# Women In Architecture

pre-study for the development of a third-party funded research project on culturally relevant gender-equitable changes in architecture

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# WOMEN IN ARCHITECTURE

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# 1. Point of departure, Motivation, Questions

The educational situation at German universities and colleges is good. The number of first-year students has been rising for years. The proportion of women has been almost balanced since 1998, although the percentage of men and women students is distributed differently across the range of university courses.

The proportion of women studying architecture, for example, is now much higher. In 2006, for the first time, half of the students in architecture courses in Germany were women and half were men; in 2016, 58% of architecture students were women. Against this background, the question arises as to which path female architects take after completing their studies. The high proportion of female graduates is reflected neither in leading positions in practice nor in the academic field. The top 20 architecture firms in Germany in 2017 do not include any office that is managed solely by a woman or a team of women. Moreover, the income of full-time female architects is 30% lower than that of their male colleagues.

This study "Gender Equality in Architecture" aims at examining how female architects are developing and whether drop-out rates are based on exclusion mechanisms within the structure of this professional culture which result in women not taking up their profession or not reaching management positions within their profession. Existing data and statistics were analysed and interpreted. Research revealed that the data at hand is sparse and incomplete. In addition, some of the available data has been misread.

Expert interviews were used to gain a deeper insight into the professional culture. To this end, female and male architects in different employment relationships were interviewed, as well as people who have studied architecture but do not pursue the profession. Our study offers a good foundation for further research.

# 2. Procedure and presentation of the results

This study adopts a mixed-method approach, combining qualitative and quantitative research methods. The aim was to prepare and quantitatively present the situation of women in architecture, their study and working relationships. In a further step, expert interviews were used to gain a deeper and interpretative insight into the professional culture and to reconstruct gender-specific attitudes, motives and experiences with regard to studying architecture and the architectural profession. On the basis of the available results, a research proposal will be formulated that implements necessary, in-depth questions and develops action-oriented concepts for architecture faculties and their cooperation partners.

## 2.1 Qualitative research: guided interviews

## Interview guide, selection procedure of interview partners

A total of 21 men and women who had studied architecture were interviewed by telephone. In selecting the interviewees, an attempt was made to represent as heterogeneous a group as possible in terms of age, gender, regional location and activity (self-employed, employed, public authority). In addition to architects who work in higher education and/or in office practice, people who are no longer active in the classical architectural profession, i.e. so-called drop outs, were also interviewed.

Geschlecht	W	m					
	15	6					
Regionale Verteilung	0	W					
	7	14					
Jahrgang	1950-59	1960-69	1970-79	1980-89			
Jahrgang	1950-59 4	1960-69 5	1970-79 5	1980-89 7			
Jahrgang Beschäftigung				1980-89 7 S	S-P	D	

Employment legend

A: Employed in an architecture practice; B: Employed in public authority; P: Professorship; S: Own Office or in Partnership; P-S: Professorship and own practice; D: Drop Out; W/E: West, East (Germany) Table 1: Distribution of the interview partners' selection criteria The guideline-based interview is a method from empirical social research that provides qualitative data. The aim is to collect the experiences and views of actors in an oral interview and thus to gain deeper and broader insights into the research topic. In our case, the topic is the professional culture of studying architecture, the practice as an architect, the perception and evaluation of one's own experiences in the field, and the like. Before and during the interviews, the interview guide was checked for its applicability. The results of these phases flowed into the further development of the questionnaire in an optimisation loop ("grounded theory"), which combines deduction and induction.

The interview guide covered the following overarching themes:

- Entry / introduction
- Previous professional career
- Study/ training/ occupation
- What makes an architect?
- What is most interesting about being an architect?
- Drop-out
- Women in architecture

At the end of the interview, demographic information was collected and recorded in writing. These include: Gender, age, place of birth, marital status, children and their years of birth, year of graduation, studies and higher education. The current guide can be found in the appendix.

## 2.2 Methodical procedure of the interview evaluation

For data backup purposes, the interviews conducted over the phone were recorded on tape with the consent of the respondents. The data preparation was carried out by a specialised company and transcribed verbatim. The results were then categorised based on the research objectives. The next step was to encode the available material and interpret the expert statements. The interpretation was checked by reference to the current state of research.

## 2.3 Quantitative research - Figures, Data, Facts

The data basis for the quantitative study was primarily retrieved from official statistics databases (Destatis) and from surveys conducted by the Federal Chamber of Architects.

Further quantitative results were obtained through surveys at the Faculty of Architecture of the Technical University of Munich or other institutions.

- University internal data (TU Munich) in digital form has not been collected thus far and is not available. The data collection was partly carried out by counting lists.
- Inter-university data on gender distribution of academic staff / doctoral students/ professors at German architecture faculties are not recorded statistically and are not currently available.
- An important figure is that of new entries of men and women into the respective state Chambers of Architects. These figures are not available separately, but always include the total number of registered architects. This portrayal is distorted, as it also includes the large proportion of men, dating from the 1980s and 1990s. Within the framework of the study, an analysis was carried out based on information from 9 (of a total of 16) provincial chambers. The number of new entrants to the respective regional chambers of architects over a period of 10 years was surveyed. The methods used to determine the figures provided could not be verified. The figures show a clear tendency, namely that the amount of women and men entering the chambers are distributed equally according to the number of graduates (see Figure 4). A scientifically based collection of data is identified as a desideratum for future research.
- To examine the category "Women Architects in Public Perception", lectures and exhibitions of recent years in two relevant platforms (Architekturgalerie München, AIT) were reviewed and the proportion of women represented there was counted; with the result that women architects are clearly underrepresented in the public eye.

With regard to the results of the quantitative surveys, the following points should be noted:

- Some values may not add up to 100 due to rounding of percentages.
- The available data on architects is limited. A large proportion of the figures relate to surveys conducted by the Federal Chamber of Architects. The Federal Chamber statistics are collected annually on the basis of information provided by the Chambers of Architects of the respective German states. The figures show the number of architects registered in the various chamber lists on the cut-off date of 1 January of the respective year. It should be noted that these figures do not cover all persons working in the architectural sector, but only those registered in the respective professional chambers.
- In 2017, the number of employed graduates of architecture and urban planning who are not members of the chamber amounted to 13% of all employees in architecture offices. A differentiation of the figures by gender is not available (statista).
- Further figures are based on the principles of the Federal Statistical Office (DeStatis). The methods used for data collection can be researched by using the source cited.

# 3. Female Architects at German Universities and Colleges 3.1 Interviews

Understanding roles at the university

When evaluating the interviews, the impression is created that, despite the high, time-intensive workload, the study period is mostly presented as a conflict-free time, predominantly perceived as positive and enriching. This assumption is also supported by the low drop-out rate (see p. 12).

"I liked my studies very much, I enjoyed them very much, and they should be fun. Yes, it was fun, it was work-intensive, yes, it was good."

female, 36, employed

Gender inequality is rarely reported. This may also be due to the fact that some of the interviewees completed their studies some time ago, and their memories might be blurred. But even the younger interviewees hardly ever report unequal treatment based on gender. It is possible that women who choose a technical, male-dominated subject begin their studies with the expectation of being an outsider. Female students of architecture seem to be aware that they are entering a male domain even before initiating their studies.

"There were more men than women, although I actually always coped with it quite well. And it wasn't like later, it's different on the job, when there are mainly men around. At university it is still fun."

female, 30, employed

"So, I think it's different as a young woman than as a young man. I didn't notice it that much, because you're used to it, but I did notice that - we had several, but especially one professor, who was gay, and I noticed how much he somehow preferred some students. And I think it's probably the other way round, too, that somehow professors preferred some girls, or female students, without their performance perhaps being that good."

female, 36, employed

#### Decision Criteria for Choosing to Study Architecture

Many statements reveal that the decision to study architecture was often based on a diffuse inclination towards what one imagined architecture to be. Often there were no role models, architects were not known to most people either personally or as "big names". In most cases there was no clear picture of the study contents.

"Basically the prospect of working creatively [crucial for decision to study architecture], simply enjoying it, although admittedly at the time I didn't know what I was letting myself in to and I had no architectural training. (...) Well, there aren't any architects in my family, so I basically approached it relatively naively and then, over the course of time, I understood exactly what it was all about, including the type of work, which, ultimately, one might in fact have to do."

"At the beginning of my studies, I didn't have that many expectations of the course. I just let myself be influenced by what came along."

male, 31, employed

For almost all interviewees, an idea of the job profile and everyday working life only developed during the course of their studies, mainly through internships and work in offices, often even during their first professional station. This is sometimes seen as a challenge.

"My image [of the architect] only developed in the course of the first semesters up to and including the internships. And I was relatively unbiased before that." male, 31, employed

"...well, I started working immediately after my Bachelor's degree and then did my Master's parallel to my work, because I felt that you study for far too long and without getting get a real idea of the job, so that you're actually forced to get practical training quickly and a lot, in order to understand more and more about what do I do as an architect, what do I need to be able to do."

At least the trainers are aware that studying architecture is not enough to prepare for office practice. Internships, which accompany university studies can close this training gap (Groihofer, 2013; Spiegel ONLINE, 2016). Whether false expectations and the lack of knowledge about the actual profession of architects are related to the disappearance of women from the labour market who have successfully completed a lengthy and work-intensive course of study needs further research. There is still a need for further research, especially on university studies (Groihofer, 2013; Kuhlmann, 2012; Spiegel ONLINE, 2016), career entry (Adams, 2016) and career development (Adams, 2016; Jautz, 2000).

#### Further research questions

- Investigation of the motivation and expectations of students before, during and after completion of their studies in architecture.
- Change in the occupational profile during the course of study.
- Interviews | survey with students of architecture at universities and colleges to examine gender-specific aspects during their course of studies in more detail and to possibly detect a subject-specific influence already at university
- What do professors and lecturers say about students?
- Alumni survey: current alumni, career development

## 3.2 Figures, Data, Facts

When comparing selected European countries, Germany ranks 7th in terms of architect density (see appendix). This puts Germany in the top third with approximately 1.3 architects per 1000 inhabitants. Despite a high density of architects, the proportion of women architects in Germany is comparably low at a European scale: If we look at the gender distribution of architects in all European countries, Germany is in the lower middle sector of the table in terms of proportion of women, ranking 15th out

of 25. It is noticeable that countries where there is little state support for families as regards childcare, such as Greece, Bulgaria and Croatia, have the highest proportion of female architects. In contrast, in the Scandinavian countries, which are known for their exemplary family policies and high female employment rates, the distribution is balanced, with female percentages ranging from 44% to 51%. France is considered a country where women are particularly good at combining children and work, yet only around a third of the architects there are women (Veil, 2003). There is therefore no conclusive picture for Europe with regard to the compatibility of family and career in the architectural profession (Volpp, 2016). Childcare as a sole reason must be rejected in favour of more complex descriptions. Incidentally, many architects are also fathers, and therefore also have a childcare issue to solve. There is also a need for research in this area.

The high density of architects in Germany suggests that there is great pressure on the architecture industry to acquire new contracts. The continuous increase in employment since 2016 and the demand for architects only reached a 10-year high in 2017. Turnover in the construction industry reached a low point in 2005 and has been growing steadily since then due to low interest rates and sustained increase in residential construction. This means that the positive trend with regard to overall demand and employment structure in the architecture industry has only been taking hold in the last few years.

#### Study, Structural Drop Out, Drop-Out students + Graduates Architecture

Overall, the number of architecture students has been rising steadily since the early 1970s. Whereas in 1973 the number was 17,190 students with a female share of about 17%, there was a high in 1997: the number of students was 49,733 - with a female share of already 43.9%. In 2006, parity between women and men studying architecture was achieved for the first time. Since then, the proportion of women students has risen steadily, and since 2007 about 60% of first-year students are female. At 24%, the drop-out rate among all architecture students is below the average for all subjects. In engineering sciences, architecture has by far the lowest drop-out rates [sic] (engineering sciences as a whole 33%, architecture 24%, (Heublein, Richter, Schmelzer, & Sommer, 2014). These figures indicate a high level of satisfaction and a high level of identification with the study programme. This impression is confirmed in the interviews. A structural drop-out during the course of studies cannot be identified.

## Scientific Staff at the Faculty of Architecture (TU Munich)

One part of the study examines the figures at the department of architecture at the TU Munich. These results are intended to assist developing measures to be applied and tested within the framework of the diversity-oriented target agreements with the TUM.

So far, the department of architecture at the TU Munich has not been able to carry out a continuous digital data collection on gender distribution. A collection of data is absolutely necessary to record the status quo as a basis for the implementation of the equality goals of the department of architecture and is strongly recommended within the framework of the study. For this reason, only a snapshot of the situation and no development can be shown. This snapshot shows an urgent need for action.



## Scientific Staff at the Faculty of Architecture (TU Munich)

Figures from 2014, 2015 and 2016 were used as a basis for a presentation of the proportion of women at the various stages of scientific work at the university. The picture here is comparable to the so-called EU-wide She-Figures (see graph). The She-Figures show the proportion of women in a typical academic career path. They are based on annual surveys conducted by the European Union EU. While women still form the majority of students and graduates in the first stage of academic education, this is reversed in the doctorates. The gap widens in the proportion of women in middle management positions. Here the question arises as to why the gap between 58% female graduates and 38% assistant supervisors is so great. There is no requirement for this job other than the completion of the degree. The low proportion of women to parity when filling positions.



SHE FIGURES 2015 Gender in Research and Innovation

The largest gap can be observed at the highest level of the academic career ladder, where women are represented by only 20%. By comparison, the proportion of non-scientific staff in the same period under review is just under 70%. The evidence of a very large difference indicates that there is a great need for action at the department of architecture to reduce the gender gap at the highest levels of the academic career path.

Non-formalised application procedures and career paths in the architecture industry complicate these processes. This is true for parts of the university as well as in architectural practice: vacancies are often not advertised, but are passed on through personal acquaintances and word-of-mouth. One aspect of work at universities that should not be overlooked is found in literature: since in architecture, a university job may optimise a career, but career opportunities are generally awarded in architectural practice - and not at the university - the supposedly attractive university job easily becomes a (women's) trap (Schumacher, 2004).

## 3.3 Recommendations for Action

An important step is to collect data and a commitment to monitoring it respectively. Here, active work on parity can be carried out without too much effort with regard to recruiting mid-level academic staff. The same applies to the staffing of supervisory assistants. Parity for visiting professorships is already being actively promoted by the Dean's Office.

In the context of appointment procedures, efforts must be made to ensure equal representation on the boards. However, a professional approach to the topic of gender and diversity is equally important. For this purpose, training courses are available for ALL participants in an appointment procedure. Lectures and expertise on the topic should also be anchored in the department. This is necessary in order to avoid the implicit gender bias that still characterises science subjects. Gender bias means that women and men are usually unintentionally and unconsciously viewed, treated and evaluated differently in scientifically relevant aspects such as performance, competence etc., even if there is no objective justification for this.

A special focus must be placed on actively recruiting potential female candidates, which is also required in the equal opportunities monitoring for appointment procedures at the TU Munich.



Fig.3: Photo: Matthias Kestel

## 3.4. Research Questions

Research desiderata exist especially in the areas of studies, career entry and career development:

- What is the distribution of men and women at different career levels in the academic architectural profession throughout Germany?
- How many graduates are not active in the architectural profession after completing their studies?
- In which areas of the architecture industry (academic career, employed, self-employed ...) do graduates develop?
- In which fields of activity are graduates employed (competition, construction and detail planning, project management, technical administration services...)?

# 4. Women in Architectural Practice

## 4.1. Interviews

Despite an increasing number of female architecture students at universities and colleges, women remain underrepresented in architectural practice. It seems likely that one of the main reasons for this imbalance is the male-dominated professional culture of architecture, which is associated with great challenges for women (see: Heß, 2012; Kullack, 2011; Volpp, 2016; Weiske, 2001). One frequent argument is that professional practice is bound to strong traditional values coded as masculine, and in particular the lack of opportunities to reconcile family and career is a problem or even leads to dropping out (cf. (Dörries, 2011a; Grewe, 2018; Volpp, 2016). The interviews aim at providing a better insight into the professional situation of architects and to explore the question of how the asymmetrical gender relationship is expressed in architecture and what subjective patterns of interpretation of gender and gender difference are associated with it. What influence do professional habitus and social structures have on the issue that so few women architects are represented in professional practice?

#### Reconciliation of Family and Work

A family constellation founded on an unequal division of labour between the sexes is commonly referred to as ,traditional'. It is based on the notion of a natural, biological and anatomical distinction between ,man' and ,woman' and assigns women to the private sphere, to feeling, to passivity, men to the public sphere, to reason and activity. The regime of dualistic gender opposition is particularly evident in the unequal distribution of work between the sexes: Reproductive and domestic work (,care') is considered to be female, while the male is supposed to be in gainful employment. Within this hierarchical relationship, women are subordinate to men and financially dependent on them. Despite progress and feminist movements that bring about a change in gender relations, this family model is still deeply ingrained in the laws, regulations and public services as well as in people's subjective interpretations in the Federal Republic of Germany and still serves as a guiding family image, especially in West Germany (cf. Bothfeld, 2008; Ebenfeld, 2011)

Despite continuous modernisation processes, which allow the traditional image of the family to be presented as backward, norms of equality are mainly limited to the dimension of discourse. Thus, a "rhetorical modernisation" can be found (Wetterer, 2002), which means that in Germany there is a general assumption and self-image that gender equality/equal right exists and that it is absolutely desirable - "in practice, however, there is still a gender-specific distribution of tasks" (Greusing, 2018). There are clear indicators that the image of men as the (main) breadwinner is in fact still upheld and that care work in Germany continues to be carried out predominantly by women (Meuser, 2012; Wetterer, 2002), especially when men become fathers. On average, fathers spend more time in employment than childless men (Klünder, 2017).

#### Free Will as Legitimisation of Inequalities

In the interviews conducted, it becomes clear that many of the interviewees today still - or rather again - assume this ,traditional' family image:

"and now the latest generation seems to be developing back to home and hearth, because it is so nice to sit at home and follow the inner call of having a child."

A common reason for this (re)traditionalisation, according to the interviewees, is that women set different priorities than men. For women, family is ultimately more important than work and career. The result is a naturalised image that women stay at home 'of their own free will' because motherhood is a biologically desirable role and therefore automatically has a higher priority in life than a professional career:

"However, many women do still see family life as a priority, and it's their own decision. In other words, many women also willingly say, of their own accord, that they are working less for the sake of family life. And men, I think, still don't do this that often."

However, it can also be frustrating for employers, if women do not want to take up further job and promotion opportunities:

"Some don't want to manage projects. Many even (...) Now she has a child. Now she's out for a year. Now we've offered her to come half a day a week. No. Well... And then she comes and we arrange a part-time thing with her. Okay. It's not going to be easy as a project manager. But that's not the even the idea." female, 63, professor + own practice/ partnership

So, consciously or not, women are, to a certain extent, 'blamed' for having fewer career opportunities and for the unequal distribution of work, as this is an active and voluntary decision made by the women themselves.

#### The Problem of Compatibility in Architecture

Even if many women wish to continue working despite having started a family, it often fails because of the difficulty of combining the two. Architecture is experienced as a very time-intensive and highly demanding profession, which requires 100% availability and where the boundaries between private and professional life are eventually blurred (Forlati, Silvia, Isopp, & Riß-Retschitzegger). In order to be able to combine the two, a partner is needed to provide support. The majority of respondents agree that the workload cannot otherwise be managed on one's own:

"that women, let's say, somehow have executive positions in offices and earn good money, is definitely possible, but of course I don't think they do that on the side with three children at home. And that the man also goes to work. I can't imagine that. So you need someone to back you up. Definitely."

male, 50, employed

"And then I gave up the professorship because I couldn't do both. Office, children and professorship can only work if you do it as a couple or if someone has your back. Who has your back as a woman?"

female, 63, professor + own practice/ partnership

In addition, there are hardly any role models who (publicly and visibly) live the successful combination of family life and the architectural profession:

"So, if you look closely. Of the very successful female architects, which of them has children? Check that out. You can pull it all through by simply deciding, "I'll do without children."

female, 63, professor + own practice/ partnership

"So, in my experience it's like there weeks when you really have to dig in and then weeks when you don't. And of course that often works well for men, who have a woman at home to look after them and do the laundry etc.. And there are few cases, but of course there are, and these should be held up, where it is exactly the other way round. But there are simply few examples." weiblich, 50, Drop-out

The question arises here as to the extent to which working in the architectural profession does not allow for motherhood, as it is not compatible with the profession-specific habitus and the resulting professional culture. It is therefore not simply an individual problem but a social grievance (Weresch). According to Forlati et al (2015), change is only possible if there is a critical examination of one's own professional culture. Instead of simply tolerating and accepting ideological preconditions of the architectural profession, the unwritten rules must be identified and questioned. This applies equally to entrenched gender conceptions, as the following interview excerpt illustrates:

"Nevertheless, it remains a conflict a woman, just as it was a conflict for me, an emotional conflict. When I am in the office, I do what I want to do, I do what I have contractually assured my client. I have a bad conscience because the children are then alone at home. Well, they were never alone, but without me. When I am at home with the children, I have a bad conscience. (...) Nobody can take that away from you, but society can change, perhaps by men taking on a different role in bringing up children. And the women need to actually be willing to give up some of this responsibility."

(female, 58, professor + own practice/ partnership

It is necessary to continuously and critically question the hierarchical gender order and the associated distribution of tasks (also in the family) within the framework of feminist movements and gender studies in order to contribute to greater awareness of the role of hegemonic masculinity in social power relations.

However, changes are not only necessary in society as a whole. The professional habitus of architecture should also be questioned. Another suggestion, for example, is to better prepare students for the future while they are still studying architecture (Forlati et al.). Women, when they have children, are confronted with a new reality and are often unprepared. Ways to improve the compatibility of work and family life should be addressed during the course of studies, and the current work and organisational structures in the architectural field should be critically questioned. In addition, working conditions should be created which allow for better compatibility: "Work forms still unfamiliar in architecture, such as job-sharing models (e.g. the division of a full-time job into two part-time jobs), working from home and the introduction of core and flexitime should be investigated and supported" (Forlati et al., p. 89)

"There is shared project management, for example, a man and a woman or two women, if the project is complex or large and the woman only has a part-time job. (...) It would also be possible to share the management of a project in architecture practices or, yes, to somehow set up a system that allows women to continue to have attractive work and not just to do the legwork."

#### Self-Employment vs. Architecture Practice vs. Government Office

The difficulty in combining motherhood with the architect's habitus described in the previous chapter is also assumed to be a reason why many women do not (want to) work in an architecture practice despite having completed a degree in architecture. This is mainly due to the difficulty of reintegration after maternal leave. It is described in the interviews by both employers and employees. For example, many employers feel clear disadvantages when women want to return to their previous jobs after maternity or parental leave, but then often only want to work part-time.

"It's not very easy, they almost always come back at inconvenient times when you don't need them. They haven't worked for three years, they can't use the 8th AutoCAD update and that's then difficult. And because they all only work part-time and then only in the mornings, they need their own computer, their own software licences, very difficult. This is a real problem for smaller companies.

female, 63, professor + own practice/ partnership

These frequently negative attitudes are certainly noticeable for many mothers who return to work after a break. A foreseeable career risk is often the reason to leave or change jobs. There are studies which come to the conclusion "that employed female architects are often only used for routine work after the announcement of pregnancy" (Weresch) or are assigned less responsible tasks (Dörries, 2011b). The mere assumption that employed young women could potentially become pregnant in the near future makes employers less inclined to promote them:

"Well, in Office X, for example, we were a number of young women, and I had the feeling, especially in retrospect, that they didn't have much of a focus on young women under twenty. For the sole reason that they would have children anyway and then they'd want a part-time job.

female, 36, employed

The fact that family responsibilities also take up a lot of extra time means that constant availability is not a given. This breaks with the image of the architect who lives only for the profession and is available to work at all times: "I always feel sorry for a female colleague of mine, who has to take a lot of sick days. And of course that is noticed at the end of the year. And of course the children are always sick. And somehow there's no other way to do it. And she is a single parent, so it's very difficult. And actually it's almost impossible to move up in the world or to continue brilliantly."

female, 30, employed

Nevertheless, interviewees also report positive examples where they do not experience any form of discrimination in their daily work:

"Well, I think that our women are definitely treated equally in the office. They also get the same projects. So they have to do exactly the same as we do. In a way, it means that they are considered capable of doing the same thing. Or that they are given them, so that through that they can make their own way".

male, 50, employed

Nevertheless, this statement suggests that doing the same work as men is still something that women must be "entrusted" with. The quote shows that despite its good intentions, the statement that "women make their own way" is not yet taken for granted.

An alternative to working in architectural offices is self-employment. This promises the possibility of combining professional responsibility with family life (Dörries, 2011a). Nevertheless, the interviews show that this path is also clearly risky and, at least initially, there is little security. Self-employment requires investing a lot of time and work, especially in the beginning:

> "When we set up our own business, we really worked extremely hard."

> > (female, 36, own practice / partnership

Ultimately, it is a career in the (building) authorities that promises the most security for many women. The interviews also show that this seems to be a popular workplace for many women:

"Take a look at the authorities. All the building authorities: Munich, Berlin, they're all filled with women."

female, 63, professor + own practice/ partnership

One reason for the high number of women working in (building) authorities is assumed to be due to the better structural organisation: regulated working hours, reduction of overtime and easier re-entry after parental leave make the building authority an attractive and safe workplace:

"Sure, it's a job, a secure job, where you are taken back after parental leave. There are structures in place which you can rely on."

female, 63, professor + own practice / partnership

"That young architects or rather female students say I want a secure job. Because that was the point. A secure job with limited working hours so that I can also look after the children. And preferably where I can clock in and there's a good social environment, and where I'm not too challenged."

female, 62, professor + own practice / female partner

Nevertheless, the interviews also reveal prejudices against working in (building) authorities. The statement "where I am not too challenged" shows that work in public authorities is seen as much less demanding. So there may be security, but this work has no room for the real passion for architecture, as becomes apparent in the following quotation:

> "You can't even get any man at the building authorities anymore with whom you can actually have a decent conversation. There are always only, please excuse, the often very frustrated women who do the job anyway, even though they have no passion for it."

female, 63, professor + own practice / female partner

The question therefore arises as to the extent to which the structures of a public authority could also be transferred to architecture practices. In this context, not only the difficult compatibility can be questioned, but also the established professional habitus, which blurs the boundaries of private and professional life: "Well, you wouldn't have to adapt the framework conditions to the civil service, but what is lucrative about the civil service is that you actually do get leave, and concession of overtime for example (...) and simply that you make it more socially compatible. It has nothing to do with family either, but rather that people can go home sometime in the afternoon, do some sports and in the long run somehow have a better, yes, a type of life model. And I think that is important to young people today."

female, 43, civil service

#### Conclusion

Traditional role models lead to the reproduction of established gender stereotypes: Women are assigned the sphere of the "inside", domestic and reproductive work, while men seem to be responsible for the "outside", gainful employment. The interviewees also refer to these traditional images. It seems that especially under the prevailing working conditions in architecture the compatibility of family and career is problematic, as boundaries blur when time-consuming work activities take over private life. Women architects are therefore faced with the decision of becoming self-employed (which gives them more freedom, but also involves greater risk) or working in building authorities where they benefit from secure working conditions. However, pregnancy and maternity still represent a career obstacle for female architects.

#### **Research Questions**

- Investigation of structural causes for the incompatibility of architecture and parenthood.
- How do innovative forms of work affect the compatibility of family and career? How do architects shape their paternity?
- How do architects come to the decision which form of employment they choose?
- Is the size and structure of an architecture practice related to providing better career opportunities for women?
- What role do the supply structures of the chambers of architects play in architects' professional decision-making?

## 4.2 Figures, Data, Facts

Should studies and transition to professional practice therefore not represent a structural drop out, the question arises as to why so few women attain managerial positions, both in the academic field and in professional practice.

## Delta between Graduation and Career Entry (Drop-Out)

One of the questions of the present study was to investigate whether there is a structural drop out after graduation and if so, how it is justified. This question could not be answered satisfactorily. The move of students into professional practice is not transparent. There is no numeric record of persons working in the architectural profession. This opens up an immense research desideratum: There is no reliable data on how and in which direction graduates are developing. The figures which the BAK (Federal Chamber of Architects) makes available annually only include those persons who are members of the Chamber. At the same time there is no data on when architects join the Chamber of Architects after completing their studies.

In this context, the available figures are often misinterpreted. For example, the Deutsches Architektenblatt writes in one issue: "Although for years, more than half of the students at German architecture faculties have been women, the figures remain sobering in everyday professional life. Only 34 percent of the members of the chambers of architects are female" (Ettinger-Brinckmann & Niebergall, 2019). The figures quoted here give a distorted picture: the high proportion of men in the 1970s to 1990s is reflected in the current membership numbers of the Chambers of Architects: in 1980 the proportion of men studying was still 69%.

New admissions to the individual state chambers of architects are not yet systematically recorded by the Federal Chamber of Architects. In the context of this study, the new entrants of the past ten years to the respective regional chambers were surveyed. This survey shows that the percentage of new entrants reflects the number of graduates. The same number of men and women (in percentage terms) graduates enter the respective state chambers (see Fig. 4). In this context, it should again be pointed out that the data is imprecise: The question of new admissions could not be answered by all regional chambers. At the same time, the figures provided are not based on a standardised survey methodology. There is therefore also a research gap with regard to a quantitative recording of new admissions to the respective state chambers.

However, the figures determined suggest that both men and women are admitted to the chambers corresponding to the respective numbers of graduates.

Comparison of Graduates and Chamber Admissions of Architects (7 years to admission)



There are indications that many women and men work in the architectural profession and are not registered with the Chamber: for example, the number of employees with a degree in architecture and urban planning who are not members of the Chamber was 13% of all employees in architectural offices in 2017 (statista). There is no differentiation of the figures by gender. There are various reasons for this: The professional title of architect is a protected professional title. The protection of the professional title serves as a justification for the fact that the respective (state) chambers of architects require the candidates to prove high qualifications. The conditions vary from state to state, but can in principle be summarised as follows: After successful completion of the degree programme, proof of professional experience (usually 2 years) must be provided. During this minimum period, applicants must complete all work phases. In Germany, the overall performance of an architect is divided into nine work phases. A certain proportion of the total fee is allocated to the individual work phases. Admission to a Chamber of Architects is accompanied by the entitlement to use the professional title "Architect". Membership of the chamber is associated with annual contributions and compulsory membership of a professional pension scheme. There are no official figures on the average number of years after which graduates enter the Chamber of Architects.

The 2012 study "Frau am Bau" (Women in Construction) by the University of Siegen (Bielefeld, 2012) clearly shows that the time between completion of studies and entry into the Chamber of Architects is significantly longer. The reasons for this are, on the

one hand, that the graduates are not given the opportunity to go through all work phases during the initial phase of their career, for example because the architecture practice does not offer all work phases. "Almost 20 percent of the graduates stated that they needed 4 to 5 years to meet the requirements for admission to the Chamber, and another 15 percent still have the status of a "graduate" between the 6th and 10th year (Bielefeld, 2012, p. 40)

Reasons such as the obligation to join the professional pension scheme or the opinion that the title "Architect" is not required, if one does not wish to be entitled to present a building application result in the entry into the Chamber being delayed or not taking place. For many graduates "it is enough for a colleague in the office or the boss to hold the title. The fact that the title "architect" also represents a quality feature is not important here" (...) "If graduates work in the architecture industry, entry to the chamber is not absolutely necessary and - apart from the title of architect - does not initially bring any advantages. Even in the case of so-called "Young Offices", frequently one person first tries to become a member of the Chamber. The title is waived in order to save money in the initial phase. (Bielefeld, 2012, p. 40)

One finding of the Siegen study, which was also confirmed by our research, is that entry into the chambers rarely happens after 2-3 years, but that 5-7 years are quite common. This means that a large number of men and women, who are not recorded in numbers, work in architectural offices. There is no information whatsoever regarding the development scenarios in the years following the completion of a degree in architecture.

"If we look at these facts once again from the perspective of the compatibility of family and career, it becomes clear that women in particular do not necessarily need the title of "architect" to exercise their profession. Since classic office activities such as drawing and administrative tasks and then preferably in combination with part-time work or a home office are considered particularly compatible with family planning, the title "architect" is indeed desired, but not a mandatory requirement. Especially, if it is sufficient that one of the practice owners is entitled to present a building permit, employees can dispense with the obligation to apply to the Chamber of Architects for admission to the title. If during the two-year post-graduate phase the opportunity to supervise construction work is not provided, then the graduate period is extended by several more years until the actual motivation, namely to be able to act as an architect in one's own name, is "forgotten"" (Bielefeld, 2012, p. 41)

## Structural Architects Registered in the Chamber According to Activity

Between 50 and 60 percent of all registered architects in Germany are either salaried employees or civil servants. A comparison over the last 10 years shows that the overall proportion of freelance workers is slightly declining. The figures regarding the proportion of women and men among salaried/civil servant architects confirm the statement made in the interviews that women are less likely to work freelance. This seems to reflect the picture of having a better structure in an employment relationship.

At the same time, white-collar employment seems to imply less recognition of performance:

"The relationship between employed and civil servant architects and their employers is usually characterised by the typical hierarchy and subordination between employee and employer, based on labour law. For example, in the copyright assessment of the question of who is named as the author in publications, contradictory opinions may arise. Equally in need of clarification is the question of whether the legally prescribed further training of architects is to be financed by the employer and recognised as working time." (Federal Chamber of Architects)

This statement, which can be found on the website of the German Federal Chamber of Architects, clearly illustrates the strong hierarchical structure within the architecture industry. This perception is also reflected in the interviews.



### Working Time Models in Architecture

With regard to the establishment of new, flexible working time models, the architecture sector shows little innovative spirit. The architectural profession is still very much rooted in its traditional professional image, which is characterised by a culture of presence. The "part-time work" model is a model primarily served by women. Parttime work is often associated with the performance of less responsible activities and has been shown to lead to the exclusion (of women) from management positions. Other working time models such as job sharing are hardly or not at all applied in architecture practices. A rethink would be useful and important here: Chambers and professional associations consider the issue of flexible working hours in terms of economic aspects, among others: "Flexible working hours are therefore a decisive factor in adapting working hours to the workload and thus strengthening competitiveness."(Chamber of Architects of North Rhine-Westphalia, 2013, p. 5). The German construction industry is also calling for working times to be adapted to the requirements of the Industry 4.0.



#### Gender Pay Gap in Architecture

According to a study by the Hommerich Research Institute, female architects and planners earn on average 30 percent less than their male colleagues (statista). The statistics presented here show the average gross monthly earnings of full-time employees in the sector "Architectural and Engineering Offices" in Germany in the years from 2015 to 2018 according to gender, clearly illustrating the gender pay gap in the sector. Other available figures also show that the pay gap exists already at the point of entry into employment - this indicates very clearly, the inequality of how women and men are treated, the level of knowledge after graduation is usually comparable and issues such as interruptions of working time, part-time employment etc. are of no relevance.



Fig. 7: Staff in Ingrid Kuhler's office: Ruth Jureczek and Irene Keil, 1980s, Photo: Marina Auder

# 5. Professional Culture

## 5.1 Interviews - Architecture as a Male Profession

As already mentioned in previous chapters, women architects are, despite high numbers of female students, still underrepresented in professional practice (Balthasar, 2017; Schumacher,

2004; Volpp, 2016). This finding would lead to the conclusion that architecture is a profession in which men are over-represented. This question is also important in the literature consulted and in the interviews conducted.

This chapter is therefore devoted to the context of the "male profession" and attempts to describe the extent to which interviewees and literature describe architecture as a male profession.

In the early 1990s, Angelika Wetterer described professionalisation processes as processes excluding women. Professionalisation means "the acquisition and codification of academic expertise, the development of a specific professional ethic, the establishment of entry requirements for certain professional areas or the establishment of professional associations" (Wetterer, 1992, p. 7). At first glance, this process does not appear to be related to gender. However, Wetterer and other researchers point out that these processes are accompanied by the exclusion of women from the professional field. Women are denied the necessary skills to carry out their profession and are increasingly being pushed into auxiliary jobs and assistant positions. In the course of professionalisation, smaller fields of professional activity are split off, which are less recognised and are therefore assigned to women. Wetterer also notes that professions which are not held in high esteem by society and are often poorly paid have a high proportion of women (Wetterer, 1992). By contrast, professions that enjoy high social standing have a high proportion of men. Architecture has always been associated with masculine qualities that seem indispensable for becoming a "good" architect. A professional profile has emerged that is oriented towards images of masculinity and is therefore more compatible for men than for women. It is probably less so that architecture "in essence" demands skills that men are more likely to possess than women, but that even in the 20th century, women were still excluded from the architectural profession and this exclusion was legitimised by the alleged need for "male" qualities. With an increasing number of female architecture students and thus more female architects, however, these ascriptions of certain skills as "male" are being questioned. The women in the profession prove that they, too, have the necessary skills for the job. The question therefore arises: can architecture still be described as a male domain in which male architects are overrepresented both structurally and symbolically? Wetterer's professionalisation theory can be a helpful analytical tool in answering this question. It describes socio-structural professionalisation as a continuous (re)production of gender hierarchies. Women are either excluded from the profession by depriving them of the opportunity to acquire the necessary qualifications for the job (for example, by excluding women from university studies). This has not been the case in architecture since the beginning of the 20th century, when women were admitted to study in Germany. This is often followed by latent forms of marginalisation of women at work that are less visible. These exclusion processes are relevant because they also take place when women formally have access to a professional field. On a symbolic level, parts of an occupation are gendered and "codified" and thus repeatedly assigned either to be male or female (Wetterer, 1992). This symbolic process is less influenced by how gender relations in an occupation actually are: It can perpetuate the myth of a male profession even if many women are already in the profession. How this symbolic process of professionalisation in architecture works, what professional myth of architecture is created, is discussed in chapter 5.2.

#### The Architecture Practice as a Work Place

The interviews clearly show that from the point of view of the architects interviewed, the profession is perceived as a male profession. From the point of view of the interviewees, men determine the image of architecture: they are more often represented in leading positions in practices and most clients are male

"The money is in the hands of men. And money and the architect belong together in so far as the client simply has to trust that his money has been properly invested. We can do that too. We women. Of course we can. Maybe even better sometimes, but never mind."

female, 62, professor + own practice / partnership

Architects are dependent on the trust of their clients, because they decide who to commission and must assume that the invested budget will be used responsibly. Women are considered to be less competent in dealing with finances. As a result, they are often in a position where they are exposed to mistrust and then have to prove themselves through extraordinary competence (Korfmacher, 2006).

"The management of all three areas, i.e. two architectural areas and one financial, consists of men. Above them there is also a man and above him another, and then above that one there is no one else (laughs).

female, 37, employed

The decisions on who is promoted in a practice are therefore usually made by men (the managers or practice owners), who then often decide to promote men because they assume they are like-minded. Thus the hierarchy is reproduced on the basis of gender lines. (Bielefeld, 2012).

"Why are there fewer women here in higher positions, as project managers or in even higher ones? (...) And then he said: Well, take a look around. Which of those women could be promoted? So it sounded as if there is no one there who could be promoted in any way. And at least fifty percent were women in this office. And that was of course a stark comment and also a completely wrong question, because the question is not: Who can I promote here? Because I can, of course. But every name that I'd say, he'd say: 'Yes, but she can't do that' or: 'She's too small' or: 'She doesn't look you in the eye' or they'd have some strange excuses sometimes. The question is rather: Are the men deployed there really better?"

female, 36, employed

The interviewee identifies a "macho way of thinking" (female, 36, employed), which consequently leads to the notion that women are only promoted if they exude "masculine" qualities - there is no recognition, appreciation or neutralisation in the sense of a de-thematisation of femininity. Moreover, the justification for the rejection of women in management positions seems to work on the basis of physical characteristics: Women are too small or too weak for a higher position.

"Especially since the big advantage was that they, of course, liked girls. Whenever only men were in the office, it was always nice to have a woman around. So they thought that was good then, as a hiring criterion, actually always an advantage"

Ffemale, 63, professor + own practice/partnership

The interviewee makes it clear that in her perception it can be an advantage to apply for a job as a female architect in a practice. Women who reduce the proportion of men in an architecture practice are perceived as pleasant. However, this description does not mention the professional qualification of female architects for the job, but rather they seem to qualify themselves more by their gender and thus as a welcome "change".

#### Construction Sites as a Working Place

In their everyday work, architects not only work in the office, but, depending on their area of responsibility, also on the building site. Construction sites are strongly male-coded places where women are an exception, regardless of their professional position. As a result of this special role, they are often the focus of attention and subject to more control than male architects (Schumacher, 2004). This is also described by one interviewee:

B: "Well, I was in construction management. The best line I ever heard was, "Are you looking for your Daddy?" I: "Super."

B: "(laughs) So women in construction is still an issue. Meanwhile there are unisex toilets. But I have experienced construction companies, for example companies that produce prefabricated parts and so on, where there is only one toilet for men. (...) So, as I said, as a woman in construction management, on the building site, not much has really changed. You have to have a certain basic attitude as a woman and immediately pull the ripcord.

female, 59, own practice/partnership

The infrastructure on construction sites is often not equipped to meet the needs of women, for example because basic facilities such as toilets are not available for women. However, female architects are not only subject to prejudice at the construction site, but are also openly discriminated against in some cases (Korfmacher, 2006).

The building site is also a place where technical competence is required, which is more likely to be attributed to male architects than to female architects (Paulitz, 2014). The perception on the building site that women architects are not capable of fulfilling their tasks as well as men also leads to their authority not being recognised, as is made apparent in the following quotation:

"And then on the building site, it becomes more physical. And you have to show that you're not squeamish. And even if you are squeamish, you can still convince with other things, but it takes time. Well, they don't trust you right away. They did what they wanted!"

female, 30, employed

Women architects must therefore "convince" (female, 30, employed), "pull the ripcord" (female, 59, own practice/partnership) and "make clear announcements" (Steindorfer, 2014). As a consequence, many female architects perceive the building site as an unpleasant place where it is particularly difficult for them to behave "correctly" (ibid.). They have to prove their abilities and fight against existing prejudices in order to perform their tasks on the construction site. However, the interview also makes it clear that female architects are quite successful in mastering these tasks and gaining recognition. "Well, I have worked with many [women architects]. And I asked them how they got along. And I know a lot of women who work in such positions, and they answer: 'Yes, well, I really have to fight my way through here or show them that I have to be taken seriously."

male, 50, mployed

"Female" and "Male" Characteristics - How Competences are Attributed to Gender

"Yes, maybe, but rather afterwards, as far as computer programs and so on were concerned. So all this IT and software and also the interest in software, I think, was higher among men. But maybe I am speaking more of myself, but I do think that is still the case. So all the architecture offices had IT people, often architects themselves, but always men. So, those who were very familiar with the programmes, who were also interested in how something works when I had long since switched off. Yes."

female, 36, employed

Professionalisation processes in architecture lead to a gendered allocation of competences. Women are determined to be interested in the "beautiful", the aesthetic, and thus are more likely to have competences comparable to those of interior designers. Therefore, women who introduce themselves as architects are often mistaken for interior designers (Balthasar, 2017). "The traditional assumption that female architects are best suited to designing homes and interiors is an expression of their low status in the profession rather than a specifically female characteristic" (Wajcman 1994, quoted after Schumacher, 2003, p. 5). Men, on the other hand, are more likely to be familiar with statics, finances and technical issues (Paulitz, 2014).

"(...) a woman got attention when she was always particularly tough, that is, when she came across as particularly tough, in the sense of having a bit of a masculine attitude, speaking a bit loudly. They were bawdy women who, when they come into the room, are present. You do need them, but a woman in her own right, if she's feminine and all that, well, she wasn't really on the radar. That was probably seen as more of a weakness actually."

female, 36, employed

As already mentioned, female architects seem to be more successful when they embody male attributes. Toughness in manner and speaking out loud are perceived as masculine and thus as a competence; doing or being like that can be an advantage for female architects. Female characteristics are perceived as weakness in the section quoted here.

"This can be achieved with strength, and that is, I believe that is, I believe that is also/ this is perhaps really something, an important component, I believe, that somehow is missing. This ability to stand up and say, oha, I'm not sure, or can you help me or help me, or. I don't know, maybe just admitting weaknesses, too. And not, yes, not seeing oneself in the role of having to know everything and being able to do everything. I think that is the best way to put it. And that is, I think, the ability that women simply have much, much more of, or can access much more quickly or as a matter of course, and what men do not have. And I believe that this leads to structures which unfortunately exist somehow, I believe, and which also lead to the fact that perhaps, I believe, women simply find it harder to cope."

male, 46, Drop-Out

Qualities that are perceived as masculine are thus upgraded, gualities that are perceived as feminine are devalued in return. This distinction is also relevant because in the position of site manager, it is primarily the skills described as male that are important. A study by the University of Siegen showed that it is more difficult for women to access site manager positions: Site managers are expected to have different leadership qualities, they should be able to work under pressure, endure unpleasant conflicts (i.e. also make unpopular decisions), and assert themselves on the construction site (Bielefeld, 2012). However, the hypothesis that female architects are rejected because of prejudices about their abilities is not tenable according to the study. Rather, the study comes to the conclusion that the lack of training in leadership skills and preparation for the construction manager position in the course of studies are responsible. The already burdened students and the full curriculum in architecture at the universities prevents a systematic consideration of these issues. However, students would have to be prepared during their studies to deal with stressful situations and learn how to deal with conflicts in the workplace. This is particularly important as the position of site manager plays such an important role in the qualification of architects and can be a prerequisite for admission to the Chamber of Architects.
#### Lack of Female Role Models

In addition, there seems to be a problem of representation of female managers as role models in the architectural sector.

"And there are of course many women and many women in management positions. But what I find interesting regarding the size of the practices is that only the male name actually appears in public. Or the male names are cited, are invited to juries. The fact that the women, who enter quite a lot of competitions in the background and influence the practice's designs and also lead teams, are not actually celebrated or reflected in this form."

female, 31, own practice

Female architects who hold a leading position in a practice are less likely than male architects to have the opportunity to appear in public and thus receive attention and recognition for their work. Internally, they are crucial to the success of the practice, but lack public or professional cultural prestige. Female architects who run a practice together with male partners suffer, as their position is misjudged.

"And for years I had a really tough time running the practice here with him. Because, as a rule, people come here and know, the owner is the architect. And where is HE, the architect? And even on the phone, an incredible number of people thought I was the secretary. Even though the studio also bears my name and I answer with my name. [...] And now that you mention it to me, I notice that it has been less of a bother to me for a while now, or maybe it has become less. But, I mean that many people come here and think there's an architecture practice here, the architect runs it and he also has a wife and a child. And they don't even notice that the practice also bears my name. And that affected me quite often then."

female, 36, own practice

The public invisibility of female architects who run their own offices or are involved as partners results in a lack of female role models for female students and young female architects (Schumacher, 2004).

"And in this respect, so yes, it was; I chose my professor because I was looking for a female architect as a role model, yes, or in the profession, so I also thought it was good to have as many young women as young men in the practice. Unfortunately, that did not work out at the time, as I said. And then I gave up the idea and years later we are almost all women in the practice (laughs). It's funny, but that's life, full of surprises."

female, 58, own practice/partner

"I think this is really a huge problem with role models. Yes, also with trusting. Now I don't really believe that the men who work there are really deliberately keeping the women small. I think it is more a matter of 'it's always been that way, so let's keep it that way'."

female, 50, drop-out

Female students and female architects need female role models to trust themselves with leadership positions. Examples of positive career paths also provide an insight into the opportunities for shaping one's own career and strategies for coping with the special challenges facing female architects. However, female professors are also outnumbered at universities, so that there is a lack of female role models even during the course of studies (Schumacher, 2004). Developing confidence in one's own abilities and competence is then crucial when choosing a career and for promotion. For only those who are convinced of their own abilities can exude this confidence to the outside world, in everyday life at the office or in job interviews. Respondents consider being able to present themselves well and competently in job interviews and making a convincing impression are crucial to their chances of getting a job.

"So the young ones/ there are twin attributes. Young, man, you wouldn't entrust him with anything. Young, woman, you can't entrust her with anything. But with the young man, somehow I experience this again and again. Young, man, he digs right in. Says: 'I can do it'. Young, woman, usually says: 'I'll see if I can do it'. So I often stop colleagues in their tracks and say: 'Stop! (laughs). "Let's talk for five minutes. Body language, choice of words. It is not only from one side, but it is simple, the market is saturated. architects. And they then simply / they then choose the male or female architect according to "do you know someone who is good"? And according to pedigree, according to appearance. And when you go into a shop and want to be served, you look for a competent, seemingly competent salesperson, saleswoman and there, too, it is appearance and not knowledge that counts."

female, 59, own practice/partner

For women to leave the convincing impression that they are competent architects, many factors certainly play a role. A strong identification with the occupation (cf. Chapter 5.2. Occupational Myth "The Creator") and role models to follow are helpful. There is also a need for a sustainable match between the qualities that are in demand on the labour market and those that you personally bring with you. Architects should perform, i.e. embody, the profession. As outlined above, it seems more difficult for women architects than for men to convey this impression (Mosberger, Salfinger, Kreiml, Pitz, & Schopf, 2007). This is not due to a lack of professional qualifications, but rather to the possibility of being able to represent these effortlessly in the field of work. This is exacerbated by a conflict of objectives facing female architects: there is evidence from research that women who appear competent in their profession are less popular (Heilman, Madeline E./Okimoto, Tyler G.). Women architects are therefore in the special position of having to choose between competence or collegial sympathy.

## Potential Motherhood and Thus Potential Loss as a Career-Inhibitor

As already described in Chapter 4.1., the issue of reconciling family and work is still more relevant for working mothers than for working fathers. However, even in the recruitment phase, female architects are often faced with the problem that they are excluded as applicants due to a potential absence during pregnancy or parental leave.

"Well, companies per se still prefer men to women." female, 31, own practice

"I can only imagine that it is because either the woman does not sell herself well enough or per se tends to drop out at some point."

ibid.

"But I found it quite extreme that they distinguish between a 29-year-old woman and a 29-year-old man, who at some stage could also be absent due to paternity leave. But somehow that hasn't hit home yet."

ibid.

The mere possibility that an employee might have a child in the future prevents employers from hiring or promoting her. Although parental leave also gives fathers the opportunity to stay at home after the birth of a child, this alternative seems to be considered less likely and therefore less important when hiring a "29-year-old man".

#### Conclusion

The impression that architecture is a male profession still exists among those interviewed. Although the student numbers give reason to hope otherwise, women are underrepresented, especially in management positions. At various points in this chapter it has become clear that female architects have to and do master special challenges in their profession. In further research it is interesting to find out how the "male profession" of architecture is gradually changing due to the presence of female architects and how female architects creatively deal with the challenges that this profession presents to them. Another research question is how women join forces to find better organisation through networks (Schumacher, 2004). For the snapshot described above cannot be understood as a rigid corset; on the contrary, the conditions in the architectural profession are constantly changing, especially due to the presence of women who set the agenda that is particularly relevant for them. A look at the symbolic level of this debate remains open: namely the image that architecture presents in professional culture and public debate. As is to be expected: The two sides overlap; as long as the image of architecture is perceived as having male characteristics, it will remain more difficult for women to assert themselves as architects. On the other hand, the high number of male managers does not help to change the image of architecture.

#### **Research Questions**

- How do female architects creatively deal with the image of architecture as a male domain?
- How does the presence of women in the field change architecture as a male domain?
- How is the working atmosphere in offices and on construction sites perceived?
- What role do questions of (potential) parenthood play in career decisions?
- What professional networks do women use to promote their careers and exchange information?
- What are the means by which female architects succeed in asserting themselves professionally? Do they face specific challenges
- How do architects choose to present themselves when marketing their activities?
- How does the fact that professors are usually appointed from practices and not from the university field affect appointments at universities?
- How do fathers experience the architectural profession?

## 5.2 Professional Myth "The Creator"

In addition to "hard" factors that can disadvantage female architects in their profession, there can also be "soft", hidden factors of which those involved are less aware. One of the main questions of this study is why many female architects do not reach management positions or establish their own practice. To find this out, we need to turn to these "soft" factors. Here, the concept of habitus, as formulated by Pierre Bourdieu, is particularly suitable for gaining an insight into these "soft" factors. The question now is to what extent professional field, habitus and gender are related.

Pierre Bourdieu assumes that society is characterised by autonomous fields which fulfil a certain social function and in which certain rules prevail. Fields continue to be characterised by an illusio, i.e. by the belief of the people in the field and in the rules and interests of the field. They take them for granted and therefore do not usually question them. Bourdieu uses the metaphor of a game here; the people in the field are the players who play by the rules, even though they have different positions and tasks within the field. They thus also reproduce the rules that prevail in the field.

However, the rules of the field are of even greater importance: Bourdieu points out that only those who acquire a habitus that allows them to participate in the field can be part of the field. Thus only those who internalise the rules of the game and identify with them can "play" (Bourdieu 1996; Krais 2000). Beate Krais has examined this phenomenon in the field of science and argues that "the self, the ego, is inseparably connected with the activities in the (...) field. (Krais, p.40, 2000). This means that the logic of the field, the interests that prevail in the field, are so closely linked to one's own interests and the commitment of the persons in the field that they connect with one's personality through the formation of a specific, field-dependent habitus, i.e. they are incorporated. Habitus is an embodiment of thought and vision in the human body, which is displayed in clothing, movement, eating habits, writing, language and much more. The habitus "sends out" "social signals as indicators of (...) performance

or capability, are there social (...) criteria for whether someone is considered innovative, capable, reliable, worthy of support, etc., whether he or she is believed to work hard, to have what it takes to achieve great (...) performance, and whether or not he or she ,belongs' or not. (Krais, p. 41, 2000).

This idea can certainly be transferred from the field of science to architecture, to query whether there is a specific habitus that shapes architects and thus connects profession and person. Particular attention is paid to the category of gender to ensure a view of how gender and professional habitus interact. In her analysis of the scientific field, Beate Krais already points out some rules that have a different effect on women than on men and points out that gender must always be taken into account if an accurate field analysis is to be carried out. The aim of the following chapter is to illuminate these mechanisms in architecture as well.

#### The Professional Habitus in Architecture

"In this case, the habitus [at work] is an internalised professional culture that varies according to the subject area" (Ihsen, p. 105, 2006). In everyday working life, a person is equipped with certain subject-related dispositions that shape his or her demeanour, professional actions and positioning in relation to the profession (Fuchs-Heinritz, 2011). In architecture, this professional habitus is defined by male characteristics: Indications of such a professional habitus can be "widespread clichés and prejudices about outward appearances, as well as typical work or behaviour patterns. These structures and ideas of the architectural profession are oriented towards male representatives, since women in architecture are not the result of a long tradition (...), but are rather a modern phenomenon" (cf. Heß 2012 quoted after Volpp, 2016).

The fact that the professional habitus is male-dominated is thus due to the fact that there has only been an increasing number of women architects since the 20th century. The professional habitus is described in the literature as a male "stylistic figure" that draws an ideal image of the architect. (Schumacher 2004)

It is the image of a man, "a genius even, willing to work around the clock to create outstanding architecture". (Weresch, 2012). Architects shape their own dress style: black, simple but stylish clothes, horn-rimmed glasses, trainers and short hair. Moreover, they do not see their profession as just work, but see it as a calling (Volpp, 2016). This is also apparent from surveys according to which almost 80% of students feel called to study architecture (Mosberger et al., 2007). The professional habitus goes beyond the sphere of work and for many people forms an anchor point of their development of identity, "which is expressed in specific language and thought structures." (Ihsen, 2008, p. 793). The following shows how the architects themselves interpret this image and what experiences they have made with the myth that seems to accompany their profession.

#### Idealised Notions of the Profession

"Well, I think public opinion still holds that this is a great, creative, and highly paid profession and that you only spend your time with beautiful things, right? Only with beauty, let's say. There are two sides to it. On the one hand, that an architect's opinion is highly regarded, when he says something, people rely on it. They say, "I'm sure the architect will have a great idea."

male, 50, employed

Architects are therefore, according to the interviewees, highly regarded in society. The reactions to the profession are mostly positive and outsiders assume that architects work in a versatile, creative field and are well paid. This creates a social image of architects as omniscient creators and problem solvers. For architects, this becomes a challenge that is also echoed in the interview excerpt: they are under great pressure to live up to this image. In another interview, it becomes clear that this idealised idea is created during the course of studies and often leads to disappointment at the start of the career.

When you then say, "I am an architect" or "I studied architecture", you always hear, "Oh, I wish I had done that. That's such a great profession'. Or 'Oh, how nice!', or something. So it is, so to speak, always connoted with a 'Yes, it's such a beautiful, creative profession. And you can create', and somehow, yes, it has an incredibly positive connotation. But when you ask architects or people who have studied architecture or who are practising this profession, all you hear is, well, let's say, usually frustrated, yes, stories or great dissatisfaction. And that does not correspond to this image of what is, so to speak, externally associated with this profession.

female, 41. Drop-Out

"Well, I wouldn't necessarily blame the university course itself, but I believe that this is actually a phenomenon that you find in society, as it were, that you find in films. So there's a cliché, a cliché of what you think an architect does, so to speak, or what the existence of an architect looks like, which I think is a bit romanticised."

ibid.

It is difficult for students to examine their romanticised idea of their future profession, as they often do not have any practical work experience. The interviewees have a more positive idea of their everyday working life than the everyday working life of an architect actually proves to be. However, the image is maintained during the course of studies, as reactions outside the university environment are usually positive when studies or career are mentioned. Through the self-portrayals of the mostly male teaching staff at universities in the subject of architecture, the ideal image is charged with male characteristics: A kind of student-master relationship often develops in which it is difficult for students to separate the qualities they associate with their teachers from their gender (Schumacher, 2004). The aforementioned lack of female role models at universities and in leading positions in architecture practices also has an effect here, as female architecture students have little opportunity to combine their visions with female role models.

#### An Ambivalent Relationship to the Professional Myth

Architects have an ambivalent relationship to this myth of the "creative creator": On the one hand, they often only realise in their everyday work that the profession involves less creative activities than they thought during their studies. The positive image, the professional myth, which was presented in their studies and in public, is often not reflected in their everyday working life. In addition, salaries are often low, which also does not correspond to the image presented. However, architects enjoy the high esteem and positive prejudices associated with their profession; they appreciate the positive feedback on their profession.

"Well me, maybe I'll say that here in town X everyone is an architect. That's why I don't get this 'Oh cool, an architect', but otherwise architecture is always very highly regarded. You get the feeling that you belong in this lawyer-doctor category, nobody knows the salaries, everyone thinks we're rich and (laughs)/ exactly, it's always a special profession. And I think that's nice. So when you say you are an architect, it always sounds very good (laughs)."

female, 30, employed

Part of the professional myth is also the idea that architects can freely develop their creativity and focus on their creations (Weresch, 2012). In practice, it then becomes clear to architects that they are often confronted with far more organisational tasks and bureaucratic restrictions. So in fact the creative side of the profession partly fades into the background.

"Because it is really like that, so what I find most exciting about the architectural process, that part of designing spaces and creating, that's naturally very limited in the real world of everyday work, I'll say. It is so much about standards, laws, about, let's say, trouble with the construction companies and so on. It was always like that, so that I thought well, this isn't, let's say, creative enough."

female, 41. Drop-Out

In their research on architectural studies in England, Johnson et al (2003) found that a study culture prevails in which long working hours and night shifts are required. If you were not able to do this, you would be considered as not having enough stamina and not being suitable for the profession. This idea is realistic insofar as architects are also required to be fully committed to their profession and to subordinate their private lives; they are urged to work overtime, weekends and to forgo holidays (Schumacher, 2004; Tramitz et al. 2011). This culture is problematic for several reasons: on the one hand, the idealised image of architecture makes it difficult to advocate fair and appropriate working hours and forms. The problems that arise from such a work situation appear as an individual problem and lead to self-doubt rather than criticism of the working conditions. Furthermore, it is hardly possible, especially for parents, to always prioritise their gainful employment. Yet it is precisely they who are particularly exposed to the expectations as professionals. Mothers, in this regard, again are especially vulnerable.

In addition, professional culture in architecture is characterised by informal careers in which there is room for discrimination, for example on the basis of gender, because career paths are not very predictable or predetermined and there are no uniform quality criteria for work (Schumacher, 2004). This means that, unlike other occupational groups where career paths are more predetermined and regular, disadvantages based on gender may be less obvious as there is no standard against which to compare a career. This interaction makes it more difficult for female architects to identify structural disadvantages based on gender and increases the probability that the career path will be judged as based solely on individual skills and decisions. "So from this perspective, I would say it is someone who combines different functions, who develops spaces, who can respond to needs, who integrates complex parameters and creates a building from them. And he thus moves in different reference spaces, sometimes individually, when you refer to the building core, but also in a social context, because you always formulate a position through your work.

Architects appear as designers who solve different, complex tasks and position themselves socially through their activities. The multitude of activities an architect can and must perform makes this clear. This image of the architect as an "all-rounder" leads to high demands in both work and private life.

"I think the picture is already a bit distorted to what it really is, that even in public, people always think that these are the people who have a lot of money, who know about everything. And well, that's the way it is, you somehow have to know about everything, but you always have to fight your way through and you're not the sterile, cold person that people may think and above all you're not the one who always drives up with a Porsche to the construction site and kicks up a fuss. But somehow you're a human being with a reasonable attitude towards all people. And I think that the picture that is usually conveyed, in a way, is perhaps a bit old-fashioned or just no longer up-to-date.

male, 31, employed

The image of architects as all-rounders could be particularly important for female architects. Mosberger et al. (2007) and Schumacher (2004) found that women in surveys cited their interest in the milieu rather than their own skills as the reason for their decision to study architecture. If they are less likely than their male colleagues to see their competences as a decisive factor for their studies, they could be intimidated more quickly by high expectations. These expectations could be all the more challenging for them, if they do not feel that they are naturally part of the group of architects. Further research would be needed to find out whether female architects deal with the pressure of expectations of their profession differently.

### A Change in Professional Habitus?

"To some extent, there's a kind of elitist attitude of the architects themselves. Well, I also experienced this myself in my student days, professors who walked through the auditorium in white starched shirts and a sketch roll under their arms and a Montblanc pen stuck in their shirt pocket, and I always found it a bit clichéd. And whatever, I just thought was a bit over the top, and yes, I certainly believe that there are many who somehow overestimate themselves a bit, and yes, who not only see themselves as part of the whole, but also see themselves as superior in a way, and I believe that this is the general image of the architect [in public]."

In this quote, the interviewee refers to his concept of the professional habitus in architecture. He has discovered certain insignia typical for the architect (starched shirt, sketch roll under his arm and a Montblanc pen in his hand), which he identifies as "clichéd". With this dress and their demeanour, architects intend to reflect the conception of themselves as an elite. He clearly distinguishes this general image of architects from his own perception and further diagnoses a change in the professional image: the architect becomes a partner and link:

"Although I think it has already changed, especially in the last ten to fifteen years, I think. So, I believe that the architect is again seen more as a partner, as a link between the client as the builder and contractor, yes, [incomprehensible] and all others involved, yes, [incomprehensible]. And it certainly has something to do with the fact that the profession has shed at least some of its vanity. Which was also desperately needed."

ibid.

It would be interesting to find out whether the change indicated here is also due to the higher number of female architects who have helped to shape a different professional habitus. The idea that the professional myth could change due to the higher number of women in professional practice is also indicated in the following interview excerpt: "An important component, I think, that the profession is somehow lacking. The ability to stand up and say, whoa, I'm not sure, or can you help me, or. I don't know, maybe just admitting or allowing for weaknesses as well. And not, yes, not seeing oneself in the role of having to know everything and being able to do everything. I think that is the best way to put it. And that is, I think, is a quality women simply have much, much more of and admit more quickly or as a matter of course, and what men do not have. And I believe that this leads to these structures, which unfortunately do exist, I believe, and which also, I think, lead to the fact that women find it more difficult (...)".

ibid.

The above extract sees gender differences in the way mistakes are dealt with: according to the interview, women have a better ability to admit to themselves and others when they have made a mistake and to acknowledge their own weaknesses. Men do not do this. However, this is difficult for women because neither weaknesses nor mistakes are accepted in the professional culture. There is a pressure to present oneself as omniscient (matching the idealised image of architects as "all-rounders"). As in other creative professions, self-presentation is of great importance. This is intended to fuel the idea that the architect "merges" with his/her work "merge" thus fulfilling the professional ideal (Heß, 2012, p. 458). It would be worth investigating whether women architects cultivate a different image in how they portray and stage themselves and if they do so in a less career-oriented way than male architects.

#### Conclusion

The architectural profession is characterised by a certain professional habitus, which assigns certain characteristics to architects and draws a certain idealised picture of their abilities. To what extent this professional myth of the "creator" is in flux and is being changed, especially by women, remains open. However, there are indications that women find it more difficult to identify with the male-dominated image of architects. Due to the fusion of field-specific habitus and masculinity, it is structurally difficult to assert oneself as an architect whilst not denying a female identity (Schumacher 2004). This difficulty in identifying with the professional myth could be a reason for their leaving the profession or for having less successful career paths: It is not possible to oppose a professional culture without consequences, even if one may reject it in terms of content, because identification with the profession and with the image associated with it facilitates professional success (Ihsen 2008). For a realistic occupational profile and for positioning after graduation, it would therefore make sense to find gender-sensitive forms of teaching in higher education, and study actual everyday working life in more detail (Schumacher, 2004). This would benefit everyone, certainly men too.

### **Research Questions**

- What measures would reduce disappointment when starting work?
- How exactly can the relationship of architects to the professional myth be interpreted?
- To what extent does the professional myth contribute to making it more difficult for women to identify with the profession?
- Why is the professional myth in architecture so persistent in comparison to other professions?
- How do male architects situate themselves in the ethos of creativity in architecture?
- How do women deal creatively with the professional myth in architecture, how do they find their own interpretations?
- How do new working time models affect the architecture industry?
- What innovative forms of working time organisation are there?

## 5.3 Figures, Data, Facts

### Women Architects in the Public Eye

In the public eye, architecture is still a male domain. This is supported by the narrative, in which an entire team consisting of both genders is reduced to a supposedly leading head. This is usually the man (mentioned in the practice name, for example). Even if the partner is at least as well known among experts, the man often appears in public. In the course of the study, we counted and graphically recorded the lecturers of the past 10 years in the Architekturgalerie München. The picture is clear: the proportion of female lecturers or exhibitors at Architekturgalerie München is between 18% and 38%. A comparable picture emerges when the German Architecture Award is granted. Not to mention the most important prize in architecture, the Pritzker Prize, which has been awarded annually for almost forty years. A woman has won it twice so far. The lack of equality became most obvious during the award of the Pritzker Prize, when Denise Scott Brown unsuccessfully called for a prize "in retrospect" in 2013. When Robert Venturi received this prize in 1991, explicitly in recognition of his life's work, and amongst others for one of the most important books of postmodernism: "Learning from Las Vegas" from 1972. His long-time partner and co-author of the book, Denise Scott Brown, went away empty-handed.



#### Lecturers and Exhibitors at the Architekturgalerie Munich

## German Architecture Award



Fig. 9: Source: German Architecture Award. Source : German Architecture Award, https://www.bbr.bund.de/BBR/DE/WettbewerbeAusschreibungen/DeutscherArchitekturpreis/Architekturpreis\_node.html

The issue of public appearance is closely related to self-presentation: self-staging among architects becomes most evident when master builders and their work merge. This relationship reinforces the formative and advertising character of architects' self-presentation (Heß, 2012, p. 458). The fact that architects also use the marketing strategies of global media, similar to those in the film and music industry, is demonstrated by celebrities such as the late Zaha Hadid or Rem Koolhaas. They have managed to shape their public image, having initially been known only within their profession (Hess, 2012, p. 460). The German architect Stefan Behnisch said the following about self-dramatisation among architects: "You have to be an entertainer, you have to be convinced of yourself, you have to be able to present and sell your-self". (Behnisch in Tramitz/ Bachmann/ Myrzik 2011: 114 (Volpp 2016, p. 20).



Fig. 10: "Solange" (As Long As), Katharina Cibulka: "as long as I talk about career and you mean family management, I am a feminist"

## 6. Research in Literature

Not much literature is available on the general problems faced by female architects in the early stages of their vocational training (e.g. Eichhorn 2013, Jautz 2000, Marwich 1992, Wetterer 1994). There is clearly a need for research, especially on university studies (Groihofer 2013, Kuhlmann 2012 Spiegel 2016), career entry (Adams 2016) and career development (Adams 2016, Jautz 2000).

On the other hand, there is more literature on the main category of specialist culture in architecture, which usually deals indirectly with specialist culture and the challenges for women in architecture (including Heß 2012, Kullack 2011, Marwich 1992, Schindler 2008, Schuhmacher 2004, Volpp 2016, Weiske 2001). No explicit literature could be found regarding concrete similarities and differences to the engineering sciences. Here, too, there is a need for research.

The fact that the compatibility of family & work is still a problem in the career of female architects and often leads to a drop out (Dörries 2011, Grewe 2018, Volpp 2016) is repeatedly emphasised in literature (Dörries 2011a, Dörries 2011b, Goebel 1997, Grewe 2018, Matzig 2018). Since the specific professional culture is already manifested in the teaching process, it is suggested that a gender-critical approach should be implemented during training or in teaching (Bielefeld 2012, 1989).

A relatively large amount of literature can be assigned to the main category Gender & Architecture. It ranges from current gender relations (e.g. Bauriedl et al. 2010), the early pioneers in the field (e.g. Dörhöfer 2004), to space, power and difference in architecture (Kuhlmann 2012). Important subcategories here are gender difference and inequality in the professional field of architecture (Buchmüller 1993, Dörhöfer 2004?) - with a relatively small number of literary works - and the two dominant subcategories 'women building' (including Adams 2016, Becker et al. 2013, Zieher 1999) and 'feminist architecture' (ibid.; Erlemann 1982, Kaufmann o.A., Marwich 1991, Nierhaus et al. 2002). Whether and how a differentiation can be made here between 'women building' and 'feminist architecture' must be further examined. In addition, the sub-item on gender-equitable building was added, as this point was explicitly addressed in several sources (e.g. Altenstraßer 2007, Buchmüller 1993).

Research has also shown that women architects are well networked (including baufrauen, DVDP, FOPA, IAWA, PIA, n-ails, genderWerk). An analysis of the (self-determined) presence and visibility of women architects could be very useful here.

The largest amount of literature could be found on women architects in history. The focus here is primarily on female architects who have shaped the discipline (e.g. Bauer et al. 2004, Budde et al. 2017, Dörhöfer 2004, Droste 2001, Frey et al. 2015, Holzschuh 2014, Maasberg 2005, Oberessl 2013, Ricon Baldessarini 2001, Stojanik 1995). An additional subcategory is exhibitions, congresses and symposia that focus on the work and achievements of women architects (e.g. Frau Architekt, Yes we plan- Architectinnen Symposium in the DAM). A more in-depth analysis of these could also prove very fruitful.

# 7. Conclusion

The large number and variety of open research questions shows the need for further research. The complexity of such a research project requires different methodological approaches in order to do justice to all questions and research objectives. At the same time, the empirical and quantitative evidence of the study and its visualisation make it very clear that gender in the architectural profession is a topic that cannot be solved by waiting and waiting alone. The information available must already now be an incentive for change and the development of a new culture in the architectural sector! On the basis of the available results, a research proposal will be formulated that implements necessary, in-depth questions and develops action-oriented concepts for architecture faculties and their cooperation partners.

#### **Research Questions**

University Studies:

- Investigation of students' motivation and expectations before, during and after graduation in architecture with a focus on possible gender aspects (e.g. role models, professional practice, life plans, gender connotations of specific fields and practices, etc.) V
- Change in career expectations during the course of study
- Graduates: graduate destination study, career development, fields of activity
- Investigation of the development scenarios in the years after graduation in architecture

Architecture Practice | Universities:

- In-depth investigation of the dimensions and obstacles to career development of women in higher education and architectural practice.
- Determination of cross-university data regarding gender distribution of academic staff / doctoral students / professors at German architecture faculties.
- Investigation of change processes at universities and architecture faculties through gender and diversity oriented measures such as target agreements.
- Registration of all persons working in the architectural profession (beyond chamber membership) and their forms of employment.
- Records of the time elapsed between entering the study programme and joining the Chamber of Architects.
- Investigation of structural causes for the incompatibility of the architectural profession and parenthood.
- Impact of innovative forms of work on the reconciliation of work and family life.
- How do architects shape their paternity?

Professional Culture:

- Is the professional myth in architecture particularly persistent compared to other professions? If so: why?
- Are there gender differences in terms of professional ethics? Are dimensions of the occupational profile marked by gender?
- How are male architects positioned in the ethos of creativity in architecture?
- To what extent does the occupational myth contribute to making it more difficult for women to identify with the profession?
- How does the presence of women in the field change the male domain of architecture?
- What professional networks do women use to promote their careers and exchange information?
- How does the fact that professors are usually appointed from practice rather than from the university field affect appointments at universities?

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- Figure 1: Scientific staff at the department of architecture (TU Munich). Source: TU Munich
- Figure 2: SHE FIGURES Gender in Research and Innovation. Source: Women in Science
- database, DG Research and Innovation and Eurostat Education Statistics (online data

code: educ\_grad5)

- Image 3: Photo: Matthias Kestel, retrieved on June, 3 2019 from https://www.ar.tum. de/studiengaenge/bachelor/ba-architektur/
- Figure 4: Comparison of female graduates and chamber admissions of female architects (7 years to entry). Source: Data sets can be obtained from the following regional chambers on request. Berlin, Rhineland-Palatinate, Hesse, North Rhine-Westphalia, Saxony, Saxony-Anhalt, Hamburg (2013-2017 only), Mecklenburg-Western Pomerania, Bayer. \*Change of chambers is partly also listed under new entry in the statistics.
- Figure 5: Proportion of female and male full-time and part-time employees. Quelle: Bundesarchitektenkammer, Broschüre Gehaltsbefragung 2015, retrieved on October 4, 2018 from https://www.bak.de/w/files/bak/07-daten-und-fakten/architektenbefragungen/gehaltsumfrage/broschuere\_gehaltsbefragung2015.pdf

Figure 6: Gender Pay Gap,

- Average gross monthly earnings of employees in architecture and engineering firms. Federal Statistical Office, Employee Earnings 2017, page 140, Published March 2018. Retrieved on October 4, 2018 from https://de.statista.com/statistik/daten/ studie/819771/umfrage/bruttomonatsverdienst-von-arbeitnehmern-in-architektur-und-ingenieurbueros/
- Image 7: Ingrid Kuhler's office staff: Ruth Jureczek and Irene Keil, 1980ties, photo: Marina Auder
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- Figure 9: German Architecture Award. Source: German Architecture Award, retrieved on October 4, 2018 from https://www.bbr.bund.de/BBR/DE/WettbewerbeAusschreibungen/DeutscherArchitekturpreis/Architekturpreis\_node.html
- Image 10: "Solange" ["As long as"], photo: Katharina Cibulka, retrieved on June, 3, 2019 from http://www.katharina-cibulka.com/solange.html

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# 10. Imprint

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#### Funding:

Technical University of Munich Gender & Diversity Incentive Fund (GDIF) Funded under the Excellence Initiative by the federal and state governments department of architecture

Duration: 01/2018 - 12/2018

### Translation:

Selina Gullery

#### Special thanks to:

The interviewees for their valuable contributions to our study.

