, par une approche globale et notamment technologique
- Une idée commune du rôle de l'Architecte considéré comme élément particulier d'une équipe pluridisciplinaire qui comprend les différents représentants de la conception du cadre bâti
- Un point de vue commun sur la formation de cet intervenant, tant sur le plan du contenu que celui des méthodes pédagogiques fondées sur les motivations de chaque étudiant.

## I - SES OBJECTIFS

L'Unité Pédagogique n°1 - D.U.A. - a donc pour objectifs :

- Un enseignement de l'architecture développé et confronté à la pratique et à la recherche
- Une pratique conforme aux besoins de la société, l'architecture devant être considérée comme un service social
- Une recherche appliquée ayant pour objet d'intégrer les possibilités techniques et scientifiques dans le processus de la construction
- La formation d'un homme qui, en tant que citoyen et praticien, ait vis à vis de la société et de lui-même une attitude critique et créatrice
- La formation d'un homme qui s'intégrera dans un exercice professionnel renouvelé au sein d'équipes pluridisciplinaires.



## MULTIDISCIPLINARITY / TOWARDS MULTIDISCIPLINARY TEACHING AT UP1 IN PARIS

The uprising of the newly founded Unités Pédagogiques (UPs) that replaced the École Nationale Supérieure des Beaux-Arts (ENSBA) after the student protests of 1968 in France were directly confronted with the creation of new curricula and the inquiry of the teaching personnel. With some schools continuing with the already existing staff, others employed predominantly new faculty members and thus created a new educational programme from scratch with the objective to turn architecture into a legitimate university discipline based on knowledge to counter the prevalent discipline based on artistic arbitrariness.<sup>1</sup> To achieve this, fields outside of architecture, such as history, theory and criticism, sociology and psychology, gained increasingly more weight at architecture school and therefore transformed architectural design education into a multidisciplinary issue.

Even before the events of May 68 there were attempts at the École des Beaux-Arts to implement a prototype of multidisciplinary teaching and thus transform the current system. For example, Michel Marot, a patron at the ENSBA used to invite for his lectures not only teachers but also external speakers and even students. For his studio, a group of four teachers with complementary skills formed a collegial pedagogical unit. In spite of that, Michel Marot was still severely attached to the Beaux-Arts pedagogy, which led to his rejection by the students after the protests as a supporter of the old system.<sup>2</sup>

UP1 which was later renamed École d'architecture de Paris-Villemin until eventually becoming École nationale supérieure d'architecture de Paris-Val de Seine (ENSAPVS) after merging with three other UPs, is one of the great examples of how multidisciplinary teaching played an important role in the pedagogical experiments done after May 68. In comparison to the curriculum of the ENSBA which was not connected to the reality of production and not preparing the students to solve the problems of the future, the new multidisciplinary curriculum at UP1 wanted to implement an education that is linked to contemporary society and its possible transformation.<sup>3</sup> Jean-Louis Violeau stated in his book “Les Architectes et Mai 68”:

*“One works for a circle of intellectuals, a famous pianist or a rich landlord but never for “the largest number”, ignoring the question that a country like France, rebuilding itself in times of demographic growth, should answer.”<sup>4</sup>*

The newly founded curriculum included humanities, exact sciences, technical sciences, fine arts and architecture in order to accomplish the goal of UP1 to understand and integrate “the forces of production”, “the needs of architecture for the greatest number of people” and “scientific and technological problems”.<sup>5</sup> The heart of the education of an architect, the design studio, was also put together with a multidisciplinary team. These teams organized the semesters based on different subjects and with a clear methodology (e.g. from architectural to urban scale or from the sociological to the technical perspective). A clear example of this integration of multidisciplinaryity is Studio 2 at UP1, supervised by architect and researcher Claude Schnaidt. A team of sociologists, visual artists, engi-

neers and architects accompanied the students with the problems evolving in complexity from Bachelor to graduate level. The studio was organised in a small room with a central table around which weekly collective discussions with students and the multidisciplinary teaching team took place. The staff was adapted to the projectual approach and the progress of the student's work. The studio focused on the integration of the technical and constructive aspects into the field of architecture in the interest of redefining the discipline. Students were thus invited to analyse the existing, such as the "Grands Ensembles" and to interrogate construction economics, the industrialisation of buildings, the typology of housing and the project methodology. With this pedagogy, the discipline changed to a system that serves society. While the integration of engineers was rather simple, as construction was already present before in the curriculum, the involvement of the humanities was another case.<sup>6</sup> Stéphanie Dadour and Juliette Pommier write in their article about UPI:

*"Regarding the humanities, everything was up for experimentation. From the beginning, social studies seemed to be looking for a place and a role - even in terms of content - at UPI. Historians, sociologists, geographers and economists who became involved in UPs had to reconfigure and even (re)invent a culture of architecture."*<sup>7</sup>

This was illustrated by the different modes in which the humanities were being taught, ranging from courses, seminars and tutorials to case studies. This engagement eventually turned into the definition of dwelling as a new transdisciplinary research subject.

Up until 1984, which marked a rupture in its evolution, UP1 was offering one of the most compelling postgraduate research programmes as well as a compelling scientific journal (In *Ex-tenso*).<sup>8</sup> UP1 showed how the integration of teachers from other fields such as humanities created a multidisciplinary teaching team which helped with the evolution of architecture as a practice able to draw from the scientific issues and abilities to problematize other fields, eventually incorporating their reflections into a more complete discipline. To become an architect, one must first learn to think like an architect. After 1968, this became much more complex as the influence of the architect-teacher was now only one of the ingredients in the composite network of design pedagogy.

<sup>1</sup> DADOUR, POMMIER, *Multidisciplinarity A Brief History of UP1 (1968-1984)*. In *OASE 102 Schools & Teachers*, 23.

<sup>2</sup> MARANTZ, *Just before the Revolution Teaching Architecture at the École des Beaux-Arts (1962-1968)*. In *OASE 102 Schools & Teachers*, 21

<sup>3</sup> DADOUR, POMMIER, 23.

<sup>4</sup> VIOLEAU, *Les Architectes et Mai 68*, 33.

<sup>5</sup> UP1 BLUEPRINT, 11 October 1968, École d'Architecture Paris-Villemin Archives.

<sup>6</sup> DADOUR, POMMIER, 23.

<sup>7</sup> *Idem*, 27.

<sup>8</sup> *Idem*, 31.





## COLLECTIVE WORKING / RESEARCH THROUGH COLLECTIVE WORKING AT ETH IN ZURICH

With the students becoming more and more socially and politically conscious and starting to identify the contemporary struggles, they often demanded for a change in pedagogy concerning the mode of working. They knew that in order to effectuate change nationally or even globally, working collectively and collaboratively is essential. The demand to move beyond the authorial approach to production of architecture of traditional pedagogies was omnipresent at the time.

Early experiments were already made at the École des Beaux-Arts, from 1961 on, Robert Auzelle offered the “Séminaire et Atelier Tony Garnier”. In what today would be called a postgraduate diploma, architects with graduates from other disciplines, such as sociology, geography and engineering, worked collaboratively to do research in the field of urban design.<sup>1</sup>

A great example of how collaborative and collective working can successfully be implemented into a design studio can be seen with Aldo Rossi's studio at the ETH in Zürich starting in 1972. Rossi tried to break with conventional academic traditions that he disliked during his education at the Politecnico di Milano from 1950 to 1959. The idea behind his teaching was to develop a line of research together with the professor, assistants and students and by doing so detaching his pedagogy from classical academic hierarchies. For Rossi it was not only the goal to let the students work collectively but he saw in the design studio the opportunity to develop a research group which consisted of a collective body in the classroom consisting of the teachers and the students. Borrowing the term from Ernesto Nathan Rogers, Rossi saw in his teaching the chance of creating a school of *tendenza*. Aldo Rossi was one of Rogers' students and they also collaborated together for the main Italian architecture magazine at the time, *Casabella-Continuità*, from 1958 to 1964. Ernesto Nathan Rogers was the editor in chief of *Casabella-Continuità*.<sup>2</sup> Martino Tattara describes a school of *tendenza* in his essay about Aldo Rossi:

*“Rossi ascribed to a school of tendenza a clearly defined character based on the dialectic exchange between students and teachers towards the definition of a field of application and scientific research tools based on primarily formal parameters.”<sup>3</sup>*

The aim for Rossi was that the students together with the assistants and teachers would analyse the (historical) city, in this case Zurich, through a collective practice of research activities. The shift in Rossi's pedagogy away from the focus on the finished product and thus the quality of the design output to a more research based pedagogy was never a concern, as for



him teaching design was more about the scientific approach of the exercise. Moreover, the change to a pedagogy based on multidisciplinary bibliography, ranging from art, literature, cinema, philosophy to sociology, urban geography and politics, compared to a more traditional pedagogy of the 1950s was a radical change. But not only the bibliography was an important factor for Rossi, he also insisted on giving lectures about his early interests, methodological issues and on the work of a diverse set of architects, such as Perret, Loos and Behrens, but he also lectured his students about the architecture of the French Enlightenment, the idea of the socialist city or of German rationalism. With this pedagogical methodology, the canonical understanding of modern architecture was extended and complexified.

For his studio at the ETH in 1973, the students were asked to draw collectively a ground-floor plan of the city of Zurich in 1:1000. On this so-called Rossi plan, compared to the famous Nolli plan, all the city's open spaces are left white and thus lacking representation. The buildings are represented and drawn similarly, with their core architectural elements: walls, stairs, windows and columns. What is really interesting to look at is the division of labor in Rossi's studio. Half of the class's students had the task to draw the huge plan of Zurich, while the other half should come up with an architectural design proposal. And this is exactly where the pedagogical approach of Rossi becomes visible. For him the plan was a crucial project tool, not in proposing projects directly, but in designating a learning field in which the students could later on inscribe their work in the urban history of the city.<sup>4</sup> Rossi's attempt at a new form of pedagogy at the ETH was revolutionary, as Martino Tattara argues:

*“Influenced by the transformation in the organisation of the school following the students’ protests from 1963 and breaking with conventional academic hierarchies, Rossi’s dialectical vision of the classroom as an egalitarian and democratic collective was in line with the political spirit of the time. But while his activities could today be called “participatory”, they were fundamentally tied to the definition of a scientific approach to the discipline.”<sup>5</sup>*

<sup>1</sup> MARANTZ, Just before the Revolution Teaching Architecture at the École des Beaux-Arts (1962-1968). In OASE 102 Schools & Teachers, 19.

<sup>2</sup> TATTARA, Drawing Lessons from Aldo Rossi’s Pedagogical Project. In OASE 102 Schools & Teachers, 63.

<sup>3</sup> Ibid.

<sup>4</sup> Idem, 67-69.

<sup>5</sup> Idem, 69.





## HIERARCHY / OVERTHROWING HIERARCHICAL STRUCTURES IN FLORENCE

When comparing architectural education to other disciplines, there is one major difference that makes it truly unique, which is the design studio. The studio constitutes a space of research, teaching, learning, creating and contemplation defined by collective action. It is an environment in which close mentoring takes place between professor and student.<sup>1</sup> Joan Ockman explains in her book “Architecture School” how this relationship is different from other academic disciplines:

*“The intense interpersonal relationship between the student and instructor ... remains at the heart of a form of education that has revolved around the design studio since the Beaux-Arts epoch (and, at an earlier moment, around the close social and professional bonds between master and apprentice)”.*<sup>2</sup>

At the same time, this “Master and Apprentice” system was usually linked to a strong hierarchical structure where students needed to follow the advice of their teacher. So it comes as no surprise that the spirit of 1968 wanted to eradicate this toxic power relation. Already in 1963, Bruno Zevi wrote in an article that the three famous “Master and Apprentice” systems, the Bottega, the Beaux-Arts, and the Bauhaus, were outdated and not suitable anymore for architectural teaching. He identified two main problems. Firstly, he questioned if an elitist method of teaching, such as the Patron System, was still applicable when confronted with mass education. Secondly, Zevi saw the risk of simply copying the Master instead of becoming a critical thinker. This thought was very present in the ideas of Zevi at the time which promoted a deep understanding of history with his so-called “metodo storico”.<sup>3</sup> Already in 1957 he wrote:

*“The study of history creates a critical consciousness whose usefulness can be checked at the drawing table better than in the library.”<sup>4</sup>*

The latter problem raised by Zevi in 1957 is further theorised by Jan Silberberger in “Against and for Method” where he analyses teaching methods focused on individual expression based on tacit knowledge rather than promoting a comprehensible methodology:

*“On the other side, if “sheltered space” denotes an environment “protected from the pressure of accountability”, these spaces run the risk of creating toxic power structures. When professors adopt an understanding of architectural design essentially related to taste - “one of the cherished myths of modernity” - not only the process of designing but also the assessment of design pro-*

*posals is governed by subjective judgements and personal, tacit knowledge. This stance would lead architecture education to be simply a process of acculturation whereby students reproduce and imitate their teachers to become inaugurated. Teaching that promotes individual expression (instead of, for example, traceability and comprehensibility) and relies mainly on personal, tacit knowledge (instead of, for example, a coherent methodology) is thus prone to create a highly teacher-centred environment of extreme dependencies.”<sup>5</sup>*

When in 1968 student protests started to propagate around Europe this hierarchical power structure at university was one of the major points of action that students attacked. Especially in Italy where the organisation of universities was highly problematic. At the time, the Italian government funded higher education but all other decisions regarding the organisation of universities were more or less left to the professors.<sup>6</sup> Federico Mancini described in his essay “The Italian Student Movement” of 1968 the situation of the “ordinari”:

*“Chair-holding professors, or ordinari, are the real bosses in the Italian university fabric: they elect the rectors and the faculty chairmen, they co-opt other members into the guild, they manage the university funds, distributing them among themselves. It is not exaggeration to say that the universities are made for them and that they tend to regard their chairs as fiefdoms of which they are the liege lords.”<sup>7</sup>*

It is clear that the professors understood their employment as highly prestigious which led to the abuse of their power and the constitution of a careless power-crazy oligarchy in Italian higher education. As a result, the place and importance of the

students were completely secondary. According to Mancini:

*“In such a system, students are bound to be little more than tolerated guests, and I mean this in a strictly literal sense.”<sup>8</sup>*

When Italian universities started to get occupied by student movements, the University of Florence, and in particular its Faculty of Architecture, was one of the first ones after Turin to take a stand against the authoritarian system of Italian higher education. On January 23, 1968, the Faculty of Architecture of the Università degli Studi di Firenze was occupied by the student corpus which led to several quarrels with police. The students proceeded to constitute a General Assembly and determine their demands in a motion called “Motion A” presented on February 26. Motion A demanded the handover of complete power of the university to the General Assembly with the important specificity that every faculty member participating in the Assembly acted with the same rights as a student. The General Assembly aimed to eradicate the separation between teaching and research, as well as the abolishment of academic authoritarianism. Their objective was to make education a right for everybody and to advocate for a basic income so that every individual would have the possibility to attend university. Following the motion proposed by the Assembly, several exchanges with the faculty took place and resulted in a victory for the Assembly that accepted a document presented by the faculty on April 16, 1968. In this document the faculty stated their willingness to carry out any experimentation for the purpose of faculty reform. Moreover they accepted the forms of power proposed in a former motion. After 85 days of occupation, the students vacated the university on April 17, 1968. During this time the students not only determined their demands but



also created a building workshop and produced several installations that were placed in the historic city centre of Florence with surprise actions.<sup>9</sup> Among the producers of these creative performances to protest against the transformation of public space for private profit were several young collectives such as UFO and 9999. According to Germano Celant this moment marked the formation of the Radical Movement.<sup>10</sup>

There was a common denominator to these radical groups: Leonardo Savioli, one of the few professors that survived the student protests. Already before the revolts, Savioli searched for contemporary ways of education and proposed a solution with the course to design a Piper. A Piper was an entertainment club which revolutionised “going out” and the way we dance. Koenig describes Savioli’s Piper course as a project:

*“Amongst the few amusing and witty things, that do not anaesthetise the younger generation’s faculty to create.”<sup>11</sup>*

Next to the members of UFO and 9999, Savioli’s students included Alberto Breschi, founder of ZZiggurat, as well as Adolfo Natalini, founding member of Superstudio who acted as Savioli’s assistant since 1966.<sup>12</sup> It is interesting to see that during a time where students revolted against authoritarianism, it was still possible to have a mentor, such as Leonardo Savioli. This shows that having a mentor doesn’t necessarily mean that a hierarchical dependency between student and teacher must be present but rather that it is necessary to have competent people that can help students unfold their capacities for critical thinking and creating relevant work.<sup>13</sup> Natalini writes in a letter to Savioli in 1979 about the importance of having him as a mentor:

*“I believe that architecture exists as long as someone, like yourself, makes it a testimony. I have thought it many times while listening to your lessons, or watching the drawings you call projects, or the sculptures you call architectural model.”<sup>14</sup>*

- <sup>1</sup> SILBERBERGER, Reimagining the Crit. In *Against and for Method*, 224.
- <sup>2</sup> OCKMAN, *Architecture School: Three Centuries of Educating Architects in North America*, 29.
- <sup>3</sup> RICCHI, Istituto Universitario di Architettura di Venezia IUAV and Università di Roma. In *Radical Pedagogies*: <https://radical-pedagogies.com/search-cases/i11-istituto-universitario-architettura-venezia-iuav-universita-roma/>, accessed on 15.01.22
- <sup>4</sup> Ibid.
- <sup>5</sup> SILBERBERGER, 226.
- <sup>6</sup> MANCINI, ‘The Italian Student Movement’, 428.
- <sup>7</sup> Ibid.
- <sup>8</sup> Ibid.
- <sup>9</sup> MASCHIETTO, *Facoltà di Architettura di Firenze 85 Giorni di Occupazione*. In *Quindici*, no.10.
- <sup>10</sup> VANNUCCHI, Archizoom Associati, 9999, Gianni Pettena, Superstudio, UFO, and Ziggurat, Università degli Studi di Firenze, Facoltà di Architettura. In *Radical Pedagogies*: <https://radical-pedagogies.com/search-cases/i02-universita-studi-fiorenze-facolta-architettura/>, accessed on 15.01.22.
- <sup>11</sup> KOENIG, *Architettura in Toscana*, 3.
- <sup>12</sup> FALCO, Leonardo Savioli: Didactics and Projects for Space Involvement, 3.
- <sup>13</sup> Ibid.
- <sup>14</sup> ASF, Savioli, Carteggio, *Lettere a Leonardo Savioli*, 222, c.561.





# **PART II**

## **THE BOLOGNA PROCESS AND ITS IMPACT ON HIGHER EDUCATION IN EUROPE**



## INTRODUCTION //

### THE BOLOGNA PROCESS AND ITS IMPACT ON HIGHER EDUCATION IN EUROPE

Signed by the ministers of education of 29 countries at their meeting in Bologna in 1999, the Bologna Declaration (in full, Joint Declaration of the European Ministers of Education convened in Bologna on 19 June 1999) was an attempt to reform higher education in Europe. The six aims of the Bologna Process were to establish a system of easily comparable qualifications and a two-tier study system (Bachelor & Master), as well as the introduction of the ECTS credit-system, the promotion of mobility of students and staff and European cooperation on the quality assurance and evaluation and the promotion of the European dimension in the higher education system.<sup>1</sup> Today a total of 47 countries have signed the Bologna declaration.

When referring to “Bologna” today in the context of higher education in Europe, one is not only specifically talking about the Bologna Congress and the resulting reform, but much more about parallel and historically relevant processes. “Bologna” is thus a generic term for the academic and higher education policy changes at universities over the last three decades.<sup>2</sup>

Four major decisions in the landscape of higher education in Europe preceded the signature of the Bologna Declaration by the 29 countries. Starting in 1988 with the “Magna Charta Universitatum” that already treated the promotion of mobility, followed by the “Maastricht Treaty” in 1992 which introduced amongst other things the ECTS (European Credit Transfer and Accumulation System). In 1997 the participating countries met in Portugal for the Lisbon Recognition Convention that promoted the recognition of qualifications granted in one institution in another institution, as well as avoiding the harmonization of the institutions and instead promoted their subsidiarity. One year before the Bologna Process, in 1998, the “Sorbonne Declaration” was signed. It broke with the avoidance of harmonization and promoted Europeanization as a solution for national problems. Therefore the Bologna Declaration was not a sudden change in the landscape of higher education in Europe but rather the final step after several preceding treaties and declarations. The 47 participating countries aimed for a transformation of the EHEA (European Higher Education Area). In the case of the Bologna Reform, it must be taken into account that it is a so-called “soft law”. It is not, as often assumed, a European policy process, but an intergovernmental cooperation between states. This means that the member states are not obliged to sign the reform, but do so voluntarily.<sup>3</sup>



Alongside the Bologna reform, various transformations can be observed that have had a significant influence on science and higher education policy trends. For example, the economisation of the tertiary education sector, which is promoted by various market-based instruments such as the “New Public Management” (NPM).<sup>4</sup> The NPM was a global phenomenon of reforms and was especially relevant in the 1990s. It had four major goals, a stronger market and competition orientation, a target- and result-oriented management, decentralised basic structures and an instrumental and procedural orientation towards the enterprise model and a change from the internal orientation of public administrations towards customer or citizen orientation.<sup>5</sup> This process described the influence and affiliation of society and therefore also of higher education institutions to the capitalist economy.

Anna Hipp describes in her Doctoral Thesis “Wissensproduktion im Spannungsfeld zwischen Forschung und Praxis: Die Architekturausbildung im Zeitalter von Bologna” that these transformations resulted in two different directions taken. Firstly, there is an increase in research projects outside of universities, such as Think-Tanks or Research Institutes. Secondly, application-oriented disciplines underwent a change towards increasing academisation. The latter had thus a substantial impact on architectural education.<sup>6</sup> This change is well described by Christophe Van Gerrewey, David Peleman and Bart Decroos in their text, “Schools & Teachers - The Education of an Architect in Europe”:

*“In the context of delegitimation, universities and institutions of higher learning are called upon to create skills, and no longer ideals - so many doctors, so many teachers in a given discipline,*

*so many engineers, so many administrators, etc. The transmission of knowledge is no longer designed to train an elite capable of guiding the nation towards its emancipation, but to supply the system with players capable of acceptably fulfilling their roles at the pragmatic posts required by its institutions.”<sup>7</sup>*

The changes resulting from the Bologna Reform and the accompanying transformations in the European higher education area thus also affected the discipline of architecture. This refers to topics such as “employability”, quality assurance, mobility programmes, as well as a stronger connection between teaching and research and the understanding of a lifelong learning process. This resulted in the three most important changes for the studies of architecture. The two-stage system with Bachelor’s and Master’s degrees, the ECT system for comparable accounting, and the previously mentioned employability, i.e. the employability of the degrees.<sup>8</sup>

These changes in the European Higher Education Area and especially in the discipline of Architecture resulted in the transformation of the formation of the “good citizen” to an entrepreneurial model. The emphasis changed from erudition to production. Pier Vittorio Aureli described this change in an interview as follows:

*“This (the change of emphasis from erudition to doing) destroys for me what really made the university different from practice. University is this moment between childhood and adulthood and now adulthood is taking over the university.”<sup>9</sup>*

In the following four sub-chapters, different influences of the Bologna Declaration on architectural education are high-

lighted. Firstly, the impact of political changes, such as economisation are analysed, and as such so is the relation between architectural studies and the market economy. The second chapter treats the question on how Bologna influenced and restructured multidisciplinary teaching in a time of growing academisation and need for peer-reviewed research and the accompanying conflict with application-oriented disciplines such as architecture. The way in which students work together in a capitalistic order and how this cooperation is needed to perpetuate the current system is the topic of the third chapter. Lastly, the question of hierarchy and power structures at universities and how they have been altered since Bologna is investigated.

<sup>1</sup> <https://swisseducation.educa.ch/en/bologna-process>, accessed on 29.12.21.

<sup>2</sup> HIPP, Wissensproduktion im Spannungsfeld zwischen Forschung und Praxis: Die Architekturausbildung im Zeitalter von Bologna, 28.

<sup>3</sup> Idem, 29-30.

<sup>4</sup> Idem, 30.

<sup>5</sup> <https://wirtschaftslexikon.gabler.de/definition/new-public-management-npm-38664>, accessed on 31.12.21.

<sup>6</sup> HIPP, 27.

<sup>7</sup> VAN GERREWEY, PELEMAN, DECROSS, Schools & Teachers The Education of an Architect in Europe. In OASE 102 Schools & Teachers, 5.

<sup>8</sup> HIPP, 30-31.

<sup>9</sup> AURELI, Private Interview, 13.11.21.



## DESIGN & POLITICS //

### UNDERSTANDING THE RELATION BETWEEN EDUCATION AND THE MARKET ECONOMY

As already described in the previous chapter, the term “Bologna” is referring not only to the Bologna Declaration but more generally to tendencies and processes, such as the “New Public Management” that took place at the same time and that restructured and reformed the European Higher Education Area (EHEA). As we have seen, the introduction of these instruments led to an economisation of higher education that also had an impact on the discipline of architecture.<sup>1</sup> In his text “Labor and Architecture: Revisiting Cedric Price’s Potteries Thinkbelt” of 2011, Pier Vittorio Aureli described this relation between education and capitalism as follows:

*“During the 1990s it became clear that education is a fundamental economic factor in advanced capitalism. As such it could no longer be sustained as a publicly funded system, but was susceptible to being traded as a commodity.”<sup>2</sup>*

Historically the economisation of higher education was already theorized by Max Weber in 1921. Weber uses the term “Marktvergesellschaftung (Market socialisation)”, describing it as a trend in which society and thus also higher education gets aligned with the economic field. In the 21st century, the research continued to analyse these relations within the capitalistic system. Specifically in the context of higher education, Schultheis used the term of “Vermarktwirtschaftlichung des Universitätsstudiums (Marketization of University Studies), resulting finally in higher expectations of efficiency and effec-

tiveness.<sup>3</sup> Therefore it is no surprise that Pier Vittorio Aureli in his text about Cedric Price's Potteries Thinkbelt made the comparison between the factory and the university:

*"It is an oversimplification, but one can say that the university prefigured by the Bologna Process is a factory that produces immaterial commodities in the form of knowledge and that this production cannot be separated from its producers. When what is bought and sold is inseparable from its producers - in this case, students, teachers, and researchers - the object of production becomes not just the commodity itself, but the very subjectivity of the producers. In short, universities are now factories that produce subjectivity, which is addressed to the precarious student-workers: socially mobile, able to cope with all sorts of unstable conditions, and ready to jump from one knowledge domain to the other according to opportunities."*<sup>4</sup>

In order to stay relevant, secure their survival and legitimation, architecture departments and universities in general needed to adapt to these trends. This raises the question of what consequence arose from these transformations. To adapt to the economisation of society, architecture schools used different strategies that can be analysed. A strong example is the growing mediatization of studies through advertising. This can be seen with posters in the urban context or even with the self-representation of studies on the universities' websites.<sup>5</sup> Furthermore, the reputation of universities is less and less achieved solely through "Peers". This manifests itself in the fact that nowadays international rankings gained a lot of importance in the landscape of higher education. These changes are in line with Pier Vittorio Aureli's thoughts on education becoming a fundamental economic factor in advanced capital-

ism, a commodity understood as a tradeable product. This had not only a significant impact on the discipline itself but also on the life of the students. The shift from the idea of the mass university of the 1960s to the entrepreneurial system following Bologna also altered the accessibility to higher education. Pier Vittorio Aureli describes this phenomenon:

*“Since knowledge is now a marketable commodity, students have to pay to access it, and because the rise in tuition accentuates an entrepreneurial approach to education, students must be all the more farsighted, since their investment is significant.”*<sup>6</sup>

Before Bologna, students were liberated from the expectations and regulations of the market economy, whereas now they need to adapt and to live within these new terms.<sup>7</sup> For example, a change to another discipline at university represents a financial investment that is not neglectable. It can be seen that these changes apply for a grand majority of disciplines at universities and are not exclusively relevant for the department of architecture. The fact that architectural education historically has always had a strong relation to the profession of the architect helps to prevent a discussion about the immediate usefulness of education in regards to professional life.<sup>8</sup> Pier Vittorio Aureli describes the impact of Bologna on the departments that in society don't have a precise profile such as the one of the architect:

*“While departments and universities of applied research, especially in the fields of engineering and science, are well-funded because of their immediate usefulness in the market, the humanities suffer from lack of investment, and thus are seen as increasingly irrelevant in the face of market pressure.”*<sup>9</sup>

As a result, in architecture, it is less the education that is scrutinized but rather the profession itself.

In conclusion, it is clear that the departments of architecture and universities in general needed to adapt to these transformations that were decided in a “top-down” manner. Yet, we can see that this created new problems and questions about the importance of education, the place of the university in our society, its connection to the market economy as well as the price that students need to pay. Pier Vittorio Aureli gives a possible answer to some of these questions:

*“At a moment when capitalism seems unable to sustain not only its labor force but even itself, a radical revision of this productivist logic is necessary. In this respect, as Gorazd Kovacic has written, Arendt’s critique of labor (and of Marx) can provide a clue for a counterproposal that would, for instance, reduce labor, production, and consumption together for the sake of a better (and not just sustainable) development and liberation of human life.”<sup>10</sup>*

<sup>1</sup> HIPP, Wissensproduktion im Spannungsfeld zwischen Forschung und Praxis: Die Architekturausbildung im Zeitalter von Bologna, 31.

<sup>2</sup> AURELI, Labor & Architecture: Revisiting Cedric Price’s Potteries Thinkbelt. In Log No. 23, 114.

<sup>3</sup> HIPP, 31-32.

<sup>4</sup> AURELI, 114-116.

<sup>5</sup> HIPP, 32.

<sup>6</sup> AURELI, 116.

<sup>7</sup> Ibid.

<sup>8</sup> HIPP, 33.

<sup>9</sup> AURELI, 114.

<sup>10</sup> Idem, 118.







## MULTIDISCIPLINARITY // THE NEED FOR TRADITIONAL RESEARCH DISCIPLINES

The culture of knowledge in the discipline of architecture is radically different from other disciplines at universities. This shows itself for example with the evaluation of architectural practices. Compared to traditional research disciplines where the evaluation comes from peer-reviewed articles in renowned journals, such as Science, the architectural practice is evaluated through oral peer review during dissonant discussion.<sup>1</sup> This creates a tension as Bologna forces the discipline of architecture to adapt to traditional structures of research which are not aligned with the core values of the discipline. In a discussion with Peter Eisenman in 2013, Pier Vittorio Aureli shows his rather radical opinion about this change:

*“I refuse to write for peer-reviewed journals. I think it makes students and architects incapable of using history as a tool to invent a culture for architecture. Think of the monographs and research and all kinds of minutiae that the army of scholars and PhDs produces every year. They prevent the possibility of figures like Colin Rowe to use history as an operative tool. A figure like Colin Rowe could not exist today.”<sup>2</sup>*

Architecture departments are pushed to become more academic in order to be comparable to other disciplines. A major influence for this academisation is that more and more research is financed through third-party funding and therefore faculties are forced to adapt in order to survive. The question that needs to be asked is at what cost these changes take place. It could

thus be argued that adjusting to traditional research practices leads to a loss of architectural culture and a transformation of the research practice.<sup>3</sup> To illustrate how the discipline of architecture relies on other disciplines to publish peer-reviewed articles, one could look at the ranking of the most influential peer-reviewed journals linked to architecture. The two most influential journals are “Journal of Building Engineering” & “Journal of Building Performance Simulation”<sup>4</sup>, thus one can clearly see that these journals do not treat the core questions of the architectural practice as it is rather architecture that needs to adapt to other disciplines in order to create “relevant” content to be published.

As already stated, next to funding from chairs and university funding, third-party funding is one of the major options. This is problematic in architecture as for example the use of scientific methods from other disciplines, such as social sciences, is not inherent to architectural research. In order to apply for funding, it is therefore necessary to employ scientific collaborators who as a consequence take away a place for a person teaching architecture at the university. This transformation could be regarded as a necessary change in the discipline but the problem is that this change is not natural and was enforced through political trends following the Bologna Process. This change is not only visible in the research but also in the field of architectural teaching. With the adaptation to the new system, students get into contact with a transformed culture of knowledge. This can be seen through more written work that is asked from students that leads to more connections with other disciplines and their ways of working, thus creating an imposed multidisciplinary. This transformation does not touch the core of architectural education, the studio work, but rather focuses on side disci-

plines such as theory and history which ask for these written assignments.<sup>5</sup> This change can be seen as a chance to create a new architectural culture as well and doesn't imperatively have to be looked at as a negative transformation. It is however highly problematic as this transformation imposes a system of knowledge production based on traditional research disciplines on a system which has had its own production of knowledge for centuries. The need to squeeze them into a peer-reviewable format in order to get funding for research can be seen as problematic as it could lead to a loss of architectural knowledge culture but also as it delegitimizes the research published in non-scientific architectural journals around the world.

In this chapter, we have seen how architectural knowledge production differs from other more traditional research disciplines and how the academisation following the Bologna Process imposed multidisciplinary in architecture schools. This transformation should be investigated critically as it could lead to a loss of quality in the discipline of architecture as well as preventing the emergence of new creative forms of research that are not compatible with the standardization of knowledge production coming from Bologna. Furthermore it is highly problematic as a lot of these changes are enforced through economic incentives.

<sup>1</sup> HIPP, Wissensproduktion im Spannungsfeld zwischen Forschung und Praxis: Die Architekturausbildung im Zeitalter von Bologna, 195.

<sup>2</sup> AURELI, EISENMAN, A Project is a lifelong thing; if you see it, you will only see it at the end. In Log No. 28, 71.

<sup>3</sup> HIPP, 196.

<sup>4</sup> <https://www.scimagojr.com/journalrank.php?category=2216>, accessed on 13.01.22.

<sup>5</sup> HIPP, 197.



## COLLECTIVE WORKING // COOPERATION TO PERPETUATE THE ENTREPRENEURIAL SYSTEM

Architecture students have, compared to other disciplines, a very strong feeling of belongingness amongst themselves that can easily be perceived from the outside. They appear to be a homogenous group among themselves but appear to be completely heterogenous outwardly compared to students of other faculties. This strong feeling of community comes as no surprise as the design process is fundamentally collective. Dana Cuff describes the process of a design project as follows in her book “Architecture: The Story of Practice”:

*“The fundamental point is a simple one: the design of our built environment emerges from collective action. Typically design is believed to be an individual’s creative effort, conjuring up images of late nights at the drawing board. Indeed, this is a significant part of making buildings, but it is not sufficient to explain the design process. Those who argue that the individual architect determines what the building will be, and all such issues of practice, clients and collective action concern how the design will be implemented, are simply separating content from method, form from means, while overlooking the integral balance necessarily struck between them.”<sup>1</sup>*

Cuff is writing about the design of a built project, but the fundamental point still remains the same for a university project. It is now the fellow students, assistants and teachers and the given task, which can include a fictitious client, which accompanies the student-architect. Furthermore, it is usual for students to work in pairs on a project. The fact of having a studio space (this is not always the case) also separates architecture students from other students as they spend most of their time together working on their design proposal.<sup>2</sup> They distinguish themselves almost like a football team which separates them from students of other faculties writes Cuff who describes them as follows:

*“Arkies (...) stay up late, are never home, spend all their time in studio, and belong to a clique of other architecture students.”<sup>3</sup>*

Yet, on the other hand, inside this seemingly homogenous group, each student searches for their individuality. Bologna shifted higher education from the model of the mass university and the formation of the “good citizen” to the entrepreneurial model. With this entrepreneurial model being strongly linked to the capitalist society, one can analyse this individualistic behaviour within the collective spirit of architecture students.<sup>4</sup> Pier Vittorio Aureli states in an interview:

*“Now what I see is this tendency for example at the AA, even first year students have to immediately have a thesis, they need to have their opinion about their work which is ok and fine. I don’t want to sound like a conservative teacher but I think this is also a problem because you don’t have this time to elaborate, to study, this time to absorb so there is an urge to have your own*



*position. Sometimes students formulate their opinion or their position without having absorbed knowledge first.”<sup>5</sup>*

Pier Vittorio Aureli raises an interesting point on the urgency to formulate a standpoint before even having had the time to ingest the knowledge transmitted. A possible explanation for this phenomenon is entrepreneurialism. Entrepreneurs have to be quick, they need to always launch their ideas without having the time to reflect on their ideas first. This aspect is not limited just to students. When looking at faculties in general, researchers, professors and assistants are constantly pushed to present their findings and to make sure that it is innovative and different from what others are doing.<sup>6</sup> Aureli summarizes this in a short but powerful phrase:

*“I think that this model in the universities is a disaster because the university becomes this kind of social condenser of entrepreneurial promotions without substance.”<sup>7</sup>*

Even with this entrepreneurial model and the strong individuation process, cooperation among students stays crucial. The capitalistic system is in a strange way a symbiosis of constant cooperation and individual self-promotion. It cannot be perpetuated without the interplay of these two contradictory strategies. Richard Sennett describes in his book “Together” the relation between cooperation and competition:

*“Anyone who has played a team sport, cut a business deal or raised a brood of children knows that mutual cooperation and competition can combine. The undertow of competition is aggression and anger, sentiments which are hard-wired into human beings. Rehearsals, conversations, coalitions, communities*

*or workshops can countervail against this destructive pull, because the impulse of goodwill is also imprinted in our genes. As social animals, we have to work out through experience how to strike a balance.”<sup>8</sup>*

This cooperation manifests itself in the collective work within the studio space but also with the now accessible mobility programs such as Erasmus. Universities thus profit from this cooperation alongside the entrepreneurialism of the students as it increases productivity like any other corporation in the world. This highlights again the role of universities after Bologna as the modern-day factories.

While there are without a doubt negative consequences on the collectiveness amongst students coming from the Bologna Process, one major positive point that is extremely important is the creation of the Erasmus program. Erasmus, the mobility program of the Bologna Process, lets students take an exchange semester or year at another university. This not only lets them meet new students from other European countries but also lets them compare curricula and the infrastructure of foreign universities to their own. The biggest change the mobility program aims for is to create European citizens. Even though this last point is discussed a lot, as some say only students that already have this European feeling choose to study abroad, it is still one of the most important topics related to collective work and to the building of a collective understanding of higher education in Europe.

This chapter showed how our built environment comes from collective action as well as how architecture students distinguish themselves from other students in other disciplines and

seem to be a homogenous group from the outside. Yet, inside this group they each develop their individuality which demarcates them from one another. This creates a problem as it can be dangerous to promote a behaviour of production without absorption of knowledge first. Finally, this shows us again how the capitalist system infiltrated higher education and how the interplay of individuation and cooperation is needed to preserve the current *modus operandi*.

<sup>1</sup> CUFF, *Architecture: The Story of Practice*, 13.

<sup>2</sup> HIPP, *Wissensproduktion im Spannungsfeld zwischen Forschung und Praxis: Die Architekturausbildung im Zeitalter von Bologna*, 153.

<sup>3</sup> CUFF, 118.

<sup>4</sup> AURELI, Private Interview, 13.11.21.

<sup>5</sup> *Ibid.*

<sup>6</sup> *Ibid.*

<sup>7</sup> *Ibid.*

<sup>8</sup> SENNET, *Together: The Rituals, Pleasures and Politics of Cooperation*, 65.



## HIERARCHY //

### THE SHIFT OF HIERARCHICAL STRUCTURES AT UNIVERSITIES

Another important transformation in higher education following Bologna is the growing complexity of the administrative apparatus at universities. According to Hipp, the reason for this increasing bureaucratization lies in the trends of specialization and professionalization in architectural education at universities.<sup>1</sup> These changes are viewed positively by some, while others question them critically and identify problems of significant importance. In her thesis, Hipp interviewed several people working in architecture departments at universities in Switzerland. One of the approving opinions about the growing bureaucratization comes from the head of a department of architecture:

*“My experience shows that education has become much more specialised and professionalised in recent years. We consider this (administrative) restructuring as an added value, as there is now a better and clearer division of tasks, which leads to more professional competence.”<sup>2</sup>*

The specialization and professionalization of architectural education are here clearly understood as a benefit by this head of the department. On the other hand, a lot of critical voices have been raised against the changes that Bologna brought about. One of the biggest issues with the Bologna Decree in relation to architectural education is the huge administrative effort to adapt the curriculum to the new two cycle system and translate the existing courses into the ECTS-system. A lot of

critics argue that Bologna had no real impact on the content but created a lot of expenses in building a big administrative apparatus.<sup>3</sup>

A critical point of this transformation is the change of power structures and hierarchy at architecture schools. The revolts of May 68 challenged the authority of teaching, the teacher and the elitist nature of education. The growing administration coming from the Bologna declaration makes this question about authority of 68 redundant. It is no more the authority of teachers that should be questioned but rather the growing power of the administrative apparatus at schools. The more universities become complex constructs, the more managerial they need to be, making it necessary to have heavy administration capable of running the schools. Yet, this leads to the undermining of the hierarchical relationship between student and professor.

As a result, this leads to a precarious situation for many teachers and staff at universities. Schools are now run by the administration and the authority of the teacher gradually erodes completely. The problem with this transformation is that it does not only affect the intellectual authority but also puts staff members in economically precarious situations. In a private interview, Pier Vittorio Aureli states:

*“This, of course, has consequences not only on our intellectual authority which is gone but also in terms of economic situation, the idea of precarity. There are very few people at the school with full professorship, but a lot of tenure track, researchers, etc. These are people in a more precarious and fragile position.”<sup>4</sup>*

This precarious situation of academics is a universal problem as a study conducted by Clark (2015) shows. The study, based on data from academics associated with ten European teacher unions, states that 48% of the subjects do not have permanent contracts. The situation becomes even more critical when looking at the fact that the majority of these academics are employed full time. This problem is illustrated in many ways. For example, a study from the Netherlands shows that only around 20% of postdocs get an appointment as assistant professor.<sup>5</sup>

In conclusion, the Bologna declaration and the accompanying transformations, such as economisation lead to a growing administrative apparatus. For the discipline of architecture, the expenses that Bologna created are to be critically looked at as it didn't affect the content of the studies but mainly changed the organisation of the curriculum with the two-cycle system of Bachelor's and Master's degree as well as the ECTS-system. As a result, the question of hierarchy gradually shifted from the relation between teacher and student to the relation between administration and teacher or staff. This leads to the creation of precarious situations for staff members and students within the university.

<sup>1</sup> HIPP, Wissensproduktion im Spannungsfeld zwischen Forschung und Praxis: Die Architekturausbildung im Zeitalter von Bologna, 186.

<sup>2</sup> Ibid.

<sup>3</sup> Idem, 187.

<sup>4</sup> AURELI, Private Interview, 13.11.21.

<sup>5</sup> IDDENG, NORGARD, Generation Precarious "Exploring the Relationship between Working Conditions for Early-Career Researchers and the Quality of Teaching and Research", 5.





# **PART III**

## **CURRENT EDUCATIONAL SITUATION AT EPFL**



## INTRODUCTION ///

### CURRENT EDUCATIONAL SITUATION AT EPFL

Inspired by the École Central de Paris, the École Spéciale de Lausanne situated in the city of Lausanne was founded in 1853. Architecture was one of the first disciplines taught alongside chemistry, mathematics, drawing and civil engineering. Later renamed EPUL (École Polytechnique de l'Université de Lausanne), it counted 45 professors and more than 500 students after a hundred years of existence. On October 9, 1968, the national council of Switzerland adopted the “Law on Federal Institutes of Technology” and on January 1, 1969, the École Polytechnique Fédérale de Lausanne (EPFL) was founded. The goal was to reunite all the disciplines on a single campus located in Ecublens-Dorigny. This transfer should last for more than 25 years.<sup>1</sup> Being a global phenomenon of the 1960s, the decision to move higher education out of the cities happened for two reasons. The first one was that more and more people started to study at universities and thus capacities in the city centres were quickly reached. The second reason was more political and had to do with students becoming increasingly politically conscious with the most radical consequence being the revolts of May 1968.<sup>2</sup> Christophe Van Gerrewey writes about the ambiguity of the latter reason in his book “Higher Knowledge”:

*“Whether the decision to transport these potential troublemakers was prompted by these uprisings, or whether the movement itself was a reaction to the relocation, is not easy to say. There is an anecdote about the French philosopher Henri Lefebvre, who was a professor at Nanterre University, which was built in the 1960s on the outskirts of Paris and which was the birthplace of the events of ‘68. When he was asked to explain why these revolts started in Nanterre, Lefebvre invited the interviewer to have a look at the campus from the window of his office. Who would not revolt if you had to study in such a terrible environment?”*<sup>3</sup>

The relocation of the university was not well received by the students as they wanted to stay connected to the city. Architecture students, who were the last ones to be transferred to Ecublens in 2001, were especially concerned about the move. For them, being in the city meant more than just being connected to the urban life, architecture needed to stay as the city is a crucial point for their studies. Laure Kochnitzky Palluel shares her memories on this moment in an interview with last year’s graduates:

*“It was also the time when the architecture department was transferred to Ecublens, after years of fighting to stay in the city and refusing to move from the Eglise-Anglaise. It was one of the first visits we had as young students at the EPFL, in 1979, when two representatives of the ‘big ones’, graduates, came to instruct us that we should stand firm and refuse the transfer to Ecublens, because the territory of the architect is the city.”*<sup>4</sup>

We see here that architecture students were already playing active roles in questioning the university’s strategies and

trying to organise themselves against top-down measures as early as the official founding of EPFL. As it became clear in the last chapter, the Bologna Process tied higher education drastically to the market economy. This can be seen as well at EPFL, when looking at their online presentation of architecture. The described career prospects clearly draw an image of what an architect is according to the institution:

*“Whether working independently or employed in a studio, architects are all called upon to manage a wide range of tasks, from the implementation of ideas using drawing and model building, through the overseeing of building sites to the coordination of the various building trades.”<sup>5</sup>*

The aforementioned shift from the aim of the formation of the ‘good citizen’ to the entrepreneur becomes clearly visible. Architectural studies at EPFL adapted to the goals of the Bologna Reform and implemented a three-year Bachelor’s program followed by a one-year mandatory internship and finally a two-year Master’s program.

The following four chapters interrogate different aspects of the current educational situation at EPFL. Starting with how student activism manifests itself at EPFL, especially in the department of architecture. It investigates what topics are relevant for students today as well as the double-sided aspect of being part of this institution. The second subchapter analyses two examples of multidisciplinary working at EPFL, the first one being “Design Together”, an interdisciplinary project between the departments of Architecture, Civil Engineering and Environmental Engineering and the second one being Superstudio, a design studio taught in the last year of the curriculum.

Collective working is the topic of the third chapter and looks again at the case of Superstudio and compares it with the design studio ALICE which takes place in the first year of the architecture curriculum. The last chapter looks at the influence of the Bologna Process on the hierarchical structure at EPFL and illustrates it with the recent example of the opening of a professorship position in History and Theory of Architecture and the following fight for the halt of the hiring process by professors, assistants as well as students.

<sup>1</sup> <https://www.epfl.ch/about/overview/history-of-epfl/>, accessed on 09.01.22.

<sup>2</sup> VAN GERREWEY, Higher Knowledge, 15.

<sup>3</sup> Ibid.

<sup>4</sup> KOCHNITZKY PALLUEL, MAP21, 42.

<sup>5</sup> <https://www.epfl.ch/education/bachelor/programs/architecture/> accessed on 09.01.22.







## DESIGN & POLITICS ///

### STUDENT ACTIVISM AT EPFL

Compared to countries such as France or Italy, Switzerland doesn't have a strong tradition in striking or civil disobedience in general. Hansjörg Schmid, a spokesperson for the Swiss Employees Association (Angestellte Schweiz) explains this phenomenon of Swiss culture which handles disputes rather through discussion. This is not the case for domestic conflicts, but also internationally as Switzerland often works as a mediator to help conflicting countries find a solution.<sup>1</sup> He continues to link this to the Swiss political system:

*“This tradition is anchored in our society and can also be seen in Swiss democracy. People can voice their opinions and change things through referendums, which also reduces conflict.”<sup>2</sup>*

In the last few years, younger people in particular started to organise school strikes and protest for several causes, starting with the “Fridays for Future” movement, to “Black Lives Matter” and the #MeToo movement or the “Women’s strike” in 2019. These movements aim for more justice, equal rights and a better management of the climate crisis. They materialise the big problems our generation is facing.

It didn’t take long for EPFL to react. However, just as it was the case for the recent movements, it wasn’t the institution that took the lead but rather the students. A good example of this is the creation of the Instagram account called “PayeTonEPFL” denouncing harassment, racism, sexism and homophobic behaviour of professors or students against their fellow students in or around the workplace at EPFL.

Concerning the Faculty of Architecture at EPFL, two examples can be analysed regarding student activism. Firstly, TNT (Commission for a Transition to a new Work Culture), a student group that tries to improve the architectural culture of the “charrette”, the traditional week before the hand-in of the design project, as well as the critique. And secondly the Drag-Lab, a newly formed student association that brings to light feminist approaches in architecture. The culture of the “charrette” is often perceived as the hardest week of the semester. From the first day on, older students tell the students of the first years stories about what they will have to endure. Pauline Bluteau writes in her article about the “charrete”:

*“It is exhausting, trivialised, unhealthy, harmful, dangerous... There is no shortage of vocabulary for architecture students to describe this culture of “charrette”. A tradition that considers*

*that working to exhaustion is an integral part of these studies-passion, while it continues to take its toll.”<sup>3</sup>*

As we have seen in a previous chapter, architecture students search for their proper identity inside the community, and this often results in unhealthy competition between students. This effect could be one of the explanations for why the charrette is still around. Students are proud to have worked more than others and are proud to be passionate about their work. On the other side, there are also professors who still encourage this behaviour. A possible approach to find a solution could be to look at the design critique following the charrette. If students were to fear less the crits, it is possible they would not force so much work upon themselves, which as it is now, threatens their mental and physical health. Jan Silberberger describes the atmosphere of the final crits as follows:

*“Not only are they often reduced to static instances of a one-way knowledge transfer, these public reviews are also typically governed by a ‘climate of fear, defensiveness, anxiety, and stress’, so much so that from the students’ perspective the crit is probably the most gruelling and potentially humiliating experience of their education.”<sup>4</sup>*

Thus, it becomes clear that the critiques and the charrette need to be rethought. Next to TNT, another interesting student association was founded in 2021, the Draglab. The Draglab describes themselves as follows:

*“People studying, teaching or working at EPFL promoting parity and diversity in the architecture school through readings and discussions.”<sup>4</sup>*

During the lockdown the Drag Lab periodically organised Book Clubs between students, alumni and researchers, described as follows:

*“The DRAG lab book club is a format for horizontal discussions open to all. It aims to provide a framework for joint reflection and sharing of questions about architecture, its practice and teaching.”*<sup>6</sup>

While the first series of Book Clubs, which discussed books from Silvia Fedirici, Iñaki Ábalos and Beatriz Preciado, amongst others, had to be held online due to the coronavirus pandemic, the recent Drag Talks could be held live at EPFL. To reach the students, they use social media as well as media formats that are currently en vogue, such as podcasts. The Drag Lab considers the constitution of a corpus of references as well as the proposal of places of exchange in collaboration with institutional structures as a militant act. For them, changing references and changing the status quo is fundamentally correlated. They aim for a voluntary militant curriculum but as well acknowledge the systematic problem of non-paid student work, as it should be the task of the faculty to rethink the curriculum constantly. The Drag Lab seeks to change the curriculum in order to change architectural practice. Moreover, they also petition for this task to become the responsibility of the university instead of being unremunerated work as it is the case now. The Drag Lab not only covers systematically invisibilized topics in architecture but also tries to reorganise their physical meetings spatially in order to create a horizontal structure of discussion where everybody can join in at any moment. The Drag Lab reorganises the spaces they use, with elements one would normally not expect to find at an architectural round ta-

ble. Instead of chairs, they propose bean bags to sit on while the light is dimmed to create a cozy atmosphere. The impact of the Drag Lab is noticeable as the faculty accepted to teach a UE (teaching unit) treating similar questions.

Similarly to ASAR, the official Architecture Student Association of EPFL, the Drag Lab quickly became ‘institutionalised’ by the structural apparatus, which clearly has its advantages, but also hinders on the freedom of the association. This phenomenon is usual for student associations at EPFL, as Laure Kochnitzky Palluel, long-time ‘adjoindre de la section d’Architecture ENAC-EPFL, states in a recent interview:

*“The student associations are very closely linked to the supervisory and teaching authorities, they have a difficulty in maintaining their autonomy and do not necessarily seek it either, preferring to “enter the organigramme” and be involved in certain decisions. In my opinion, this is a double-edged position, which proved to be successful during the pandemic, in terms of making certain demands heard in relation to this extraordinary situation, but which is sometimes ambiguous and counter-productive, not always allowing the voice of students to be expressed outside the structural apparatus.”<sup>7</sup>*

We can see that student activism is still an important factor to give visibility to certain topics as well as to change things that were overlooked by previous generations. Yet, activism has also changed with the impact of social media which takes on a significant role in spreading information and in the organisation of events. The faculty of architecture at EPFL has seen two student groups emerge in the last year to discuss and highlight issues that concern architectural education and the future

of the discipline. This shows that the university needs to take into account the struggles of the students. Luckily, at EPFL the faculty is open for dialogue to improve the situation, yet one should not forget that student activism can be seen as unpaid work. It can also be exploited by the university, especially when the associations are ‘institutionalised’ as it has been the case for almost all the associations at EPFL.

<sup>1</sup> [https://www.swissinfo.ch/ger/arbeitsfrieden\\_warum-schweizer-arbeitnehmende-kaum-streiken/43038320](https://www.swissinfo.ch/ger/arbeitsfrieden_warum-schweizer-arbeitnehmende-kaum-streiken/43038320), accessed on 10.01.22.

<sup>2</sup> Ibid.

<sup>3</sup> <https://www.letudiant.fr/etudes/ecole-art/la-culture-de-la-charrette-une-tradition-qui-continue-de-faire-des-ravages-chez-les-etudiants-en-architecture.html>, accessed on 11.01.22.

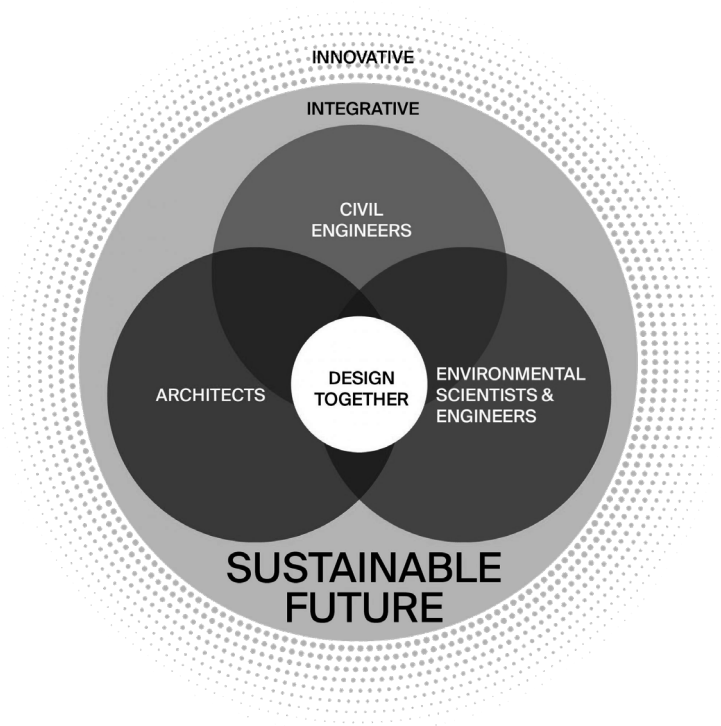
<sup>4</sup> SILBERBERGER, Reimagining the Crit. In *Against and for Method*, 226.

<sup>5</sup> <https://www.instagram.com/drag.lab/?hl=en>, accessed on 11.01.22.

<sup>6</sup> <https://www.espazium.ch/fr/actualites/drag-lab-book-club-01-drag-space>, accessed on 11.01.22.

<sup>7</sup> KOCHNITZKY PALLUEL, *MAP21*, 45.







# MULTIDISCIPLINARITY ///

## DIFFERENT MULTIDISCIPLINARY

### PEDAGOGIES AT EPFL

This chapter analyses the multidisciplinary approach of education at the École Polytechnique Fédérale de Lausanne (EPFL). We will take a look at two examples of different scales. Firstly, the interdisciplinary teaching program “Design Together” that tries to link the school of architecture with the school of civil engineering and environmental engineering (ENAC). Secondly, at the scale of a design studio, the multidisciplinary approach of “Superstudio” led by Professor Roberto Gargiani which forms the last design project before the students work on their master’s project.

The aim of the teaching program “Design Together” is to design in a multidisciplinary team, consisting of students from architecture, civil engineering and environmental engineering. The objective of the program is for the students to become aware of their responsibilities while looking for solutions for a sustainable future.<sup>1</sup> “Design Together” is presented as follows on the website of EPFL:



*“As the core element of the School of Architecture, Civil and Environmental Engineering (ENAC), the interdisciplinary teaching program Design Together enables the next generation of engineers and architects to integrate disciplinary knowledge to tackle complex challenges in a changing world.”<sup>2</sup>*

It is thus clear that the goal of the program is to adapt to our changing environment and to propose solutions for the problems we face today. It is important that these problems are discussed during our studies and that students understand their role in solving the associated questions. Yet, the question should be asked, if the measures taken have a real impact on the understanding of the necessity of the topics treated by the student body. To investigate this question, one can look at the description of the allocation of time for this program:

*“The interdisciplinary program comprises different teaching formats throughout the Bachelor (compulsory) and Master (optional) cycle: ENAC week (4th semester Bachelor), ENAC Teaching unit (6th semester Bachelor), and ENAC Semester Projects (1st and 2nd year Master). For each format, students can choose from a wide range of topics (e.g. reuse of construction materials, construction of refugee camps, design of open areas in cities) offered by multidisciplinary teams of ENAC teachers.”<sup>3</sup>*

The first thing to notice is that the program is only compulsory during the Bachelor and becomes optional for the two remaining years of the Master. Thus, this suggests that the program figures more as an introduction to interdisciplinary work and the related topics than to the formation of experts in the interdisciplinary field. Yet, the questions treated, such as climate change, are not optional for our society, they are a reality

and we as architects need to understand our role in the complex functioning of the building industry. Therefore, the question that should be asked is, if a one-week introduction during the second year and a semester project during the third year is enough to introduce these crucial topics or if there should be a bigger allocation of time for the interdisciplinary work surrounding current real-world issues. During an interview with Pier Vittorio Aureli, he stated:

*“We also are constantly bombarded with these questions like climate change and so on. It doesn’t make sense that in two days you’re supposed to have an answer to climate change. It takes years and years of studies to arrive at some conclusion about these big questions.”<sup>4</sup>*

This statement reinforces the question asked before. The multidisciplinary approach should be continued but a restructuring of its place and importance in the curriculum should be rethought. Another point that came up after discussing with several students. Usually the courses of the ENAC program “Design Together” are considered to be courses where you can get ECTS credits easily without having to work too much. This is linked to an important impact of Bologna on the curriculum. The European Credit Transfer and Accumulation System (ECTS) generated what some students would call “Credit Hunters” which implements that students take certain courses as they are perceived as easily obtainable credits. This phenomenon can be seen with the “Design Together” program of ENAC. Because the problems raised during the program “Design Together” cannot be effectively studied in such a short period of time, the program has become in part subject to this phenomenon. As a result, the program is somewhat superfi-

cial, and the multidisciplinary teamwork isn't as successful as it could be because of the lack of involvement and interest of the students.

The second multidisciplinary approach investigated at EPFL is the design studio called “Superstudio”, a reference to the Italian architecture collective founded in 1966 in Florence. On the website of the studio, the interdisciplinary approach is described as follows:

*“To develop the interdisciplinary and cultural premises of the project, the course is structured around a series of lectures and discussions with well-known architects and some of the greatest specialists in fields such as civil and structural engineering, technical installations, energy systems, territorial networks and sociology. Thanks to the integration of this multitude of knowledge, the students will be able to develop the theoretical and practical foundations necessary to define the cultural trajectory of architecture in the 21st century.”<sup>5</sup>*

The approach taken shows that it is in fact an indirect multidisciplinary studio, as the influence comes from different experts in different fields, such as civil engineering, energy systems or sociology, but the teaching team consists of architects, compared to for example the approach of studio 2 at UPI, where the teaching team consisted of multidisciplinary professionals. The approach taken in the Superstudio of 2021 appears rather interesting as students were free to choose the topic of their project as long as it fit into the projects: “Metrhotel Charles” and “Forum Naturae Artificialis”.<sup>6</sup> The approach taken by Roberto Gargiani and his team could be interpreted as problem-framing. Jan Silberberger describes this methodology

in the book “Against and for Method”:

*“The first enters the design process via problem-framing, focusing on interpreting the problem conditions and thereby predisposing a solution space and assessment criteria. This approach is typically chosen in experimental studios.”<sup>7</sup>*

This methodology differs from others, such as problem-solving, where there is generally a clear problem and students need to find a design solution directly or analyse existing solutions to create new ones. Letting the students approach the project via problem-framing gives them the necessary space to reflect on what they consider important topics that should and could be resolved through architectural proposals. Thanks to this approach, the results varied a lot and were all interesting as they tackled contemporary problems such as the critique of capitalist consumption, the question of the image of the body in society, or the rethinking of architectural critique among others.

<sup>1</sup> <https://www.epfl.ch/schools/enac/education/fr/projeter-ensemble-fr/semaine-enac/>, accessed on 11.01.22

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

<sup>4</sup> AURELI, Private Interview, 13.11.21.

<sup>5</sup> <https://libre-acces.com/info-en/>, accessed on 11.01.22.

<sup>6</sup> The Metrhôtel Charles and the Forum Naturae Artificialis. The first scenario will take up the metropolitan hotel with its historical spatial and social organisation in order to explore different forms of living together. The Forum should be conceived as a park or garden, or a composition of collective buildings and monuments, on the scale of the city. In order to propose an alternative to the existing social order and capitalism, both scenarios will take into account and reinterpret the theories of Community and Multitude. translated by Gilles Gasser

<sup>7</sup> SILBERBERGER, Reimagining the Crit. In Against and for Method. 230.



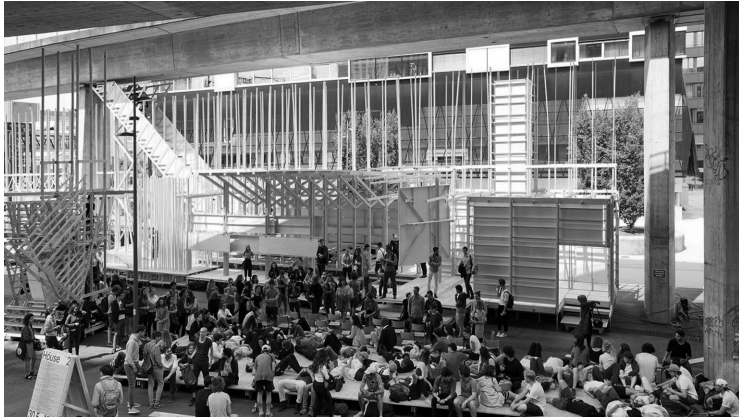




## COLLECTIVE WORKING ///

### FIRST AND LAST-YEAR DESIGN PROJECTS AT EPFL

There are twenty different design studios at the faculty of architecture at EPFL. From 2021 on, the studios of the third year of Bachelor's and first year of Master's are mixed together to create the so-called "vertical studios". Different approaches are chosen for the arrangement of groups of students from different years. Certain professors make it a mandatory organisation to mix Master students with Bachelor students while others let the students decide how they form their groups. The latter solution gives the students more liberty, as it is a crucial factor with whom one works together, yet this often leads to studios where only a marginal group mixes between the years. This applies to almost all of the studios as the usual case is that students have to form groups between two or three students. Yet, there are two major exceptions at EPFL, which are the first and the last year design studios where only one studio is proposed each year.



The first-year design course at EPFL, ALICE, is taking place as a collective studio of around 150 students divided into eleven ‘substudios’ each supervised by a studio director. While the first semester deals with the introduction of acquisition of research and production tools in architecture, such as an understanding of architectural drawings and building of models, the second semester focuses on a collective project at the scale of 1:1.<sup>1</sup> Each year the final project consists of a wooden installation imagined, drawn and built collectively by the students. In 2017, the project was called ‘HOUSE’ 2 and was erected in Zurich right in front of the ZHdK (Zürcher Hochschule der Künste) and stayed for a month open to the public. The project is a collaborative project between EPFL, that provided the project, and ZHdK, which organised guided tours, several artistic performances as well as sound installations. As the project consists

of several architectural contributions from the different ‘studios’, students learn to collaborate with colliding ideas and therefore the project develops into spatial negotiations that need to be resolved by them. After ‘HOUSE 2’ in Zurich followed a project in Brussels in the KANAL - Centre Pompidou, a project next to Jean Prouvé’s Buvette in Evian-Les-Bains and several projects in the Lemman Region around Geneva. Being the first design studio, the collective approach not only allows the students to work together on a built project for the first time, but also acts as a catalysator to create social bonds amongst all of the first-year students.

While there are exceptions, students normally work in pairs or groups of three for the rest of their studies until the last year of their studies, where the whole year again is organised in a single design studio. Already introduced in the last chapter, Superstudio is a design course based on research conducted through architectural design. In the program of the studio, it is described as follows:

*“Superstudio is the platform for outlining a vision of architecture which, in order to be an effective clear idea, must be let free to manifest itself in forms taken to excess. The aim of Superstudio is to create the premises of an architecture for the present state of life conditions, which find their foundations in the ultimate achievements of science.”<sup>2</sup>*

Compared to ALICE where the final product is a collective project of around 150 students, Superstudio lets the student organise in groups of four to eight students to constitute their Collective. This gives them the freedom to bring together common cultural interests as well as to think about their respective

strengths and weaknesses and how to profit from each other. According to the programme of Superstudio:

*“This creates the premises to define and clarify what, for each collective, architecture is in the 21st century. How exchanges happen among the members of a Collective is the first creative step for the collective action which will have to guide their outcome and designs for Superstudio.”<sup>3</sup>*

Being the penultimate semester of their studies, the semester is shared with the Enoncé Théorique, which is usually written alone. Being of similar theoretical intensity, Superstudio aims to complement the personal reflections and concerns of the Enoncé Théorique with the variety of topics treated collectively in Superstudio.<sup>4</sup> The programme of Superstudio states that:

*“These two moments, collective and personal, represent the framework for the ultimate foundations of a trajectory that will guide them beyond the boundaries of the teaching experience.”<sup>5</sup>*

A major factor of the success of Superstudio is that the teaching team around Prof. Roberto Gargiani gave the students the liberty to choose what they consider as an important topic to treat architecturally in the 21st century. One of the collectives worked on a proposal to rethink the final critique, which ended up in an unusual experience for most of the students. Next to the complete rearrangement of the spatial configuration, one of the aspects they changed was that for each critique another Collective was invited to comment on their fellow students' work. This could be seen as a chance for students to actively learn how to judge other architectural projects than their

own. Jan Silberberger writes in his text “Reimagining the Crit”:

*“If designing is trained by doing the act of designing, could crits be an ideal environment for students to learn how to judge solution proposals by judging proposals themselves?”<sup>6</sup>*

The two collective experiences at EPFL analysed in this chapter show the different approaches taken and their impact on the outcome of the project and the students. While the first example of ALICE demonstrates how more than 100 students can learn to work together and create social bonds that are indispensable for their studies, Superstudio shows the force of the Collective and what pedagogical experience can be made when students are free to decide what they think of as important to treat in the 21st century.

<sup>1</sup> <https://www.epfl.ch/labs/alice/index-fr-html/page-134469-fr-html/page-134589-fr-html/>, accessed on 08.01.22.

<sup>2</sup> <https://libre-acces.com/40882-2/>, accessed on 09.01.22.

<sup>3</sup> Ibid.

<sup>4</sup> Ibid.

<sup>5</sup> Ibid.

<sup>6</sup> SILBERBERGER, Reimagining the Crit. In *Against and for Method*. 232.

**SOIS  
POLYTECHNIQUE**



**ET TAIS TOI**

## HIERARCHY ///

### AN UNCERTAIN FUTURE OF HISTORY OF ARCHITECTURE AT EPFL

Bologna has changed the hierarchical structures at universities around Europe and thus as well the one at EPFL. We've seen that it is now the administrative apparatus that manages the school which has become necessary as the operating expenses augmented drastically. This led to the undermining of the professorial authority and shifted the power to the administration. The example of the recent opening of a new Professorship position of History and Theory of Architecture at EPFL has shown this new relationship established at universities around Europe.

In 2021 a series of professors retired which led to drastic changes in the curriculum as the professors needed to be replaced and the curriculum adapted to current issues in architecture and society. The most radical transformation was the opening of the position for History and Theory (Digital Turn). The description of the opening on their website shows the focus on the digital turn:

*“For the new Professor in History and Theory of Architecture, we intend to hire an internationally outstanding architectural historian and theoretician, with a particular research interests in the digital turn. The new professor should bring the necessary intellectual and cultural background and agenda to contextualize the historical transition of architecture, cities and the built and living environments, from the industrial age into the digital age, and provide critical and conceptual support for design across the entire institute.”<sup>1</sup>*

While it is clear that History is a place where contemporary topics, such as climate change, digitalization and ecology could and should be discussed, it is, however, questionable to do so by sacrificing a curriculum based on broader historical knowledge. Even more so as this knowledge is necessary to comprehend the current issues in relation to the great tradition of architectural practice. For these reasons, students, PhD’s, assistants, PostDocs and professors announced their disapproval of this position, the goals behind it and the consequences the appointment would have on the school’s educational curriculum and research orientation.<sup>2</sup> Furthermore, the whole process was being questioned as it was intransparent and one could think that everything was done in order to keep out the involvement of students or other people that are not considered as necessary for the hiring process. The ‘job interviews’ of the shortlisted candidates must be held publicly yet they were disguised under the name of a “Seminar Series”. Even more problematic is the fact that this “Seminar Series” took place during weekdays ranging from 8h30 to 16h30, times when students have to attend classes and can therefore normally not follow the interviews. Confronted with these allegations of missing transparency, the head of the Institute of Architecture at EPFL re-



sponded as follows:

*“We understand your perception of a lack of transparency, and are consciously working towards less opacity in the appointments of future professors, despite the fact that recruitments are fundamentally a very confidential matter (for reasons of privacy/discretion, strategic competition, etc.). The search for this position included a student representative in the search committee, a gender balanced composition of the committee, the making public of the presentations of the candidates (even though for protecting the privacy of the candidates we could not (and did not want to) declare the presentations publicly as “job talks”), and solicited input and feedback from the audience which was shared with the search committee. This push for transparency is work in progress, and we are aware that it is not enough yet, but are at this moment still bound by EPFL rules.”<sup>3</sup>*

This answer indicates that they did not want to declare the interviews publicly as ‘job talks’ which shows that they acted consciously against the transparency of the process. Additionally, they defend their strategy by saying that a student represented over a thousand students in architecture in the process. It is clear that this process is radically undemocratic as it is first and foremost the students that are impacted by the appointment of a new professor and the accompanying new curriculum. The general feeling of the students was that they didn’t have a say in the matter, and this concern was answered by a simple mail of a few lines essentially pushing the problem aside. Yet, this situation could have been a moment of reconsideration to generate a more democratic process where all the involved parties could have been heard and taken seriously.

During this process it became clear that part of these changes were imposed by the direction of EPFL. It is crucial for the presidency to have a general overview and understanding of each faculty in order to create an overall strategy for the university, yet ignoring the specific knowledge of the department of architecture not only thwarts its autonomy but also dismisses its authority and competence in its own domain.<sup>4</sup>

Even though the process came to a halt after two open letters by students, PhDs, PostDocs and assistants and the topic was discussed across Switzerland through social media and in several articles in the press, it clearly shows the hierarchical structures present at EPFL and the position that students and staff take on in this system. The immense effort put into this shows that it is difficult yet possible to achieve change by unionizing and cooperating across years and positions. This is not only valid for the appointment of a new professor in History and Theory but for every other position or decision taken at the university.

<sup>1</sup> <https://polytechnicpositions.com/faculty-position-in-history-and-theory-of-architecture-digital-turn,i7309.html>, accessed on 12.01.22.

<sup>2</sup> CORPS INTERMÉDIAIRE, E-Mail to the presidency of EPFL, 17.05.21.

<sup>3</sup> HUANG, DIETZ, E-Mail to the faculty of architecture, 14.05.21.

<sup>4</sup> CORPS INTERMÉDIAIRE, E-Mail to the presidency of EPFL, 17.05.21.





## CONCLUSION

### “WHAT ABOUT EDUCATION?”

Education in architecture is a construct of complex relations between students, professors, politics and universities. One cannot look at a single design studio without taking into account the structure of the whole institution and to fully comprehend the current educational situation, one needs to look at the past in order to understand the present.

We've seen that at EPFL, like many other schools around the world, a multitude of directions are taken and it isn't always clear what topic the school wants to emphasise on. Examples such as the “Design Together” Program show that the university is conscious about current urgent issues in society yet it seems as though this is only done halfway. Furthermore it is often the student body that needs to address these issues independently first before the direction takes on measures to integrate them into the curriculum as it has been the case with the example of the Drag Lab. So the question that needs to be asked is what strategy the school wants to take. Either stay on a pluridisciplinary approach where a lot of different issues are treated and students can choose which to focus on on their own after their studies or whether EPFL wants to establish them-

selves as a school with a strong tendency towards one issue, such as climate change or social equality. Both strategies have their advantages and disadvantages and there is not a solution to this problem, yet it should be communicated clearly as a lot of students have the feeling of not knowing which direction EPFL is taking. In an interview with last year's graduates, Laure Kochnitzky Palluel explains why EPFL not having a tendency is a specific characteristic of our school:

*“One of the characteristics of our school, in my opinion, is that it is not a school of tendency. Professor Von Meiss invited architects of all tendencies, many of whom became very famous after their time in our department: Mario Botta, Alvaro Siza, and many others.”<sup>1</sup>*

So if we conclude that this could also be a chance for EPFL to clearly establish itself as a school without a tendency and to allow opposing opinions collide within the school as it is the case today, the question must be asked if this pluralistic system with a variety of directions still allows a strong pedagogical project to emerge as we have seen several times in history. In my opinion, this question can be answered by looking back at what happened during May 68. When we look at the case of Italy we see that strong political movements helped projects to emerge at schools. Looking at Tendenza, Pier Vittorio Aureli wrote:

*“Well first of all, what helped a lot of movements, like Tendenza, was the presence of very strong political movements and political institutions like the Italian Communist Party.”<sup>2</sup>*

Even though the influence of such political movements may not be direct, it is clear that they can help. It is clear that universities nowadays have become enormous managerial institutions which makes it difficult for a project to emerge at the scale of the whole. Yet, it only needs one person, as we have seen with the example of Savioli in Florence, to let a project emerge. It is important that there is a space for experimentation where students can express their freedom and creativity. As we are talking about the present one cannot say when, where or with whom this could happen, to borrow the words of Pier Vittorio Aureli: “*A project is a lifelong thing; if you see it, you will only see it at the end.*”<sup>3</sup> So it becomes clear that for a project to emerge one needs time and patience, two things that Bologna eradicated from the curriculum at universities. Students and professors alike need to understand that this should be the key point of the university. It should be this one moment when there is the possibility to slow down and focus rather than rushing things and trying to come up with something new everyday.

On the other side, what we see today is that younger people become more and more politically conscious and start to raise their voices. This could be a chance for architecture to profit from these movements as well. Students need to start understanding the mechanisms of the university and how for example the Bologna Process changed our education to an entrepreneurial system in order to be conscious about what is happening and become ‘critical intellectuals’ such as in the example of UPAN in the 1960s. It is necessary for them to understand the precarious situation they’re in in order to liberate themselves from it. Moreover it is important to understand that a movement cannot be based on an individual initiative but needs to be pushed by a community of people.

To conclude we can see that there is neither “The Architect” nor “The Education” in Architecture. These terms are constantly changing and the importance lies in the fact that students as well as professors have to understand that education can and must be challenged and questioned in order to reinvent itself regularly in order to keep up with the pace of the ever-changing environment it belongs to. This thesis tried to reveal what has been done in architectural education and why it has been done. The first part showed what can happen when architectural education takes on risks while the second part highlighted the struggles that have been created as a consequence of the Bologna Process in 1999. The last part presented selected examples of the current situation at EPFL and what has been going on over the last few years.

Finally, this thesis should not be understood as an exposé of the past but rather as a manual to highlight patterns, exceptions and possibilities to understand the current educational situation and to highlight the need that every decision taken can and should always be questioned again.

<sup>1</sup> KOCHNITZKY PALLUEL, MAP21, 41.

<sup>2</sup> AURELI, EISENMAN, A Project is a lifelong thing; if you see it, you will only see it at the end. In Log No. 28, 70.

<sup>3</sup> Idem, 1.







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student	205
architecture	121
education	89