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A Seat at the Table

A qualitative study of gender-inequality in the architecture sector and its implications on the purpose of the urban design of the public space in Rotterdam

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A Seat at the Table

Abstract

Men retain a significant dominance in the architecture sector since female architects occupy only 23% of the workforce in the Netherlands. While women account for 50% of architecture students enrolled in academies and universities, yet their presence in the professional domain is markedly underrepresented. To investigate gender-inequality in the architecture and urban planning sector in Rotterdam and its implications on the purpose of urban design, the following research question is designed: How is gender-inequality in the architectural sector perceived by architects and urban planners operating in Rotterdam? This research is of qualitative nature. Data was gathered through twelve semi-structured interviews with fourteen participants, including partners and founders, associate partners and (senior) urban planners or architects, junior architects, students, and interns. The research showed that, despite progress due to uprising feminism, gender-inequality is present in the workplace of architecture firms in Rotterdam in terms of the gender pay gap, disadvantages in career progression for women, ignoring women, sexism, and misogyny. Genderinequality flourishes in a patriarchal architectural culture of high masculinity, working overtime, low financial compensation, the Maternal Wall Bias, and a lack of flexibility, appreciation, and trust. Moreover, discriminatory practices targeting international and ethnic groups exacerbate the intersectional challenges faced by female workers from these demographic categories. Nevertheless, change is in progress and new generations of architects by students protesting outdated standards of teachers who normalise this toxic working culture, junior architects refusing overtime and negotiating with management regarding promotions and salaries, and architects advocating a healthy work-life balance and cultural diversity in the office. This is important since architects and urban planners carry the responsibility to ensure social sustainability and improve social capital, which can only be accomplished by designing inclusively. The lack of resources, low salaries and poor working conditions are the cause of a feminine drain and a lack of diversity in the workplace, as women prefer to pursue a profession that maintains a healthy work-life balance, leaving an urban infrastructure based on the male perspective and not on the requirements of women. Since architecture and urban planning firms do not have the financial funds to hire experts regarding economy, sociology, and anthropology, or to realise a participatory design process with urban residents, it would be an economic advantage for management to embrace diversity by means of gender and ethnicities within the offices.

Keywords: architecture, urban planning, gender-inequality, equity, cross-cultural management, cultural dimensions, social sustainability, social capital, urban policies, feminism, sexism, gender segregation, Maternal Wall Bias, inclusivity, diversity, work-life balance, female labour participation

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1. Introduction

1.1. Thesis Aim

The Covid-19 pandemic between 2019-2022 was catastrophic for the architecture sector since it is highly dependent on the socio-economic state of society (Abyzov, 2017; Escalona-Orcao et al., 2020). Not only did the aftermath of the pandemic bring housing construction to an immediate halt (Airgood-Obrycki, 2020), the number of employees in architectural offices also sharply reduced (Bahadursingh, 2023). Under the guise of 'survival of the fittest' and due to high costs in construction and the stoppage of 40% of the projects (Abidi & Irshad, 2020), many people on temporary contracts within architectural firms are being layed-off in a period from 2019-2023. I, as a Business Development Officer, employed at an established architecture firm in Rotterdam, had to face the negative consequences as well. Additionally to this disruption within the architecture sector and the detrimental consequences of the absence of job security during periods of increased inflation, the lingering question emerges: If all these qualified people must leave the sector, who is left to run the business?

The architecture sector is known as a heavily male-dominated industry. Female architects make up for only 23% of the architectural workforce and managerial positions are mainly held by men since 10% is reserved for women. In addition, salary is unequally distributed with a 25% gap in favour of men in Europe

(Schuster, 2021). According to architectural historian Catja Edens, the male default is deeply rooted in architectural history. Men have always had a dominant and decisive role within the sector in classifying what is deemed 'good' architecture. Women's contributions are hardly recognised since they are omitted from relevant literature, projects are wrongly attributed to male architects, and women are photoshopped out of group portraits with their male colleagues (Image 1). Consequently, the historiography of architecture is biased, leaving the women within this profession at an unequal disadvantage regarding promotions and salary increments, and lacking role models for future female architects (Pit, 2021). Considering the issues mentioned, it can be stated that there is a severe gender gap in the workspaces of architectural firms and it requires a deeper analysis to identify the causes and effects.

The literature scrutinised describes the rise of women within architecture, traced to the first and second feminist wave, but since 1990, little literature is known on how women have infiltrated and contributed to architecture (Air Rotterdam, 2021). Nevertheless, for future





Image 1: Patty Hopkins removed from a group portrait with her colleagues (Quirk, 2014).

generations of architects and for the well-being of society with regards to ensuring an urban infrastructure accommodating diversity, it is essential to conduct research on the position of women within architecture and urban planning for policy implementation related to inclusive workforces. Even though the tireless efforts of feminist for equitable opportunities in society (Freedman, 2003), the literature of Sang et al. (2014) reveals that the culture in architecture firms is not as inclusive as desired. Their research characterises this sector as controlling, aggressive, and macho, and embodying traits typically associated with hyper masculinity.

According to Air Rotterdam (2021), the harsh working culture of architecture is still a difficult subject among women, often resulting in reluctance to discuss personal experiences and perspectives concerning gender-inequality. The causing lack of female perspective on the situation encourages to further analyse the issue. Literature also reveals that universities have a division of 50/50 between male and female students, but this equal share of women shrinks in the labour market to 18% (Lau, 2014). Why the remaining 32% of the female architects is not employed and women are under represented in the sector is unclear and cause for further investigation.

1.2. Scientific and Societal Relevance

This research provides insight into gender-inequality in workplaces of Rotterdam based architecture firms and implications of gender-inequality on the practice of urban design. It is scientifically relevant to gather new information from the architects' perspective concerning this problem statement, since most literature is dated and not useful anymore such as the studies of Sang et al. from 2014, Fowler and Wilson in 2004, and Greed (1994). Architectural historian Charlotte Thomas believes that the feminist waves are connected to the rise of women within architecture and concludes, as the third feminist wave is still happening, little to no research is done regarding working women in today's architecture sector (Air Rotterdam, 2021). The aim is to remedy this shortage of information by interviewing current workers in the labour market. In this way, the academic research gap on perceptions of people who deal with the current architecture culture will be narrowed. Centuries ago, women fought for a place in the labour market to achieve economic and social independence (Azmanova, 2016; Freedman, 2003). If gender-inequality is still felt in 2023 and women are consequently mistreated, there is an urgent need to explore this issue for women in architecture today and for future generations.

It is relevant to examine gender-inequality in architecture and urban planning since this sector has the social responsibility to design cities for citizens and their needs (Kefayati & Moztarzadeh, 2015). Public spaces should be designed to represent diverse identities (Polèse & Stren, 2000). A lack of inclusivity in the workspaces of architectural firms could be noticeable in urban infrastructure, which could have negative consequences for the social sustainability, social capital, and well-being of urban residents. Rotterdam is a modern city and inextricably linked to architecture. The headquarters of starchitects like OMA and MVRDV are Rotterdam based and with iconic designs such as Erasmusbrug, Kubuswoningen and the Markthal, it is one of the global capitals of contemporary architecture (National Geographic, 2021). Moreover, Rotterdam was rebuilt after the WW2 bombing in 1940, which provided an opportunity to design inclusively. By specifying this study to Rotterdam, this research infiltrates the core of the architectural world.

1.3. Research Questions and Objectives

The research questions of this study examine if and how gender-inequality is perceived in the workplaces of architecture and urbanism offices in Rotterdam from the perspective of the employees, such as Rotterdam based architects and urban planners, female students, or former female architects. To elaborate on the context of gender-inequality in architecture, sub-questions on societal-cultural factors are created grounded on the literature broken down in the theoretical framework. Based on this review of selected themes as architecture (Sang et.al, 2014), feminism (Criado Perez, 2019), and sexism (Bobbitt-Zeher, 2011), several subquestions

were established to obtain additional information: What are the characteristics of the working culture of the architecture sector in Rotterdam? What is the origin of gender-inequality within architecture in Rotterdam? To what extent and in which ways does gender-inequality manifest itself in this specific context? What are the consequences of gender-inequality in the architecture workplace and urbanism projects? What measures are necessary to improve the situation regarding gender-inequality in architecture?

The aim of this research was to gain a rich understanding of the causes and consequences of gender-inequality in the workplace of architecture firms and the implications of gender-inequality on the purpose of urban design. This study demonstrates the extent to which gender inclusivity is prioritised within architectural firms, as well as it explores the experiences of architects with regards to gender-inequality. Specifically, the research sheds light on ways in which firms and individual architects work towards promoting greater equality in the workplace, whether through regulatory frameworks or ethical practices. Furthermore, the study provides insight into the disparities between the ratios of men and women in both universities and the professional field. According to the literature, there are several reasons why female architects leave the profession that required empirical evidence to confirm or reject. Additionally, the results of this research aim to clarify the role of women in the architecture industry and their share in representing their needs in urban planning and architecture projects. Ultimately, the purpose of this study was to explore and describe the cultural and economic values of a gender-inclusive architectural and urban planning sector in the Netherlands. This information can serve as a foundation for future research on gender-aware urbanism in Rotterdam and can be used in comparative studies in various cities and sectors, with the intention to build upon the knowledge obtained during this study.

1.4. Summary Research Design

This study is based on a qualitative research design and conducted via a literature review and semi-structured interviews, with elements of exploratory and descriptive research (Bryman, 2016). The sample consisted of fourteen men and women between the age of 23-58 years. They are/were employed in micro, small, and medium firms within the architecture and urban planning sector in Rotterdam that differ in years of establishment from 4.5 to 30 years. The sample included partners, founders, associate partners, senior architects and urban planners, architect and urban planners, architects who left the profession, and architect students and/or interns (appendix 7.4. Participants' Profiles). The data obtained from the interviews with the participants is transcribed verbatim and coded via Atlas.ti. Due to the qualitative nature of this study, an interpretive approach was used, whereby the researcher's interpretation of social constructivism in architecture is re-evaluated throughout the research process (Bryman, 2016; Denzin, & Lincoln, 2018). By reviewing previous studies (Auerbach et al., 2003), models and themes are extracted to create interviews guides and code groups. The coding process started with open coding, continued with axial coding and ended with generic concepts, on which the result section of the thesis is grounded (appendix 7.2. Code List) (Glaser & Strauss, 2009). Based on the literature and findings, a discussion highlights the study results, including recommendations. The research adopted both an inductive and deductive approach, since it investigated patterns of subjective experiences based on grounded theory (Bryman, 2016; Thomas, 2006).

The study is structured as follows: First, the gender-based variances in societal context are theorised concerning the origin of feminism, equity, and equality in terms of the needs of women. Secondly, female

labour participation, which included gender biases, discrimination, and occupational gender segregation, will be discussed. Furthermore, this thesis dives into the architecture work ethic and culture regarding the vulnerability of the cultural discipline, the managerial and cultural structures, and how both contribute to gender-inequality in offices. These identified themes from the theoretical framework are examined and results are expressed in the findings. Subsequently, the implications of the purpose of urban design concerning social sustainability and social capital are scrutinised. Some examples of policies reinforcing female labour participation are listed and the discussion is fed with managerial alterations. Lastly, the conclusion, limitations, and recommendations for future investigation are constructed.

2. Theoretical Framework

2.1. Gender Based Variances in Societal Context

2.1.1. Shifting Dynamics of Gender Roles Across Centuries

Since ancient times of humankind, women are perceived as inferior to men within all aspects of human society. It is an old ideology that goes as far back as the human evolution, which is claimed we attribute to men by 75 anthropologists (70 of whom were men) during a symposium in 1966 at the University of Chicago on primitive hunter-gather societies (Slocum, 1975). They discussed the centrality of hunting in the human evolution and development of humankind with the consensus that we can owe our developed separation from apes in terms of biology and psychology primarily to the hunters of past times (Criado Perez, 2019). This theory raises issues regarding female evolution since women are portrayed in historic documentation as gatherers (Dahlberg, 1981), which is a misconception of reality; women were also present on the battlefield in war over centuries. From the bones unearthed from more than 1000 Scythians burial mounds in Ukraine and Central Asia, it appears that 37% of Scythian women and girls were active warriors (Criado Perez, 2019). An anthropological study reveals that across the Americas, 30-50% of big game hunters have been biologically female (Haas et al., 2020).

Worldwide, women were warriors, hunters, and heroes¹, yet the dichotomy in which men are identified as creators of society and women are subservient to the patriarchy is still felt in various cornerstones of civilisation such as language, healthcare, education, and public policy (Criado Perez, 2019). Awareness about socially accepted inequality is raised over decades by writers, philosophers, and feminists, among



















Image 2: Female warriors in ancient times (Brevner, 2019).

whom Simone de Beauvoir, who wrote in 1949: "Representation of the world, like the world itself, is the work of men; they describe it from their own point of view, which they mistake for absolute truth" (De Beauvoir, 1949, cited by Criado Perez, 2019). This perception of the truth results in a gender data gap that changed the role of women in human evolution over centuries (Criado Perez, 2019).

Feminism is the social movement or political ideology that originated from the dissatisfaction against the standardisation of men's needs and changed women's lives two centuries ago. The term originated in 1890 in France as *féminisme*, which connoted that women's issues belonged to the vanguard of change

¹ Image 2. L-R: 1. CA 1200 B.C., Fu Hao, Shang, Dynasty general, 2. CA 358-320 B.C., Cynane, Macedonian leader, 3. CA A.D. 361-411, Mawiyya, Anti-Roman rebel, 4. 1582-1663, Njinga, West African queen, 5. 1780-1862, Juana Azurduy de Padilla, South American rebel, 6. 1771-1825, Laskarina Boublina, Greek War commander, 7. CA 1840-1889, Lozen, Apache warrior, 8. 1847-1868, Nakano Takeko, Japanese samurai, 9. 1892-1973, Milunka Savic, Serbian war hero.

(Freedman, 2003). Ever since, this seek for gender inclusiveness is a social issue that cannot be ignored. This profound structural change has occurred under pressure from progressive feminist movements that question the debate on traditional gender roles. Three feministic waves have been counted in the history of the Netherlands. The first movement arose from women's desire to be allowed to vote, which resulted in suffrage for women in 1919. The second feminist wave was marked by the founding of the Man-Vrouw Maatschappij² in 1968. It is followed by demonstrations of the protest group Dolle Mina's in 1969, with their renowned demand for access to safe abortion. The third feminist wave is the revival of a renewed form of feminism from the mid-1990s onwards, in which self-development, freedom of choice, and discriminatory practices from new cultures are paramount (AIR Rotterdam, 2021). As part of the larger movement for equal rights, feminist mobilisations addressed a broad spectrum of economic, political and cultural dimensions of the division of power that entailed discrimination against women. The political struggle focused on the stigmatisation of women as caregivers and the devaluation of this role relative to that of the male breadwinner. Laws limited women's opportunities to be active in the labour market (Azmanova, 2016). Until 1956, all married women were incapacitated and could not enter into contracts or make large purchases (Stichting VHV, 2021). The division between the homemaker and the breadwinner within the household was considered by women as a double subjugation which arose from both the paternalism of a traditional family model, which claims the man as the head of the household, and the social and financial dependence on the husband. Demanding and eventually gaining access to the labour market was a logical and direct way to both economic and social emancipation, since social recognition and economic independence stem almost exclusively from one's participation in economic production (Azmanova, 2016). Through aforementioned persistence, Corry Tendeloo's³ motion was passed though the House of Representatives by a slim majority in 1955, allowing married women to infiltrate the labour market in the Netherlands (Stichting VHV, 2021).

2.1.2. Equity vs. Equality in a Male-Dominated Society

Many scholars have researched equality and equity in sociological and economic fields. These terms are inextricably linked and often incorrectly used as synonyms. Various definitions have been attributed to both terms within the social sciences and the humanities, and the definitions are extensively in conflict within different fields of research. According to Kahn et al. (1980), the equity formulation implicates that resources and rewards should be allocated in accordance to the contribution of the person in question. The greater the input, the greater this person will be rewarded. Equity refers to 'fairness' or 'justice' and is therefore distinguished from equality. Generally, equality means that rewards, opportunities, and resources are distributed equally among different individuals, regardless of different welfare prosperities, backgrounds, genders, race, and ethnicities. Espinoza (2007) states that within education, equity is perceived as providing tailor-made solutions to ensure equality for every individual taking their personal circumstances into consideration. Education reformers embrace equity rather than equality since it rejects identical resources and meet the needs of different students. Equality suggest that every student will be provided with the same experience and equity overcomes the historical legacy of discrimination, marginalisation, and underinvestment that disadvantages minorities.

² Translated: Men-Women Society.

³ Dutch politician and feminist (1897-1956).

From the ideology of feminism that aims to gain the equal opportunities and treatment for women in a patriarchal society, one might think that equity is therefore perceived as an aspiration, which is incorrect reasoning. The Convention on the Elimination of All Forms of Discrimination against Women in New York expressed in 2009 political human-right based critique on replacement of the term equality and states that equity is an illusive goal which allows governments all types of justification when they fall short, whereas equality is a human right. Therefore, equality is a legal obligation that must be respected, protected, and fulfilled by governments. Equity is subjective, a societal goal, or a political ambition. At the current state, the measure of equality is androcentric in which the male perspective is the norm for human experiences. As a result, equality is formed based on male references, which means that women have to be more like men and men do not have to be more like women. To obtain equality among those genders, women must not be treated identically as men, but rather as human beings, which is a status that men already enjoy since the male perspective is the framework for human rights. Women are demanding equality that translates into whatever treatment enhances the enjoyment by both sexes of all human rights and eliminates all forms of discrimination against women. The term equality is measurable and obligates a state of intervention to achieve this goal, equity is a subjective term that can mean different things to people and does not demand action by the state (Facio A., Morgan M.I., 2009).

The above descriptions show that, depending on the areas of research across different disciplines, overlapping features and different versions of equality and equity appear rather than sharp contrasts. In this study, both equity and equality are perceived as valuable principles to ensure a well-functioning society. In the pursuit of achieving equality, equity serves as an intermediary rather than a final objective. Without tailor-made solutions for different minorities regarding gender, race, gender, social background, and ethnicity, equality as a human right will not be achieved.

2.2. Female Labour Participation

2.2.1. Gender Bias and Discrimination: Sexism in the Labour Market

Although women have successfully fought for their place in the labour market, social and financial gender stigmatisation is still accurate (Bobbitt-Zeher, 2011). Sexism in the labour market includes discriminatory practices and biases that disadvantage individuals in professional matters. It involves treating workers unequally and unfairly because of their gender, which has impact on job opportunities, salaries, promotions, and work experiences (Bobbitt-Zeher, 2011; Stamarski & Hing, 2015). Discrimination against women flourishes in a patriarchal construct in which men dominate women in many aspects of life, including politics, economics, family structures, and cultural norms (Lerner, 1995). Patriarchy is deeply rooted in society and the negative consequences are toxic expressions of sexual objectification, intersectionality, sexism, and misogyny. Intersectionality involves overlapping discrimination, based on different aspects of an identity that are disadvantageous within a society dominated by white cisgender able-bodied heterosexual men (Carastathis, 2014). An example would be a queer woman of colour who experiences racism, sexism, tokenism, and homophobia. Misogyny is a form of sexist attitudes and behaviours, sexual harassment, gender-based violence, pathological dislike of women, and the devaluation of women's voices and experiences (Lindsey, 1990; Manne, 2017).

A basic characteristic of a patriarchal system is the division between traditional gender roles, in which men are expected to be competitive and assertive. Women are the opposite and expected to be

submissive, caretakers, and are responsible for domestic duties (Lindsey, 1990). According to Criado Perez (2019), women in current households are mainly responsible for the tasks involved since globally 75% of the unpaid work is done by women. This labour consists of socially relevant and essential obligations contributing to society and keeps households running. It includes domestic tasks such as cleaning, washing, and cooking, but also external responsibilities as taking children to school and extracurricular activities and bringing elderly relatives to doctor appointments. Criado Perez' research (2019) shows that women spend an average of three to six hours a day on these duties, which is three times more than the average man, who spend daily 30 minutes to two hours on household chores. The unpaid labour is a responsibility in addition to women's regular jobs, as the employment rate of women ages between 25-55 years in the Netherlands is 83% (Centraal Bureau voor de Statistiek, 2022b). In 2021, 77.1% of the total workforce in the Netherlands existed of women and 86.8% were men, calculating a gender employment ratio of 9.7% (Centraal Bureau voor de Statistiek, 2022c). From this data can be concluded that almost as many women as men are present in the current labour market. Women have increasingly joined the paid labour force, however, men, as a general trend, have not responded to this shift with a commensurate increase in the amount of time devoted to unpaid work. Consequently, primarily women have experienced an expansion in their overall labour time commitment. Until the age of 25, women's and men's employment rate is almost equal but the labour force participation of women decreases after they reach the age of 25 (Centraal Bureau voor de Statistiek, 2022b), meaning that financial independence that feminists wanted to pursue is unattainable for many. According to CBS (2022a), by 2021, almost half of the 9.3 million people aged 15 to 75 in paid labour were working parttime (less than 35 hours a week) in the Netherlands, with women holding the lion's share of 70% and men occupying 28%, which is considerably less. A relatively large proportion of women stops working or works part-time due to family care responsibilities.

Because women are forced to commit to unpaid duties, their schedules require jobs with flexible working hours that are often below the level of their capabilities and therefore do not financially match what they should earn based on their skills. This means that women are generally concentrated in lower-paid and lower-skilled work (Criado Perez, 2019; UN News, 2022). As women experience limited career progression in the labour market, patriarchal structures create space for men to claim advantages and privileges solely based on their gender. Within this system, men have greater opportunities for jobs, higher prospects of promotions and salary increments, and time for professional development (Stamarski & Hing, 2015). Several studies concerning performance-based bonuses and salaries have found that white male individuals are rewarded at a higher rate than equally performing women and ethnic minorities. This research includes a study of financial corporations with a disparity between performance-based bonuses of men and women employed in the same job of 25% (Criado Perez, 2019). These disparities in promotions contribute to a broader issue of women's underrepresentation, particularly in top-level positions. At companies in the Netherlands, the average share of women on management boards is 13.7% and on supervisory boards 27.6% (CBS, 2022b). Additionally, the persistence of the gender pay gap further exacerbates this gender-inequality. In 2022, the disparity between the pay-check of men and women in the Netherlands is 13% in favour of men (Centraal Bureau voor Statistiek, 2022a) and in other countries this gap is even bigger. This means that Dutch women work an average of 34 days a year for free in comparison to their male counterparts (NOS, 2022). Hence, women have less free time and earn less money compared to men. These inequalities are still felt and unresolved to this day and, according to UN News (2022), with the current rate it will take another

257 years to close the gender pay gap. Despite the enduring efforts of feminists to advocate for emancipation and gender-equality within the labour market, actions that enhance the situation are still necessary through the formulation of new policies or by increasing the awareness of inequality among employers.

2.2.2. Occupational Gender Segregation: Challenges and Implications

Within the labour market, a distinction can be made between male dominated sectors and those employing mainly women. This gender division is, according to Astin, (1984), due to sex-role socialisation that starts early in children's development. Her socio-psychological need-based model identifies four key principles for work behaviour of different genders. In this model, two of the factors influencing career choices and work behaviour are due to skills based on early socialisation through family, childhood play, school experiences, and early work experiences. Astin's (1984) assumption, based on the research of Lever (1978) about sex differences in the complexity of children's play and games, is that boys learn to build and create, which can be an implication of preliminary interest in architecture and urbanism. Boys also play more outside which allows them a greater freedom of movement, play in larger heterogeneous groups and learn to deal with a wider range of people, and are more engaged in competitive games, which means that men are generally expected to be competent, dominant, competitive, and focused on personal achievement and success (Astin, 1984). Girls play with dolls and in self-created imaginary worlds, without any competition in play, which results in women are expected to be friendly, agreeable, non-competitive, and focused on interpersonal harmony (Kahn et al., 1980). Consequently, men would be rewarded for aggressiveness and a display of leadership, unlike women, who are more committed to service-oriented practices (Astin, 1984). This is a stereotypical theory considered in 2023 as sexist, generalising, and incorrect (Lindsey, 1990). However, this traditional division underlies the segregation experienced in the current labour market. Women worldwide mainly occupy service-oriented sectors, including health & social work (78%), education (72%), and other service-oriented activities (64%). A minority of 10% works in construction and 13% in the mining and quarrying sector (Eurostat, 2022).

According to World Bank (2022), gender divisions in various industries have negative consequences for female labour participation during crises. The Covid-19 pandemic resulted in the sharpest global economic downturn since the Great Depression between 1929-1939 and is twice as large as the Great Recession from 2007 to 2009. The pandemic had unequal economic effects on individuals globally, related to different types of industries and were not uniformly felt across demographic groups (Bluedorn et al., 2023; Kim et al., 2022). A key difference is that crises were previously mostly detrimental to working men, but research shows that the Covid-19 pandemic had a greater effect on work stoppages for women, resulting in a disproportionate drop in women's employment worldwide (Alon et al., 2022; World Bank, 2022). A total of 38 countries, consisting of thirty advanced and eight emerging market economies, including the Netherlands, were scrutinised in a sample during the study of Kim et al. (2022). The results show a high degree of heterogeneity across market economies with two-third of the countries witnessing women's labour force participation rates fall more sharply than men's (Bluedorn et al., 2023).

The negative consequences for female labour participation during the recession caused by the global pandemic is due to several factors affecting women's employment within various market economies. Previous recessions mainly hit sectors such as construction and manufacturing, which are male-dominated industries. As mentioned, women work more often in contact-intensive sectors and health and well-being

professions which have been more severely affected due to the lockdowns and regulations regarding psychical contact between 2020-2022. Additionally, because of regulations and lockdowns, schools and daycares were closed for periods of several months. Given that mothers provide a larger share of childcare than fathers do, the effects constrained women's abilities to work (Alon et al., 2022). From the research of Bluedorn et al. (2023), an additional reason for the decrease of women in the work field during the pandemic is that women are more often employed in temporary and part-time jobs that are typically at risk of termination in an economic downturn. The relegation of women to vulnerable positions within the labour force, due to the 3:1 ratio of the distribution of domestic responsibilities between men and women, leads to greater job insecurity for women, especially during economic crises and in precarious disciplines, including architecture and urbanism. The level of precariousness of architecture and the impact of economic downturns will be further explained in the next paragraphs.

2.3. The Architecture Work Ethic and Culture

2.3.1. Architecture as a Precarious Discipline in the Cultural and Creative Sector

The cultural and creative industry in the Netherlands is grouped under precarious work as this sector demands an autonomous self-reliant outlook and the downside represents uncertainty and self-discipline the jobs entail (World Bank 2022; McRobbie, 2009). Vulnerable work in Western countries consist of forms as self-employment, known as non-standard forms of employment, including temporary and zero hours contracts, and dependent self-employment. This is associated with lower labour income, lower job security, insufficient and variable hours, short-term contracts, and limited social protection rights (World Bank 2022; Rubery et al., 2018). The creative industry consists of six disciplines: digital culture and design, visual arts, heritage, film, literature, performing arts, cultural participation and education, and architecture (Ministerie van Onderwijs, Cultuur en Wetenschap, 2019). These disciplines attract people who want to escape the monotony of wage labour and rely on self-employment or temporary jobs. Working in the cultural sector involves a relative freedom that makes this kind of work considered as 'passionate work' and cultivates a lifestyle corresponding to the flexibility of work opportunities in the current creative market (McRobbie, 2009). One of the precarious disciplines within the cultural and creative sector is architecture, which is considered as part of a lifestyle that requires commitment and dedication (Jackman, 2019). The culture relies on ambition, aspirations, and devotion that demands a strong work ethic to match the high work pressure. The ideology of an architect as an artist suffering from the profession is a romanticised picture of reality; long workdays, working overtime, little financial compensation (Salama & Courtney, 2013), contemporary contracts, and a high workload in a competitive environment are the known working conditions (Joyner, 2022). These sources regarding the toxic working culture within architecture are debunked by the collective labour agreement. The CLA of the architectural industry in the Netherlands states that a full-time working week consists of 40 hours (Werkafspraken - Stichting Fonds Architectenbureaus, 2023), while the previous literature suggests that most architects work a considerable amount of overtime (Joyner, 2022; Salama & Courtney, 2013). The CLA also communicates that overtime does not translate into extra salary and these hours must be compensated as leave (Bijlage 5 Code of Conduct - Stichting Fonds Architectenbureaus, 2022). According to the CLA, architects are entitled to six weeks' leave for a 40-hour contract (Verlof-Stichting Fonds Architectenbureaus, 2023), which is a reasonable amount of weeks compared to other sectors. When the collective agreement is compared with reality, a contradiction stands out, and it can be

suggested that employers may not be complying with the working conditions regulations. This is a speculation that will be further examined through the interviews.

2.3.2. Cross-Cultural Management of Architecture and The Cultural Dimensions of Hofstede
Cross-cultural management developed around the work of Geert Hofstede⁴ and is an interdisciplinary field of study, which aims to improve communication, management, and interaction of people from various cultures (Dupuis, 2014; Georg-August-Universität Göttingen, n.d.). Dr. Hofstede's cultural dimensions model is a recognised tool for studying cultural dynamics and social systems between different countries or within organisations (Hofstede, 2011). In the modern era of globalisation, the ability to apply intercultural management as a manager is a necessity. With the growth of multinational organisations, the abilities to strategise, create a management structure, and form substantive work relationships are essential to generate economic success (Beer, 2012).

Most architectural firms in Rotterdam are international oriented by collaborating on projects abroad or with external partners, resulting in employment of international architects. The implementation of cross-cultural management by applying Hofstede's cultural dimensions theory to the management of the architecture sector offers valuable insights into how cultural factors shape organisational practices, decision-making processes, and professional interactions within the industry. The model consists of six disciplines: power distance, uncertainty avoidance, individualism vs. collectivism, masculinity vs. femininity, long vs. short term orientation, and indulgence vs. restraint (Hofstede, 2011). This study focuses on genderinequality in the workplace of architecture firms and Hofstede's dimensions include a dimension regarding masculinity and femininity. Therefore, the four other dimensions will be briefly highlighted to form an overall picture, to further elaborate in detail on the dimension concerning gender influences in the workplace in section 3.2. Gender-inequality in the of Architectural Firms.

In regards of *power distance*, most architecture firms are informal organisations in which control and coordination are accomplished by empathy between workers and by personal contact, since most of the architecture offices are small compared to the amount of big firms. These offices work with decentralisation of decision-making and employees are encouraged to contribute to problem-solving. The managing director, usually the founder or partner, plays a central role in coordinating operations and is the final decision-maker, negotiator, and leader. Despite this hierarchical structure at the top, many architecture firms seek a horizontal management approach, aiming for a non-hierarchical organisational culture in practice (Ankrah & Langford, 2005).

Uncertainty avoidance examines the extent to which cultures or organisations recognise threats and know how to avoid them (Hofstede, 2011). Architecture is known as a precarious sector that suffers in times of uncertainty (section 2.3.1. Architecture as a Precarious Discipline in the Cultural and Creative Sector). Economic slowdowns have a significant impact since the design and construction of buildings stop, plans are put on indefinite hold, building expansions are postponed, and development projects are cancelled. During the last recession, the Architectural Billings Index⁵ decreased 30% compared to 2007, registering the lowest score in thirteen years. The Bureau of Labour Statistics reported that 10.000 architects and engineers lost

⁴ Dutch organisational psychologist and internationally well-known in the field of intercultural studies.

⁵ ABI: an economic indicator of the demand for non-residential and commercial construction activity.

their jobs and architectural firms reported to lay-off 10-20% of their staffs (Rybczynski, n.d.). In 2023, the economic losses suffered by this industry due to the pandemic are again noticeable. The growth rate of the construction sector dropped to -50.3% between 2020-2021 from 5.2% in 2019 (Abidi & Irshad, 2020). In March 2023, job openings decreased with 17% and according to the Associated Builders and Contractors, 3.7% of construction workers were discharged, which is the highest rate since the start of the Covid-19 pandemic (Bahadursingh, 2023).

In relation to *individualism/collectivism*, the architectural culture relies on individual ambition and dedication and requires a strong work ethic in a competitive environment. Tasks are mainly organised around individuals and to a lesser extent around teams. The organisations consist of high educated and competent employees and their sense of self-importance creates need for recognition and desire to impose their identity on the organisation. The firms reward their employees based on individual efforts and achievements (Ankrah & Langford, 2005). The attitude of employees also applies to the dimension of *indulgence/restraint*, which explores cultural attitudes towards creativity, leisure, and self-expression in organisations (Hofstede, 2011). Architecture is a discipline within the creative and cultural sector and architects therefore classify themselves among passionate artists (McRobbie, 2009). They are devoted to leave their mark on the built environment and the stereotypical image of the lone genius fully dedicated to his/her vocation still echoes in their professional identities (Pieters, 2023).

The *long-term versus short-term orientation* dimension provides insights into planning perspectives and future expectations that shape architectural projects at a substantive level. Within architecture, sustainability is a topic of conversation that requires specialisation. Another important theme is smart cities, which has become urgent in recent decades due to global urbanisation. (Silva et al., 2018). Information technology manages and governs progressive smart cities. This generates opportunities to create sustainable designs that form a lasting architectural heritage for future generations, and to reintegrate historical and cultural elements (Ballon, 2016). Required is supporting research on transition management and systems innovation, human geography, spatial planning, and critical urban science (Mora et al., 2021). As the market develops innovatively, it is valuable for architectural firms to orient to these long-term opportunities (Brookes & Poole, 2012). Since cities are built for humans, it is essential for architects to design projects fostering needs of minorities that are changed over the years due to globalisation and emancipation. With women being part of the labour market but also running households, they have different needs in urban infrastructure compared to men. Section 2.5 elaborates on embracing diversity in architecture and how management within firms can support sustainable inclusivity.

Lastly, *masculinity* represents in the cultural management model a preference for heroism, achievement, assertiveness, and material success. The opposite, which is *femininity*, representing cooperation, work-life balance, and relationship-building (Hofstede, 2011). As a preliminary indication can be stated that architecture largely aligns with masculinity. Since this research focuses on gender-inequality in architecture, themes as gender-inequality in architecture, gender aware urbanism, and female labour participation are elaborated in the subsequent paragraphs.

2.3.3. Gender-inequality in Architectural Firms

Numerous studies reported that female students and academics are significantly less likely to be offered mentoring or be granted meetings with professors, receive less funding than comparable male candidates,

and have less career opportunities after their studies in comparison to male counterparts (Criado Perez, 2019). The upper ranks of academia, in particular technology, science, maths, and engineering, are dominated by middle- and upperclass white men (Brown & Stone, 2016; Diekman et al., 2010). This lack of women is noticeable in the female labour participation within these sectors (Casad et al., 2021). The Missing 32% is a symposium in California generating attention for women in architecture. The name of this symposium derives from the fact that female architecture students occupy 50%, but only 18% of these women are employed architects. The 32% disparity consist of women who are educated to enter the architecture industry but ultimately not participate in the labour market (Lau, 2014). This is explicable as the architecture industry in Europe is also overpowered by men (Schuster, 2021). For example, only 20% of the positions within architecture firms in the UK is occupied by women. With fewer female architects in the workplace, a hegemonic masculine culture prevails which is referred to as controlling, aggressive, macho, tough, competitive, self-reliant, and extremely heterosexual (Sang et al., 2014). It can be experienced as difficult for women to infiltrate a job market in which masculine traits are the measure of a professional identity. Research by Fowler & Wilson (2004) shows that older male architects believe that their female colleagues do not have the commitment nor the aggression required in this profession. Younger male architects are optimistic about liberal and equal policies but are convinced that women lack the technical skills to be qualified architects. The study by Sang et al. (2014) shows that previous studies by Fowler and Wilson (2004) and Greed (1994) conclude that the lack of career progression for women is due to women's unsuitability for architecture, when this is actually based on entrenched gender-specific assumptions within architectural firms regarding the qualifications of a 'good' architect. Women within architecture often face a hierarchical gender division, in which men mostly occupy higher positions. In the Netherlands, 12% of partners are women and only 10% of the senior positions is assigned to female architects. Additionally, women earn in Europe on average 25% less than their male colleagues in this sector. In Germany, the pay gap between male and female architects is even higher and reaches 30% (Schuster, 2021). Moreover, working in architecture requires flexibility with long days in the office, being on standby at weekends, working overtime, and meeting deadlines at all cost. These expectations from employers are considered normal in precarious work (Rubery et al., 2018) but for female architects, this work ethic is incompatible with their domestic responsibilities (Schuster, 2021; Criado Perez, 2019). As architecture is classified as vulnerable work, contracts with job security or social protection are not guaranteed. This creates uncertainty for women with the desire to have children or mothers running a household. The Maternal Wall Bias is a form of discrimination that disadvantages women in job applications, promotions, and pay when they are pregnant or have children. It is based on assumptions that mothers are less committed to work and less productive than their childless counterparts (Williams, 2005). Not only is it challenging for women with children to muster the flexibility for these long working days; their salaries reduce after their maternity leaves. Research shows that women's wages are reduced by 4% after each child. Childless, unmarried women earn 96 cents for every dollar earned by a man, while married mothers earn 76 cents. This is also known as the Motherhood Penalty. Fathers often get a bonus after having children; their income increases by 6%, which is called the Fatherhood Bonus. Factors may include women working less or often accept lowerpaid work with family-friendly policies and men working extra hours as their families expand, yet research shows that these explanations only make up for 16% of the Fatherhood Bonus and a quarter to a third of the Motherhood Penalty (Miller, 2014). As a result, the gender pay gap is widening while women do both paid

and unpaid labour. Concluding from the issues mentioned, low salaries, long working hours, a lack of flexibility and trust, and a predominantly male working culture are barriers to entry this labour market for female architects (De Graft-Johnson et al., 2005), or reasons to leave the profession as illustrated by Image 3. Since most literature on gender-inequality within architecture is dated, further analysis regarding gender-inequality in the workplace and the lack of women in architecture will be exercised via interviews within this study.

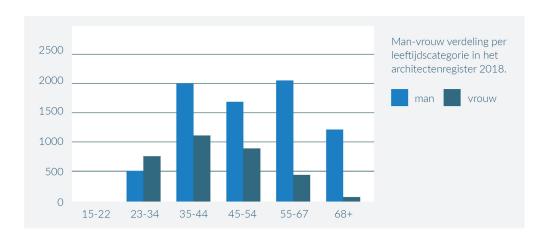


Image 3: Feminine Drain in Architecture in 2018 (Architectenregister, 2021).

2.4. The Importance of Gender Aware Urbanism & Architecture and the Impact of Non-Participation in Public Space

According to Reeves (2012), women and men use urban services and access urban environments differently. Nevertheless, in most cases, urban planning programmes do not meet the different needs to the disadvantage of women and girls (De Graft-Johnson et al., 2005). These include mixed use, accessibility, mobility, safety and security, distribution of services, community buildings, and social mix. Additionally, the study shows that the impact of urban planning on women's well-being is not sufficiently recognised. The correlation between urban planning and poverty reduction, women's economic empowerment, and ending violence against women is not made by administrators who should ensure gender-equality and women's empowerment on regional, national, and international levels (Reeves, 2012). Urban planning professor Sanchez de Madariaga acknowledges this absence and states that women are neglected in transport planning. Despite 57% of the users of public transport are female, high roads are better funded than the maintenance of payements or urban roads (Criado Perez, 2019; ITDP, 2014). In 2007, the World Bank reported that a lion's share of 73% of its fundings is determined for highways. This is not a surprising percentage considering the global trend of men dominating car ownership and men are twice as likely to travel in individual vehicles as women (CBS Statistics Netherlands, 2013). Additionally, transport professions are highly male-dominated since less than 20% of the workforce is female (Ng & Acker, 2020). Hence, a bias in personal experience that leads to an imbalance in the funding of transport requirements occurs.

Another empirical example of urban policies that do not serve the public interest is the large-scale study released by the Municipality of Sweden in 2011, examining the consequences of prioritising certain areas to clear snow and thereby neglecting others. This study found that women take care of household

chores, children, and elderly, which affects their transport needs. Women are more likely to walk the streets carrying groceries or to push prams and wheelchairs. They use public transport often and make more trips per day on average than men. Consequently, most pedestrians are women (CBC, 2018). Nevertheless, until 2011, snow clearance was mainly prioritised on major arterial roads to prevent car crashes on highways. Pavements, or urban roads for public transport, were not prioritised. The impact of this choice is significant, as the database of hospital admissions in Sweden shows that pedestrians are three times more likely to be injured in slippery/icy conditions than motorists, and that 69% of the occurring accidents involve women.

Besides the decision to clear snow on highways can be considered as sexist since it creates gender-specific insecurity in public space, it is a financial disadvantage to posteriority cycling and walking paths during heavy snowfall. A five-year study conducted in Skåne County investigating types of accidents in various seasons concludes that hospital expenses of falling pedestrians during the winter months is estimated at 36 million kroner (4.82 million euros). This does not include the total casualties, as many citizens will not visit the hospital but general practitioners only or even stay at home after getting injured. Preventing accidents during slippery weather conditions could offer an



Image 4: Women-unfriendly architecture and urban infrastructure policies (Hurley, K., 2023).

economically convincing rationale. Thence, Sweden's municipal council has chosen to give priority to pavements and urban roads when clearing snow and other countries such as Canada aim to follow this example by implementing gender equal policies (Criado Perez, 2019; Tunney & Lunn, 2018). As mentioned already, public spaces and transport are used by women for daily activities, which is 75% of unpaid work consisting of socially relevant obligations such as bringing children to school or taking elderly relatives to doctor appointments. This phenomenon is called "trip-chaining", which is a travel pattern of small, interconnected trips that has been observed in daily activities of women globally (Criado Perez, 2019). The Dutch government has budgeted over 7 billion euros for the Mobility Fund in 2022 for transport maintenance, infrastructure expansion, and integrated area development projects to promote mobility for all citizens (Rienstra, 2022; Ministry of Infrastructure and Water Management, 2022), which in practice simply does not suffice. This defect in the system affects the prosperity of the majority of the dutch population, as women occupy 50.2% (CBS, 2022a).

It can be inferred that the lack of women-friendly urban planning is not an issue of resources but an issue of priorities as these examples show that within financing and maintaining urban infrastructure and its policies, little or no consideration is given to women's needs. This absence of awareness of their needs can be traced back to the paltry occupancy of 10% of women in leadership positions in male-dominated sectors involved. Therefore, it is arguable that cities are designed from a male perspective and based on a gender-specific division of labour. Because of this way of urban planning, public spaces are inescapable better designed for men (World Bank Group, 2020).

2.5. Cultural Management Strategies for Social Sustainability

Social sustainability is defined as a development within society that fosters coexistence of culturally and socially minorities by encouraging social integration with improvements in the quality in the lives of all population groups. UNESCO stresses that cities must serve the people who live in them and to humanise cities, it is essential to support and encouraged initiatives of users and builders (Polèse & Stren, 2000).

Over the past decade, social sustainability has penetrated metropolitan politics as part of a broader sustainability agenda with the growing awareness that sustainability must also address social issues (Davidson, 2009; Rogers et al., 2012). Social sustainability can be distinguished in six areas of urban policy: urban governance, social and cultural policy, social infrastructure and public services, urban land use and housing issues, urban transport, urban accessibility and employment, and the enhancement of economic growth. These policies might help reinforcing the city's social capital (Enyedi, 2002), which refers to the value and benefits derived from social connections, relationships, and networks within communities. It is a concept that emphasises the importance of social interactions, trust, and cooperation to improve individual and collective well-being (Portes, 2000). Therefore, a way to foster social capital is by community engagement and participation (Magee et al., 2013).

Building inclusively should embrace inclusion and diversity, equity, and accessibility (Zallio & Clarkson, 2021). Since architecture and urban planning firms have the societal responsibility to create human-centred designs, it makes sense that architecture is the starting point for realisation of the above-mentioned urban policies (Kefayati & Moztarzadeh, 2015). Urban planners aim to design cities that facilitate and improve social capital and to give this aspiration physical form, municipalities collaborate with architecture firms to optimise shared public spaces (Karaçor, 2014; Kefayati & Moztarzadeh, 2015;). To

practice what they preach, they can enhance social sustainability, promote community involvement, and improve social cohesion by designing and maintaining shared public spaces such as parks, community centres, and meeting places (see Image 5) (Shaftoe, 2008) that encourage inclusivity, accessibility, and diverse activities. To design inclusively, it is essential for architecture and urban planning firms to receive post-occupancy feedback and to preresearch the area, population, and its diverse needs, such as those of women who trip-chain on daily basis. This can include inviting experts in sociology, economy, or anthropology, to share knowledge and to enrich the research with their advices (Zallio & Clarkson, 2021). Another



Image 5: Gender Aware Urbanism; Utopian design for Sumatra Park by Eva James (James, 2021).

strategy to understand and integrate diverse needs and identities is to implement a participatory design process that engages residents (Luck, 2018). Various strategies regarding community engagement, participatory design and including diverse perspectives of experts in decision-making processes are ways for

architects to address social needs, foster social interaction and promote inclusivity. In this way, architecture and urban planning contribute to social sustainability, which ultimately enhances social capital.

2.6. Policies Reinforcing Female Labour Participation

If equality fails in the basis, equity fills the gap, Today, people are globally fighting for equality by breaking traditional barriers for minorities to gain the status of a human being that deserves basic human-rights as much as men (Facio A., Morgan M.I., 2009). Political discussions about gender-neutral paternal leave, menstrual leave, the gender pay gap, hybrid working, and the glass ceiling are currently in force. Slowly but surely, the gender pay gap is narrowing since the difference in average gross hourly earnings of male and female public sector employees fell by 2% compared to 2018 (CBS Statistics Netherlands, 2022). Nevertheless, the following explicit measures could accelerate this. In February 2023 Spain passed a law allowing women to take menstrual leave if they experience menstrual complaints. This law has been in force in Japan since 1947 and in countries such as Zambia, China, Indonesia, and Korea (Bobel et al., 2020). Spain is the first European country to join this regulation and the cabinet aims to break the taboo and treat menstruation as a health issue (Derbali, 2023). Nordic countries and Portugal recently changed regulations concerning parental leave as Iceland increased the leave for both parents to six months in 2021 (Nordic cooperation, n.d.). Denmark and Finland made the same changes in 2022. Portugal already has a genderneutral system, allowing families to redistribute paid and unpaid labour after childbirth and it enables them to internally decide who is responsible for household chores and care instead of these being automatically attributed to women (BBC News, 2020). To promote gender balance in firms, the EU is concluding an agreement to impose a 40% quota of women on the boards of large companies by 2026, meaning that women must hold at least 40% of non-executive board seats or 33% of all board positions (Rankin, 2022). Additionally, hybrid working has been encouraged by the dutch government since the Covid-19 pandemic, allowing women to flexibly organise domestic and professional tasks (Ministerie van Sociale Zaken en Werkgelegenheid, 2022). Since 2023, the dutch government is also encouraging women to infiltrate the job market on full-time level, due to the labour shortage in service-oriented sectors such as healthcare (Mees, 2023). Nonetheless, the mentioned regulations could have implications which should not be underestimated. Menstrual leave is not practiced by many women in Asia because of their fear that it would be a sign of weakness (McCurry, 2022). The introduction of quotas has predominantly led to tokenism within companies. Tokenism refers to policies that are primarily symbolic and seek to fulfil commitments to stated goals, such as an imposed gender quota, with limited efforts, especially towards minority groups, in ways that do not change male-dominated power and/or organisational arrangements (Yoder & Sinnett, 1985). As stated in section 2.1.2. Equity vs equality in a male-dominated society, equity is only justified when applied to entire groups/populations. Singling out an individual and treating differently from others to project an image of inclusiveness is not representative for equality, but rather a form of tokenism. See image 6 for an example.



Image 6: Portraits of the partners of OMA (June 8, 2023). Obtained from https://www.oma.com/office

The government's encouragement regarding the increment of female labour participation is considered short-sighted as it pays little attention to aspects such as the lack of childcare and the unutilised caring potential of men in the Netherlands (Meet, 2023).

The above policies show that there is a clear problem without a clear solution. Achieving equality will not only be accomplished via regulatory measures, but it is important to strive for a gradual shift towards equality within international and national policies. This can be accomplished by including legislative changes, as research shows that greater economic equality benefits everyone in society. Equal economical countries enjoyed greater economic prosperity while also managing to develop a more environmentally sustainable fashion, and the process of gender-based budgeting proved to be beneficial for the economy (The Equality Effect, 2017; CBC, 2017). Whether these new regulations work in practice remains to be witnessed in the future. These laws have been introduced because it is increasingly clear to many that we live in an unequal society and that new forms of equity contribute to progressive living in which women's needs are heard, respected, and protected.

2.7. Summary Literature Review

Men are unfairly perceived as the creators of evolution which is noticeable in various aspects in society. The rise of feminism advocates for emancipation within the workplace, allowing women since 1956 to enter the labour market. However, achieving equality in the labour market remains a distant prospect. Women take care of 75% of domestic responsibilities, are paid less compared to men, have less career opportunities and endure forms of sexism. Gender discrimination in the labour still in force due to gender-related biological and social differences and can be remedied by equitably supporting women in aspects such as flexible working hours, permanent contracts, higher salaries and greater opportunities for promotions. This is difficult to implement in architecture because of toxic work culture consisting of working inflexibility, overtime, and low financial compensation that are considered normal but is negated in the collective agreement.

Additionally, architecture is a precarious profession in which contemporary contracts are frequently applied. Architects have an artist mentality and believe that architecture is a lifestyle. They are dedicated and committed to the profession. A high workload, hyper masculinity, and peer competition is present. These toxic traits, dated standards, and precarious and poor working conditions create a gender-inequality with

women experiencing sexism, misogyny, and the Maternal Wall Bias. Consequently, female architects leave the profession to seek flexible working conditions in other sectors. The feminine drain does not contribute to diversity or culture in offices and prevent inclusive designs which is not improving the social sustainability and social capital of cities. Urbanisation can therefore be considered as a product from the male perspective and women-unfriendly. This can be remedied with the external support of experts in economy, sociology, and anthropology, or by implementing participatory design with involvement of urban residents. Nevertheless, it is important for management to undertake internal measures to ensure diversity with policy-making. Initiatives such as gender-neutral parental leave, provisions for menstrual leave, encouraging female labour participation, and quotas for women in board positions serve as potential solutions.

3. Methodology

3.1. Qualitative Research Design

This research was provided with the question: *How is gender-inequality in the architectural sector perceived by architects and urban planners operating in Rotterdam?*

The subsidiary questions include the following:

- 1. What are the characteristics of the working culture of the architecture sector in Rotterdam?
- 2. To what extent and in which way does gender-inequality manifest itself in this specific context?
- 3. In what way do architects and urban designers encounter gender-inequality within the workplace of architecture and urban design offices?
- 4. What is the origin of gender-inequality within architecture in Rotterdam?
- 5. What are the consequences of gender-inequality in the architecture workplace and urbanism projects?
- 6. What measures are necessary to improve the situation regarding gender-inequality in architecture?

To answer these questions, it was essential to match the research design with the objectives implied. This research is based on a qualitative design and the process of gathering and analysing data was of qualitative nature. The study focused on subjective experiences of female architects and urban designers, including their decision-making, norms and values, and the connections between those (Auerbach et al., 2003). Given the need to understand and capture nuanced aspects of these experiences, a qualitative research design was deemed appropriate since qualitative methods are useful to map roles, groups, organisations, settlements, and subcultures (Babbie, 2018). This approach enabled the study to gather in-depth, non-numerical data through interviews (Auerbach et al., 2003; Maxwell, 2013). It was not the aim to achieve statistic generalisability, but to provide insight into social dynamics within architecture based on interviewees' experiences concerning gender-inequality in workplaces, their perception of the consequences of the lack of female perspective on urbanism, and their ideas for improvements of the working culture. Due to its qualitative nature, this study utilised an interpretive approach, in which re-evaluation is fostered throughout the research process (Bryman, 2016). An interpretive framework of social constructivism allowed the researcher to focus on the complexity of perceptions rather than limiting meanings to general concepts (Denzin, & Lincoln, 2018).

This research was conducted with the aim of understanding the current state of gender-inequality in architecture and urban planning in Rotterdam. The literature review evaluated previous studies and gave preliminary answers to the research questions (Auerbach et al., 2003). A partially deductive and inductive approach was carried out; it started with a literature review that acted as a guide during the process of gathering empirical evidence and is tested by the data analysis of the research conducted (Babbie, 2018; Bryman, 2016). As the findings and the literature are simultaneously examined, a constant reconsideration of previous conclusions is made. This research also required an inductive approach since it aimed to discover patterns from the data (Thomas, 2006). Based on an interpretative method and grounded on the theoretical framework, a thematic analysis as a social science research method developed an outcome based on themes extracted from the literature, using the systematic collection and analysis of qualitative data through recorded and transcribed interviews. The research design was cross-sectional, involving the collection of data from

multiple cases at a single point in time (March-May 2023). Moreover, this research incorporated elements of exploratory and descriptive research, as it sought to 'map out' a work field and associated issues, contexts, and processes (Bryman, 2016).

3.2. Qualitative Research Method

Since this research focused on architects' and urban designers' perceptions of gender integration, interviews were an appropriate research method as it gave participants the opportunity explain their experiences and opinions and discuss possible solutions for problems they encounter. The interviews were conducted using predetermined topics and questions based on literature, with flexibility to ask additional questions when deemed relevant (Bryman, 2016). This approach allowed maintaining a comprehensive overview, facilitating comparability between interviews, and ensuring relevant topics were addressed while providing flexibility to explore areas that were not initially anticipated (Kallio et al., 2016). The interview guides include a division based on participants' gender (appendix 7.1.)

The problem definition regarding gender-inequality in architecture involves multiple actors including policymakers, residents, developers, and architects. To maintain focus within this broad palette and to generate a deeper investigation into lived experiences, interviews were conducted with a sample of urban planners and architects working in Rotterdam consisting of fourteen participants with various cultural backgrounds, work experiences, ages, positions, and family situations from different firms regarding size and year founded in twelve settings. To compare different approaches of architecture firms concerning gender inclusivity in Rotterdam, partners of experienced Rotterdam-based firms and new studios were invited to participate.

The respondents were recruited via my network in the architecture sector in Rotterdam with the advantage that the research remained feasible. Non-probability snowball sampling suited best since it generated more respondents by reaching out to multiple architects (Auerbach et al., 2003). The previously acquired connections allowed an effective search for suitable interviewees. The architects who were not included in the network were reached through LinkedIn and via co-workers with an extensive network. A selection of complementary profiles with the areas of investigation was made in advance:

Table 1. Categories of participants to questionnaire

- Female and male partners/founders of micro, small, and medium firms
- Women working in architecture and urban planning with and without children
- Women currently studying architecture
- Women who left the practice
- Men working in architecture with and without children

Table 2. Areas of investigation

- Office culture and practice
- Management quality
- The profile and culture of architectural schools
- Representation of women in the profession
- Employment factors such as salary, career histories career opportunities and advancement, and status
- Needs of women in architecture
- Possible solutions of gender-inequality in offices

Working in the architecture sector since November 2021, it was possible to infiltrate as a researcher within this industry and gain the trust of participants. This was challenging due to the reluctance to openly discuss the prevailing work culture. Nonetheless, as the interviews progressed, it became clear that initial denials of

problems were later replaced by recognition of the presence of unjust practices in their working environment.

The data was recorded and transcribed verbatim, followed by coding the transcriptions by theme, analysing, and comparing them in Atlas.ti. The coding process started with open coding to identify key concepts, followed by axial coding to regroup data, and ended with generic concepts as a base for the results (appendix 7.2. Code List) (Glaser & Strauss, 2009). Using various concepts from the literature, the content of the interview guides was divided according to themes concerning women's working culture and positions in architectural firms (appendix 7.2). The next relevant concepts are discussed:

Table 3. Interview Concepts

- Female labour participation
- Feminism
- Traditional gender roles
- Gender segregation
- Data-biased design and regulations
- Inclusivity
- Diversity
- Equity and equality
- Historiographic female representation
- Sexism, patriarchy, and misogyny
- Management structures
- Culture and work ethic
- Female participation policies
- The needs of women regarding the workplace and in urban infrastructure
- Paid and unpaid labour

The themes emerged from the interviews were interconnected and linked to the theoretical framework to examine whether they corresponded or contradicted, potentially leading to development of new managerial propositions and a future contribution on infrastructure policy recommendations.

3.3. Sampling Method and Data Collection

The sample for this study consisted of fourteen interviewees employed at micro, small, and medium-sized firms in Rotterdam in twelve interview sessions. It was a well-considered choice to exclude architecture firms of 250 or more employees in this study since these firms have a lower share in the sector compared to the number of micro, small, and medium-sized firms (in 2023, only OMA and MVRDV can be added to this list). These firms do not reflect the broader architecture working culture and are an exception to the rule based on their level of expertise and work ethic. However, several participants did work at these firms and talked about their experiences.

The sample was comprised of four partners and founders (group 1), two associate partners/senior architects and urban planners (group 2), six architects and urban planners (group 3), and two (former) juniors/interns/students (group 4). Interviewees' ages ranged from 23-58 years old and working experience from 0-32 years. Due to the disparities in ages and experiences, an accurate image of the current situation of working conditions, regulations, and satisfaction of architects is created. For example, interviewee 1 (58) has

a long-standing career of 30 years at a medium-sized architectural firm, serving as a partner for 25 of those years. Interviewee 2 (49) operates her own firm, which has been established in the last 4.5 years. The two double interviews consisted of conversations with a couple (an associate partner and an architect), and an interview with an international and a Dutch female designer to foster an interesting dynamic. The rationale for this approach was to facilitate the discussion of mutual differences and enable them to address occurring issues together.

A total of six men and eight women were interviewed including four internationals. A division is made based on their positions within the firms since their ability to influence work culture is part of the problem definition. The partners and founders were questioned about their career paths, management styles, and how they catalyse new standards such as hybrid working and flexibility. Interviewee 4 (37) is the cofounder of an international institute that specialises in the development of architecture, urban studies, planning, history, and sociology, in which inclusivity should be an essential topic. The associate partner and senior architect shed light on their career developments combined with their family situations and prospects of advancement opportunities. The architects and urban planners discussed the working conditions within the offices and possible improvements of facilities, flexibility, opportunities for promotion, and financial remuneration. Finally, a former junior architect was interviewed about her motives for leaving the profession, and a female architect student gave insight into the culture and work ethic at universities, the norms and values of the new generation, and her expectations about her future career. See table 4. Participants' Profiles for the overview of the interviewees.

Table 4. Participants' Profiles	Participants	Position	Age	Male/ Female	National/ International	Size Firm	Years Employed Experience	Date of interview
Group 1: Founders and Partners	Interviewee 1	Partner	58	Female	National	Medium	32	April 6, 2023
	Interviewee 2	Founder	49	Female	National	Micro	25	April 5, 2023
	Interviewee 3	Partner	45	Male	National	Medium	19	April 25, 2023
	Interviewee 4	Partner/Co- Founder	37	Male	National	Micro	11	April 6, 2023
Group 2: Associate Partners and Senior Architects & Urban Planners	Interviewee 5	Associate Partner	41	Male	National	Medium	15	April 13, 2023
	Interviewee 6	Senior Urban Designer	34	Female	International	Medium	11	April 14, 2023
Group 3: Architects and Urban Planners	Interviewee 7	Urban Designer	39	Female	National	Medium	15	April 18, 2023
	Interviewee 8	Designer	31	Female	International	Medium	10	April 18, 2023
	Interviewee 9	Architect	29	Male	International	Small	3,5	April 19, 2023
	Interviewee 10	Architect	31	Male	National	Medium	6,5	April 28, 2023

Table 4. Participants' Profiles	Participants	Position	Age	Male/ Female	National/ International	Size Firm	Years Employed Experience	Date of interview
	Interviewee 11	Architect	36	Female	National	Small	12	April 13, 2023
	Interviewee 12	Sustainable Business Developer	47	Male	National	Small	22	May 4, 2023
Group 4: Junior Architects, Interns, and Students	Interviewee 13	Former Junior Architect	29	Female	International	Micro	1,5	April 12, 2023
	Interviewee 14	Student/ intern	24	Female	National	Micro	-	April 14, 2023

3.4 Biases and Ethical Issues

Issues that required consideration prior to this investigation were from ethical nature. An advantage was the prior knowledge of the researcher due to my previous work experience within the architecture sector as a Business Development Officer in Rotterdam. The research relied on information regarding the ins and outs of working environments and changes caused by the Covid-19 pandemic. However, it needed to be realised that this could create biases which should not influence the data concerning prejudices about employees and employers. This inside position in the work field required to be handled with care. Considering that some aspects of this research may personally affected me, particularly in relation to discussed values and motivations that align with my own, it was crucial to maintain a high degree of objectivity and self-criticism throughout the research process. Nevertheless, social science and social action cannot and should not be separated, since it is important not to dehumanise results (Babbie, 2018). By remaining aware of my position as a researcher and taking responsibility for maintaining humanity through the process, efforts were made to analyse results objectively and unbiased.

Gender inclusiveness is a precarious issue at societal level. It was crucial that interviewees could speak freely about their experiences concerning this topic and to facilitate an open dialogue with participants, ensuring that they understand the confidential nature of the research and information would not be shared with superiors or unauthorised parties (Babbie, 2018). To ensure confidentiality and anonymity, consent forms are handed out to respondents prior to interviews, stating their rights and obligations regarding shared information. This alleviated any concerns that may occur concerning potential repercussions for their employment. Permission from the interviewees was required to record the interviews and details of their identities are secured.

4. Findings and Discussion

This section includes the results of the interviews with architects and urban planners in Rotterdam. The findings are analysed, compared, and separated in the following sub-sections: *Gender-Based Variances in Architecture Work Ethic and Culture, Toxicity Normalisation: Its Origin and Implications, Gendered Urbanism and its Impact, Architecture in Times of Crisis,* and *The New Generation Architects* and are organised according to themes raised in the literature review. The goal of the study was to gain an understanding of how gender-inequality is manifested in the architecture sector and perceived by employees in offices. See appendix 7.3. for the recap table of the main findings and appedix 7.4. for the participants' profiles.

4.1. Gender-Based Variances in Architecture Work Ethic and Culture

4.1.1. Gendered Occupational Segregation

During the interviews the participants agreed that women and men have fundamentally different physical and mental traits and are raised differently. An example of sex-role socialisation between boys and girls within families is the statement of interviewee 8: "I have a twin brother and my parents were really focused on him to be enrolled in architecture [...] but then in the end, like, I succeeded more in the profession, during the studies also" (personal communication, April 18, 2023). Nevertheless, this quote also illustrates that more women are infiltrating a man's world at professional level and the roles women perform are changing. The architecture program at multiple universities maintains a gender ratio of approximately 50/50, with some interviewees suggesting that the female student population may outnumber male counterparts. It is noteworthy that exclusive employment of male architects in a firm, with women relegated to secretarial positions, is perceived as atypical among participants. The increasing presence of women in architecture education reflects the effect of feminist movements, with a potentially equal number of women and men able to enter the labour market. Despite gender based variances, 65% of the participants indicated that they have been creative from a young age, love designing and were good at maths in high school. The interviewees built sculptures, designed graphically, and used Photoshop early in life. Despite all of the participants argued that women and men differ at the core, these matching traits are not segregated by gender, making them all interested in the combination of creativity, math, and technic, which they found in architecture.

4.1.2. Gendered Skills Differences

Nine of the 14 interviewees considered that women and men have different skills and contribute differently to architecture. Interviewees 11, 13, and 14 assumed that women design from a people-oriented perspective and aim to create functional designs, while men are generally more focused on aesthetics of buildings. Interviewee 5 stated that qualified architects are mostly men, and women have better skills regarding organisation and management. Interviewee 11 agreed that women are organised, but disagreed with the statement that men in general are better designers and believes that she performs as well as her male colleagues. Interviewee 5 gave an example of a client suggesting that he should consult a female architect to choose colours for the bricks of a design, which is considered sexist. Interviewee 10 thinks the differences between the genders lie in the approach to projects, dealing with clients, and in diligence. Interviewee 6 said

architects' skills do not depend on gender but on personality. In contrast, she also expressed that she prefers working with an international team of women because the synergy is better comparing collaborating with male colleagues. She believes internationals have a stronger work ethic compared to Dutch architects, since they do not have the security Dutch citizens enjoy. She considered loyalty, dedication, and a positive attitude essential features for solid collaboration. The interviewees' answers revealed biases regarding skills of both men and women as the following quote illustrates: When you are at a get-together and someone asks: "What do you do?" "I'm an architect." For the first few years when I was in my twenties, everyone asked: "Do you mean interior designer?", (Interviewee 11, personal communication, April 13, 2023), which again is an example of prejudiced sexism towards female architects. Only interviewees 9 and 12 did not believe that men and women have different qualities.

4.1.3. Gendered Coping Strategies in the Workplace

Concerning coping mechanisms related to gender diversity, five of the fourteen interviewees, including three partners, shared the opinion that women are complex emotional beings who show signs of insecurity. According to the participants, women are more likely to express emotions in moments of criticism which can affect the progress of projects. Interviewee 1 stated she prefers working with men, because "If you work on a project and there are too many women at the table, that just makes it much harder" (personal communication, April 6 2023). Since she is a partner, this exclusion explains a lack of women in senior positions. Conversely, men are characterised as rational and confident in such situations, dare to ask for promotions and easily negotiate with management regarding leave arrangements since they are less afraid of negative reactions. In contrast, many women may face difficulties in this respect, as interviewee 5 stated that women are more modest, causing stagnation in their promotions and salaries. Female interviewees 6 and 11 believe they have two options: either be vulnerable or go along with the male work ethic and not express their feelings. Interviewee 11 reported that she always tries to keep the peace in the office and therefore often accepts poor working conditions. Interviewee 6 stressed vulnerability is not desirable in a senior position and she never experienced problems regarding the emotions of women in the workplace. Consequently, the female participants emphatically refuse to be vulnerable for fear of future backlash concerning promotions. As a result, human aspects such as emotions or desires disappear from the working environment and results in an increment of apathetic masculinity.

4.1.4. Gender-based Workplace Discrimination

Women are often approached and treated differently from men in professional settings. Across the sample, eight out of ten interviewees experience a different treatment in the offices compared to their male counterparts or have heard complaints from female colleagues about gender-based discrimination as the following quote describes: "At the office, an Italian colleague, a lady, said to me: make no mistake, I am female and I am also not Dutch. So you shouldn't think I am taken as seriously as you within the team" (Interviewee 12, personal communication, May 4 2023). According to interviewees 7 and 8, the discrimination is reflected in distrust from co-workers and managers, contemporary contracts, disadvantages in promotions and salaries, lack of appreciation and flexibility from management, leave arrangements, and career opportunities. Contradictory, the female partners emphasised that they do not experience gender-based

discrimination, although they prefer working with male colleagues since they experienced rivalry and misguided behaviour among female architects, which are originally traits associated with masculinity. According to interviewee 5, opportunities for women to attain top positions within the profession are limited, leading to a perception among women that their female colleagues are a direct competition for such positions. Interviewee 6 agreed with this statement and reported about a female colleague who tried to destabilise her during a deadline, convinced that she wanted her to fail. These responses show an aversion to women in the workplace, both by management and the employees themselves, due to the assumption that women are emotionally unstable and engage in rivalry.

4.2. Toxicity Normalisation: Its Origin and Implications

4.2.1. Dysfunctional Educational System

The findings show that four interviewees, including the current student, experienced stress, anxiety and uncertainty at university due to a heavy workload in a highly competitive environment. Teachers often impose outdated norms and values on the next generation of architects by normalising all-nighters by exerting high work pressure. Interviewee 14 said that working through nights and holidays is deemed necessary to receive good grades. She described her fellow students as overachievers and witnesses a high competitiveness among them. Interviewee 13 confirmed the high workload at universities and she consequently suffered from a burnout after receiving her master's degree. Additionally, the pedagogical approach of teachers is according to interviewee 14 dated, harsh, and sexist, since the architecture and urban planning courses are dominated by male professors. She stated that students learn gender-biased data in which men shaped architecture historiographically with an example: "There is this hallway at the university with portraits of all these architects, which are all just men. There are with 50 or something and then there's one woman among them; Zaha Hadid", (Interviewee 14, personal communication, April 14, 2023). Interviewee 11 recounted that teachers made students cry which is normalised in architecture education. Such practices cultivate a toxic working culture, in which the prevailing motto seems to be that projects are never finished and always can be improved. Particularly, students who socialised in this environment tend to internalise these values, forming their image of the professional landscape and carrying these lessons with them as they embark on their careers.

4.2.2. Toxicity Normalisation in Architecture and Urban Planning

The work ethic obtained at universities is nourished in the workplaces. 93% of the participants acknowledged that the architecture sector is challenging and highly competitive. It is a dog-eat-dog environment, in which only the strongest architects survive. This manifests in various ways, such as an overwhelming workload, meagre compensation, working overtime and peer competition. It was also noted that the demands of the profession are notoriously high and architects are expected to have high ambitions. Interviewee 7 stated that architecture is a vibrant environment and provides space to learn and develop skills. Interviewee 5 considered architecture as his passion and a lifestyle. Interviewee 11 even stated that architecture is the most beautiful profession in the world, which is according to her the reason why architects stay within the sector. Thirteen of the 14 interviewees have worked limitless hours of overtime for little or no compensation, and four interviewees experienced (multiple) burn-outs due to work pressure, as explained by interviewee 6: "At the office I kind of managed to stay calm, but then at home, I remember that period when

we delivered later, I don't know, maybe the next three days, I didn't stand up from the bed at all" (Interviewee 6, personal communication, April 14, 2023). Architects who cannot cope with the workload are bullied, according to interviewees 5 and 12. Architects who prefer to work part-time to maintain a healthy work-life balance are discouraged by management. Neglecting mental health, accepting poor work conditions, exploitation of employees, and negative affects on private life are results of a toxic work environment and reasons why women leave the profession. From the fourteen interviewees, only interviewee 9 stressed that he never experienced high work pressure and works in a healthy environment. He also stated that his circumstances are rare. The fact that this work culture is so normalised that the only person who has a healthy work-life balance acknowledged that he should feel lucky, explains why many women refuse to submit to this toxicity and switch careers.

4.2.3. Unqualified Management

The interviews indicate that a toxic working culture pervades the architecture profession, causing many architects to leave the profession. This suggests that individuals who thrive within this culture have opportunities to career progression and potentially reach senior positions such as associate partner. Consequently, individuals occupying these positions often exhibit and project work ethics they assimilated during their academic and professional trajectories. This ethic enhances an excessive amount of overtime, low remuneration, little financial compensation, and a devotion to architecture as a lifestyle that demands 24-hour dedication. Interviewee 5 concluded that most seniors are white cisgender able-bodied heterosexual men who work a minimum of five days a week, or female architects who adopted this work ethic which is shown by the following example:

"Sunday afternoon I went on the plane and I was in Shanghai at nine o'clock on Monday morning and then the day started. Friday evening at twelve o'clock I had a flight back. I was at Schiphol airport at five o'clock on Saturday morning and went to the hockey field to coach from nine o'clock", (Interviewee 1, personal communication, April 6 2023).

According to Interviewee 5, it is important to notice that these individuals in managerial positions are not educated in management skills, as they have been primarily trained in architecture and he believes that this should be changed:

"You need people who do everything that doesn't have to do with projects, like HR, and create rules for pregnant people. Those partner shouldn't interfere with that at all, you know, because yeah, sure, they think you should work yourself to death, because they did", (Interviewee 5, personal communication, April 13, 2023)

From groups 2 to 4, eight of the ten interviewees reported to deal with unqualified management and bad planning on daily basis. Architects work an extensive amount of overtime and no space is left in schedules to compensate with leave. This results in burn-outs among employees, who are unsatisfied with the resonance of their problems and advises. When asked by one of the partners why overtime is normalised, interviewee 3 explained the following:

"We would prefer everyone to just do their work within the set hours. Some people find this difficult and are very concerned with doing their job very well and are more inclined to work overtime than others." (Interviewee 3, personal communication, 25 April 2023).

Interviewee 12 disagrees and is convinced that the core of problem concerning overtime lies in bad planning on which most architecture firms thrive. He recalls the following:

"The problem was that we hadn't put the team together properly. So we worked with a team that happened to be free in the excel sheet to work on it and not with a team you need with a number of different skills to design well effectively" (Interviewee 12, personal communication, May 4, 2023).

As salaries are relatively low, labour costs are small for firms, causes management to plan poorly, which happens to be the main reason why overtime is normalised in the architecture sector. This shows that workers' well-being is not prioritised and the financial aspect is considered more important by management.

4.2.4. Diverse Need Comprehension of Architects

The findings indicated a lack of understanding of diverse needs, which translates into the collective agreement created by architecture unions and partners. The CLA does not reflect employees' needs, or partners do not abide. The different needs identified among the interviewees include support and (financial) appreciation from management, opportunities to work hybrid or part-time, flexibility, customised parental leave arrangements, providing lactation/prayer/meditation rooms, a reintegration plan for new parents to readjust to the production level, and opportunities for promotion after reintegration. Three female interviewees mentioned experiencing no consideration for mothers who need to pump breastmilk regarding scheduling and space. Interviewee 10 reported that a toilet was offered by management for his religious obligations, which is a derogatory proposition. 63% of the parents from groups 2 to 4 felt unsupported in their attempts to balance work with domestic responsibilities. Interestingly, partners 1 and 3 reported perceiving the requirements of flexibility regarding part-time and hybrid work after the COVID-19 pandemic as challenging, due to the lack of oversight and control. Also seniors working less than 40 hours per week is considered by them as displeasing. Conversely, partners in small and micro firms expressed more flexibility and founder 2 practices a four-day working week in her office and illustrated flexibility by this statement:

"I've had that, for example, [employee's name] texted me: The waves are super high on Monday morning and I really want to surf. Is it okay if I come a bit later? I really like saying yes to that. Then you also get someone back for the rest of the week with a lot more energy. So that is how I try to be a good employer", (Interviewee 2, personal communication, April 5, 2023).

Also, interviewee 12 reported that mothers holding senior positions in his office work 3.5 days per week and expressed the necessity to prevent working overtime form personal experiences as he said the following: "I also realise now, that at that time, the good decisions were not made at 11 o'clock at night on a Saturday. Good decisions were made in a meeting where you can have a good exchange of knowledge", (Interviewee

12, personal communication, May 4, 2023). This is an explanation that quality of projects is not based on the quantity of hours but on the qualities of employees, who perform better in good working circumstances. Partner 4 mentioned that all employees enjoy the same flexibility and responsibilities to avoid a hierarchical organisational structure. A distinctness can be made between medium firms and micro or small firms concerning providing opportunities for flexibility and protecting the needs of employees. Additionally, it is also noteworthy that overtime is not common in small and micro offices, while interviewees working in medium offices work overtime daily.

4.2.5. Patriarchal Architectural culture

The unconscious shortsightedness of partners creates space for a patriarchal culture including sexism and misogyny. Five of the six employed women from group 2 to 4 suspect a gender pay gap between them and their male colleagues and the female student received less internship allowance than other interns in the office. Interviewee 6 emphasised her ambition to became associate partner, but believes her chances are minimal due to the high competition in the firm. Interviewees 7, 8, and 11 have experienced pregnancy and parental leave discrimination and missed promotions during their re-integrations while male colleagues received bonuses after parental leaves. Interviewee 5 called the sector "an eminently archaic white male stronghold in which white women behave like white men" (personal communication, April 13, 2023). Interviewee 11 agreed, called herself an alpha-woman who fits in this culture and stated that "there are no part-time princesses in architecture" (personal communication, April 13, 2023). Interviewee 13 mentioned her male manager never asked for her input and her voice was simply ignored. Interviewee 6 explained her male intern embarrassed her during a meeting with partners by calling her work 'bullshit' and mansplained⁶ what could be improved. Interviewee 13 reported that she experienced mansplaining from a co-worker as well. Architecture is described by the interviewees as an environment of high masculinity in which vocal harassment is prevalent. By saying:

"Yes, it's just and culture of egos and well, I think that might also put people off, both men and women. You have to be kind of macho if you want to lead a firm in architecture, or it's almost expected of you" (personal communication, April 6, 2023),

interviewee 4 illustrated the patriarchal system of architecture. The conviction 75% of the partners that collaborating with women is difficult because of their emotional complexity, men are rational and easier to deal with, and women thrive on rivalry interactions, is evidence of a deep-rooted structural problem, transferred from management to employees.

It is necessary to emphasise that this is not an openly patriarchal system in which women directly experience misogyny. Rather, it is an underlying structural problem that is not easily apparent, but manifests itself during conversations and in perceptions of incompetence from partners. The sexist, outdated and standardised perception of women is perpetuated by the men and women who have adapted to a male-dominated culture.

⁶ The explanation of something by a man, usually to a woman, in a way that is perceived as condescending or patronising.

4.2.6. Discrimination of Internationals and Ethic Groups

The interviewees included four internationals who do not master the Dutch language and two men from non-western ethnic groups. Those architects indicated that they notice a differentiation in the treatment of internationals compared to Dutch employees. One of the interviewees was asked during his job interview if he minded working with women. He believes that this question can be traced to his religious background and experienced it as insulting and old-fashioned. Interviewee 8 experiences intersectionality as an international mother who does not master the Dutch language in relation to bonuses and promotion. Interviewee 13 explained that she left her job as the lack of command of Dutch prevented her from socialising in the office which consisted mainly of Dutch employees. Three of the four international interviewees experienced more difficulty finding a job compared to Dutch interviewees. Participant 8 stated:

"I think I sent around 100 CV applications and I didn't get any reply or rejection. Also because I don't have a European nationality [...] So I experienced a lot of discrimination because of this. For example, from my experience, whenever I put my photo on the CV, I would always get at least a reply, because people can see your face, you know. I had a feeling that, if you have white skin in Netherlands, at least I experienced that, it always helps", (personal communication, April 18, 2023).

This quote illustrates her struggle in finding work as an international. According to her, internationals are often not hired because they do not master the Dutch language or because they need a work visa which ties them to the firm as an employee. Two participants indicated that they were rejected several times during application procedures because offices refused to be financial responsible for the visa. Consequently, internationals choose to apply as interns, hoping they will receive a promotion, in spite of having obtained a diploma or have 1-3 years of work experience. Even in this position, 50% of the international interviewees stated they earn less compared to Dutch employees. As a result, they experience a high work pressure to prove themselves to receive promotion. The implications are palpable in the work force regarding diversity. Not supporting internationals and employees from diverse ethnic backgrounds to infiltrate the workforce, as equity should be practiced, will demotivate them, which affects their private lives, the work environment, and the output of the firm.

4.2.7. Maternal Wall Bias

From the interviews is indicated that women in architecture face a turning point or stagnation in their careers around the age of 30. Female architects struggle to navigate since they seek career flexibility to fulfil their domestic responsibilities. Five of the six mothers experience difficulties balancing paid and unpaid labour, given the high level of dedication required to succeed in architecture. Partner 3 questioned the number of career opportunities of women in the labour market after receiving complaints and also concluded that it is difficult for mothers to achieve senior positions. Interviewee 12 agreed with the following remark regarding a female colleague:

"If she not have had children, because she was really very good at what she did, she would have become an associate effortlessly, been sent on business trips, but none of that happened, because, "she has to feed the

children at home, we are not going to bother ourselves with that" (Interviewee 12, personal communication, May 4, 2023).

Consequently to this exclusion, many women experience career stagnation and eventually leave due to lacking prospects. This is relevant for pregnant women and mothers who require greater flexibility to balance caregiving responsibilities with professional obligations. Interviewee 11 encountered a lack of support from management after her pregnancy and they asked her to join a meeting four weeks after she gave birth. From the answers of interviewee 7 can be concluded that the presence of a Maternal Wall Bias is caused by distrust from management. These challenges lead to missed opportunities for promotions and bonuses, and the affected mothers are perceived as less committed. Interviewee 7 received multiple times the question from management if she could handle her professional responsibilities along with her family situation and interviewee 8 stated that she works twice as hard to prove that she deserves the same promotions as her male colleagues. The following quote:

"I worked through COVID. I worked through everything I had. I had a child who I had to take into another kind of school. I needed to be there in the morning so I worked from that school and then I went to the office to continue working. And then I received a comment that I wasn't connected enough. But we also have a colleague who was sick nine times in one year because of his child and he got promoted" (Interviewee 7, personal communication, April 18, 2023),

demonstrates the differences in treatment between female and male architects with families. This is reinforced by interviewee 11 who mentioned that she did not receive a bonus after her second child, while her partner and the father of the baby, interviewee 5, was appointed associate partner in the same period. Consequently, mothers encounter an invisible barrier in their professional growth and are treated unfairly compared to men, preventing them from thriving in the workplace. This ultimately leads to a drain of women in architecture.

4.2.8. Feminine Drain in Profession

Interviewee 8 reported that many women choose to develop their careers in sectors with family-friendly policies, such as the municipality or in consultancy, by saying: "There is this category of women that is so smart that they leave the job, they leave architecture to go to other fields, you know, like studying, I don't know, marketing. Or just escaping" (personal communication, April 18, 2023). These work environments are compatible to their schedules, domestic duties, they allow working part-time, and salaries are higher. The lack of a work-life balance, career opportunities, financial appreciation, and flexibility in part-time and hybrid work have caused women to leave the profession and do not infiltrate in higher positions of architecture firms. Interviewee 11 noticed this lack of senior female architects by saying:

"I wondered, where are all these women? And why don't I see women who are senior architects, or partners? Or are high up in the tree and have really just survived longer? And now that I am in my thirties and I see people around me of my generation dropping out, I understand where those women are." (personal communication, April 14, 2023).

Interviewee 13, who found a job in another direction after working in an architectural firm for 1.5 years, stated that the lack of appreciation is the main reasons she did not want to pursue a future in architecture. She experienced her time in architecture as extremely difficult and became depressed. Interviewee 6 had the same issue concerning neglecting her mental health and also experienced symptoms of depression. Both interviewees mentioned the consequential negative effects on their private lives:

"I was getting pissed and and just frustrated and, and the worst was that I was bringing that frustration home. And sometimes it would affect my boyfriend because I would be angry, because I... I didn't have energy to do anything which was really, really horrible because I, like, I could see how much it's affecting my personal life", Interviewee 13, personal communication, April 12, 2023).

Above mentioned issues regarding the lack of appreciation, better career opportunities in different industries, and the negative effects on personal lives makes women leave the profession, increasing the lack of diversity in architecture offices.

4.2.9. Awareness of Gender-inequality and Tokenism in Architecture

When asked whether the interviewees experience or see gender-inequality in daily life, 64% of the participants answered affirmative. Three partners did not recognise inequality in their management styles, company, or their own experiences, nor implement actions to avoid female discharge. Partner 4 did recognise gender-inequality within architecture, but also mentioned that he does not investigate this issue, despite doing extensive research on inclusivity since he is the founder of an institute researching diversity. Interviewee 2 claimed not to treat people differently based on gender, but also mentioned that in the start-up phase of her firm she unconsciously hired men only. It was her daughter who alerted her, which is how she started applying positive discrimination to job applications. Positive discrimination, if not fully implemented within the company, comes across as tokenism, which means that only a symbolic effort is made to give minority groups within society a chance to enter the labour market. Tokenism is reflected in the architecture companies where solely one woman, one international, or person of colour holds a senior position. An example of unconscious tokenism is illustrated in the following statement from interviewee 1:

"We did take [employee's name] specially from the team to a pitch once because we thought that would help showing that we also have people from other backgrounds working with us who can have a special influence on a design" (personal communication, April 6, 2023).

Interviewee 2 stated that, because she is a female architect, the lack of representation of women in her firm "remained unnoticed for a period of time" (personal communication, April 5, 2023). Interviewee 1 also believes her presents in the workplace is a sign of inclusivity, making implementing more female perspectives in teams unnecessary. This is yet another example of the lack of understanding from partners why diversity is not generated by a token effort and should be implemented throughout the system to eliminate outdated assumptions.

4.3. Gendered Urbanism and its Impact

4.3.1. Intersectional Design vs. Commercialised Standardisation

Especially interviewees 3 and 4 are aware that cities and building are made for humans and that requirements such as sustainability, safety, accessibility, and representation of the needs of inhabitants are necessary to design successfully. To meet the needs of citizens in the best possible way, pre-research and post-occupancy feedback are required. They believe that experts with an economic, sociological, or anthropological background are essential to exchange knowledge, or people socially involved in the respective area. They are needed to provide information about the history, cultural diversity, and developments in that particular neighbourhood. Additionally, post-occupancy feedback is essential to identify areas for improvement to create the best possible future designs.

This is a fine aspiration that leaves much to be desired. According to interviewee 3, a trend of commercialisation takes place, since developers selling houses with the concern to gain profit. As a result, houses are tailored to the average largest group with the greatest purchasing power to secure the sale. While architects try to improve diverse forms of living, developers are focused on standardisation to keep products profitable, which is in line with the neoliberal pro-growth model of capitalism we are facing in the current western economic market. Interviewee 9 substantiated this statement and explained that no research is conducted regarding humanising urban planning in his office. He declared that the economic aspect is considered more important, resulting in less adaptable designs concerning diverse needs of citizens by the following remark:

"So without the research, you can miss the understanding of the need of, like, people who are different from you because people design things from their own perspectives. So without research, you wouldn't know, like, the need or the opinion of all the users. And yeah, basically you create a built environment that is more favourable for certain, uh, target groups, I would say" (Interviewee 9, personal communication, April 19, 2023).

The mentioned quote is an example of the impact of commercialisation. Hence, architects are less creative or innovative and the housing market is highly driven by developers who are not interested in the social aspect but rather the financial element. Since the architecture branch is heavily dominated by white male individuals, limited financial resources are allocated to extended research to gain information about cultural or gender diversity, and as a trend occurs regarding standardisation among developers, it can be concluded that most projects are designed from male perspectives.

4.3.2. Impact Gender Imbalance in Built Environment Professions

All partners were unfamiliar with gender aware urbanism and not investigating this trend. What they considered interesting was cultural and social diversity and how cities become accessible for citizens with different social-economic status'. Differences in the needs of various genders are not explored nor taken into account while designing urban infrastructures. Therefore, no general conclusion is made by the interviewees regarding the impact of gender-inequality on architecture and urban infrastructure and this would be interesting to explore in further research. Although each interviewee believes that the female perspective contribute to the development of architecture and urbanism, how the shortage of women in the working

environment is translated in projects was for the interviewees unknown, since the topic of gender aware urbanism is not alive among them. However, two micro and one medium office created research groups that investigate subjects such as sustainability or architecture typology, which might increase possibilities for researching gender aware urbanism. Interviewee 9 stated that, although these groups are interesting, he does not want to spend extra unpaid hours on research additionally to his contracted hours. Interviewee 6 agreed and undervalued investigating such topics because of the unpaid overtime she already works. Architects, developers, and the municipality also consider participatory design as an obligation rather than an opportunity as stated by interviewee 4:

"Participation is often seen, both by municipalities and designers, as something that has to be included in the process and that has to be ticked off the list. But often, very often, the answer is already sort of fixed and people are allowed to react to what others have thought up, so you can adjust that a bit, but really fundamentally designing and developing policies together with people? I think we should move to these smarter methods, and which ones that would be, I don't know, but I think there is a lot to be gained there", (Interviewee 4, personal communication, April 6, 2023)

And by the following quote:

"People are exploring if we build things with a vision from a male perspective and how much this influence the appearance of buildings. If there is more female architecture, will this be different? Since this image is very much printed in our mind, this is what 'normal' architecture nowadays looks like" (Interviewee 14, personal communication, April 14, 2023),

interviewee 14 also reported an occurring shift at the university, since the appearance of male influences on urbanism is nowadays investigated by female students and supported by teachers.

4.4. Architecture In Times of Crisis

Due to the Covid-19 pandemic, contemporary contracts are ending and people employed in architecture are dismissed. Economic slowdown translates into architecture firms are forces to cut in financial expenses. Since overhead departments like Human Resources, Business Development or Public Relations are not perceived as essential by managements, those employees will lose their jobs. Many ancillary tasks are the responsibilities of architects again, such as searching for acquisitions, maintaining partner relationships or updating social media accounts. Interviewee 5 stated that HR is an intermediate department between architects and partners and supports both parties in optimising the balance in offices and creating healthy working conditions. Its disappearing affects diversity and thus gender-inequality within the firms. Cutting back on these expenses during crises and practicing circular lay-offs, is according to interviewees 5, 10, and 11 a reversal in the development of improving working circumstances. By stating:

"You cannot really change people every six months. In some professions you can make it work, you know, but in art related to this kind of teamwork professions, you need synergy. You need certain years to work together to get adjusted to each other", (personal communication, April 18, 2023),

interviewee 8 expressed the urgency of familiarity of collaboration with co-workers, since optimising these relations is an investment expressed in the quality of projects.

4.5. The New Generation Architects

64% of the interviewees are convinced that a new generation of architects will change the outdated work ethic and culture. Interviewee 3 mentioned the following:

"The people who are 40 plus, it is normal for them to check emails on Saturdays, or drawing sketches. I feel like it is much less natural for younger generations. They want to do a lot more other things besides their work" (personal communication, April 25, 2023).

Juniors and interns are advocating for a healthy work-life balance, refusing overtime, expecting skilled-based salaries, and aiming to be employed at offices that guarantee and protect the diversity and mental health of architects. They reconsider outdated traditional gender roles and standards from older generations and are not afraid to negotiate for better work conditions. Interviewee 14 already notices changes among students, since gender-inequality is a topic that attracts their attention and they are protesting the heavy workload. Whether this generation really makes a difference is a matter of time, but the mentality of a full commitment to architecture is shifting, which generates hope that architecture will be a more social profession in the future.

4.6. Discussion

The empirical findings are in correlation with the theoretical framework. The sex-role socialisation of Astin (1984) is proven to be from a dated perspective, since interviewees confirmed both men and women were interested in architecture from a young age and enjoy the combination of creativity and technic. Nevertheless, the assertion made by Law (2014) regarding the missing 32% of female architect students that do not transition into the labour market finds support by the answers of interviewees. Women leave or will not enter the profession due to their desire for flexibility, the lack of (financial) appreciation from management, and the lack of career opportunities. They search for jobs in other fields where they can work part-time and receive higher salaries and promotions. Due to the feminine drain, predominantly men or women who adopted the harsh work ethic occupy senior positions, as confirmed by interviewees and described in the literature of Schuster (2012) and Sang et al. (2014). Interviewees reported that architects are not educated to fulfil a managerial position and project their dated standards, obtained during their studies, on employees. Since equity is subjective according to Facio A., Morgan M.I. (2009), it is confirmed by interviewees that diverse needs of architects are not accommodated in offices. This setback hinders progress towards achieving equality, wherein equity, as posited by Espinoza (2007), should serve as a strategic tool. As a result of the lack of empathy from the management towards their staff, the answers of the interviewees show that employees face multiple forms of gender-inequality.

According to the interviewees and Schuster's (2021) literature, gender inequality is a deep-rooted problem within the sector and it is possible to discern which intersectional interfaces gender-inequality is experienced by architects. Gender-inequality is recognised in the general toxic working culture, in which working overtime due to poor planning, little financial compensation, high masculinity, and a high workload

are prevalent. The participants told that architecture is considered a lifestyle that requires ambition and dedication. The findings showed that both men and women experience pressure, but if linked to the literature by Criado Perez (2019), women are additionally take care of their households for three to six hours a day and, compared to the average of 30 minutes to two hours of men, female architects have more external responsibilities compared to their male colleagues in addition to their demanding careers. This feeds genderinequality and increases the risk of exhaustion and burnouts, leading women to leave the profession. The literature by Sang et al. (2014) emphasises that architects who struggle to cope with the demanding workload are subjected to bullying within the hyper masculine environment. Consequently, this perpetuates a persisting toxic culture. Both men and women experience toxicity, but according to the interviewees, women often cannot handle the pressure due to their emotional complexity. This dated mindset leads to sexism, intersectionality, and misogyny in the workplace which is fuelled by architects at every hierarchal level. Furthermore, within this patriarchal culture, distrust emerges following maternal and paternal leave, as briefly explained in the literature review by Williams (2005), who attributed this distrust and the lack of support experienced by mothers to the concept of Maternal Wall Bias. However, as disclosed by the interviewees, this form of discrimination significantly influences their prospects for promotion and salary increments.

The findings from the interviews and the literature reveal a transformation in the prevailing working culture, predominantly within micro and small architecture firms. This shift can be partly attributed to the restrictions imposed by the Covid-19 pandemic, which necessitated employers to adopt a flexible approach towards hybrid and part-time work arrangements. As the answers of interviewees showed, there is an increasing number of architects who do not recognise nor experience dated standards of older generations. Partners from micro and smaller firms are consciously not projecting toxic traits that are commonly known in architecture on their staff. Therefore, the first managerial alteration from this research would be to create awareness among management concerning unconsciously implementing toxic traits and encourage them to search for alternative working ethics that are both effective and efficient in terms of planning and financial reallocation. With architects leaving the profession, the interviews revealed that a team's synergy changes along which has a negative impact on collaborations within projects. Cultural management tools such as the dimensions of Hofstede (2011) can be used to identify this impact on strengths and weaknesses in companies.

If this work ethic disappears in the sector, it will subsequently not be reflected in education systems either. Professors promoting an unhealthy work-life balance by encouraging all-nighters and creating competitive atmospheres is a result which has not been recognised in the scrutinised literature. The interviewees perceive this pedagogical approach as damaging to the development of future architects, as it implies a work ethos that is embedded in their professional identities and subsequently influences their interactions with colleagues. To stop the toxicity normalisation, both teachers and students need to voice their displeasure. This change is already in effect in work ethics in universities. Students are protesting high workloads, researching gender-inequality in architectural history, and refusing to compete on dated standards of professors. Employees recognised this new wave of architects in the workplace in terms of negotiation for promotions and refusing overtime. They believe that this movement might have an impact on the revitalisation of a feminist wave within the sector since Freedman's (2013) literature illustrated that a revolution against the standardisation of men's needs can change women's lives. This research showed that

applying equity into office policies is essential to increase equality among genders. To establish these improvements for all architects in the Netherlands, it is necessary to amend the CLA accordingly. Section 2.6. Policies Reinforcing Female Labour Participation listed some policies that are also relevant according to the interviewees, such as gender-neutral parental leave, a quota for women in senior positions, and closing the gender pay gap. They unveiled that architects believe that through policy-making the culture will change and it is crucial to hire experts specialised in management positions and employment needs to accomplish equality. Even during recessions, it remains important to financially invest in HR departments and qualified management, as they play a vital role in protecting the well-being of the staff.

Besides female energy optimises the working culture according to the interviewees, the urgency of gender-equality in the architecture sector lies in the fact that diversity in the workplace is essential to ensure inclusive projects (Karaçor, 2014; Kefayati & Moztarzadeh, 2015;). Interviewee 4 is interested in the representation of gender diversity and provided the conversation with food for thought: Should a building be inclusive and represent all these different identities as much as possible, or is a building inclusive by designing it as neutral as possible to make everyone feel equally comfortable? Since equity and equality are already extensively discussed in the literature section, from the perspective of this study, it can be concluded that that a building or space must accommodate the interests of different identities if the designer aims to create an inclusive building and avoid intersectional discrimination (Zallio & Clarkson, 2021). Examples of interviewees regarding different needs of minorities are lactation rooms, prayer/meditation rooms and gender-neutral public toilets. Social sustainability is, according to Zallio & Clarkson (2021), only achievable by designing inclusive public spaces improving the social capital of cities (Kefayati & Moztarzadeh, 2015; Karaçor, 2014). The interviewees agreed and are convinced that designing processes require an understanding of the needs of minorities and believe that gender-specific differences regarding perspectives on design can support those projects. Mainly because the results of the interviews showed that inviting external experts on diversity in the design phase is not a financial priority, it is of economic value to utilise the internal diversity in the firm positively.

5. Conclusion, Limitations, and Recommendations

5.1. Conclusion

This study started with the research question: *How is gender-inequality in the architectural sector perceived by architects and urban planners operating in Rotterdam?* After the discussion, it can be concluded a toxic working culture is prevalent in architecture offices and bears characteristics such as low financial remuneration, working overtime, high masculinity, lack of appreciation, trust, and flexibility, high workload, rivalry, and bullying. Gender-inequality manifests in this context as women have domestic responsibilities in addition to their careers and are perceived as emotionally complex human beings that cannot handle work pressure. Because women do 75% of the unpaid labour (Criado Perez, 2019), flexibility is required, which is impossible in such a high demanding profession, and makes women around the age of 30 leave architecture to seek for family-friendly jobs (Pieters, 2023). People who survive such an environment stay, who mostly are white cisgender able-bodied heterosexual men who project their toxic traits on employees and maintain dated standards. This creates a patriarchal working culture in which sexism, intersectionality, and misogyny flourish.

Female architects in particular experience gender-inequality in a stagnating career progression compared with their male colleagues, experience difficulties in arranging pregnancy and paternal leaves, undergo a lack of trust and appreciation, are victims of the gender-pay gap, and are mansplained by coworkers. The women who are still dedicated to architecture but also want to start a family have to deal with the Maternal Wall Bias and encounter distrust from their managers after re-integration in the office. They work twice as hard to prove their loyalty and ambition, since the stigma of being less work-committed is following them. They receive the Motherhood Penalty, which implicates a regression in their salaries, in contradiction with their male counterparts who receive Fatherhood Bonuses after they become parents. The origin of this harsh culture lies in the pedagogical system in which teachers normalise these dated traits.

Consequently, the toxic work environment remains in offices and women leave the profession, meaning that inclusivity and diversity in projects is not guaranteed since the representation of women's needs is not infiltrated in design approaches. Architects have the responsibility to contribute to social sustainability but without inclusivity, the city's social capital will not improve. There is no financial funding to conduct research with experts in economics, sociology, and anthropology to ensure inclusivity, which means a financial disadvantage for management to not benefit from the diversity within the office.

Nevertheless, a change in the culture is occurring due to a new generation of architects refusing to work overtime, advocating for diversity, creating healthy work-life balances and is not afraid to negotiate with managers regarding salaries and promotions. To accelerate, implementing policies that guarantee equity to accomplish equality and reinforce female labour participation is necessary. Gender-neutral parental leave, closing the gender pay gap, a quota for women in board positions, encouragement of hybrid and part-time work from management, and applying 40-hour working weeks are ways for architectural offices to accommodate the needs of female employees. The system should be reformed policy-wise through official

channels, changing the CLA along and should be enforced by the SFA⁷ or BNA⁸. By distilling a toxic work environment, a new composition of qualified management, a radical pedagogical change at universities and introducing policy alterations, inequality in architecture can be fought and overcome. Gender inclusivity is not only in the interest of city inhabitants who aim to live in a modern, diverse urban infrastructure that fosters their needs, or is solely important for a healthy work culture in architectural offices; gender inclusiveness is in the interest of all qualified, talented, hard-working women who deserve a seat at the table.

5.2. Limitations

This research was subject to several limitations. Firstly, a notable limitation regards the specific characteristics of the sample. To deliver a feasible study, this research focused on perceptions of the designers within architecture, as there is a limitation concerning the entire urban planning and architecture sector regarding gender inclusivity. Other parties such as residents, universities and academies, the municipality, developers, and other specialists of urban planning and architecture were not included.

Additionally, it is important to acknowledge that limitations in interviews may have arisen due to influenced competition and social/professional positions. Participants may exhibit reluctance in sharing sensitive information or experience tendency to provide answers that align with societal expectations. For further elaboration read section 3.5 Biases and Ethical Issues in the methodology of this study.

Lastly, the choice to focus on the industry and not on citizens left out opportunities in relation to researching experiences of gender inclusivity in urban planning and architecture projects that are realised, though this decision is made deliberately to create a sharper focus on the work culture in which those developments are designed. Therefore, this limitation can be seen as an opportunity for future investigation (section *5.4. Recommendations for Further Research*), for which this study provides a basis on how genderinequality translates to the design of cities.

5.3. Recommendations to the Architecture Sector

According to this study, the culture requires a holistic change that must create awareness concerning gender inequality. Since there are current debates regarding the position of women within architecture, such as Nai010's symposium on June 16 2023 at the New Institute Rotterdam (Symposium Vrouwen in Architectuur, n.d.), it is the right time to do research and provide recommendations to the architecture sector.

To fight gender inequality in architecture, an alteration must take place in pedagogical systems at universities. Toxic and outdated standards like all-nighters and peer competition should be curbed and professors must focus on generating diversity in the curriculum and the student population. This could be accomplished by creating awareness among students and offering unbiased histographical courses regarding the role of women in architecture. They must embrace equity rather than equality and meet the needs of different students. Teachers should critically examine their own norms and values pertaining to their work-life balance and, if deemed necessary, make adjustments according to the contemporary zeitgeist.

Subsequently, it is important that above measures are also implemented by properly trained management within offices. They should promote and encourage diversity, not by treating women equally to

⁷ Stichting Fonds Architectenbureaus, translated to Foundation Fund Architectural Firms.

⁸ Branchevereniging Nederlandse Architectenbureaus, translated to Dutch Architectural Firms Trade Association.

men, but rather providing them tailor-made arrangements regarding flexibility, hybrid and part-time working, re-integration in the office after childbirth, and offering chances of salary increments and promotions. Moreover, it is necessary to allocate financial resources to improve working conditions and refrain from reducing investment in HR during crises. Lastly, management must stop implementing high demanding schedules and priorities effective and efficient work styles. These measures should be incorporated into the CLA with provisions that establish a maximum 40-hour working week, facilitate gender-neutral parental leave, and ensure the implementation of higher minimum wages. This needs to be monitored by management, HR, and unions such as SFA and BNA to prevent abuses. Finally, it is essential that architects and students struggling with workplace inequality and poor working conditions keep protesting such circumstances to create a healthy work-life balance appropriate to modern values anno 2023.

The architecture sector is not an exception regarding prevailing toxic work cultures and gender inequality. The healthcare sector inhibits bullying and disruptive behaviours that are normalised, thereby compromising on the care of patients. Furthermore, the work mentality in healthcare aligns with that of the architecture sector, since employees frequently work extensive overtime and are often inadequately remunerated (Holloway & Kusy, 2010). Given that healthcare is a profession directly linked to societal well-being, it is crucial to address challenges pertaining to working conditions in this sector as well. By setting an example for new generations and refusing to accept bad working conditions in various sectors, there might be a possibility that pressing issues such as the gender pay gap potentially will be solved in less than in 257 years.

5.4. Recommendations for Further Research

Section 4.3. Gendered Urbanism and its Impact deserves a deeper and extended investigation. After this study can be concluded that a shortage of women within the profession of architecture has negative affects on the culture and synergy in the workplace, meaning that ultimately designs are based on the dominant male perspective. Nevertheless, it is interesting to explore the impact of the lack of representation of diverse needs in offices in the built environment concerning safety and cleanliness in public spaces, sanitation facilities, accessible transportation (Criado Perez, 2019), possibilities to community engagement, accessibility to services such as schools, childcare, and healthcare, the accessibility of nature, and gender responsive measurements such as stroller-friendly pedestrian paths (Jabeen, 2020), and breastfeed facilities. Various designs of public spaces by different architecture and urban infrastructure firms can be compared and analysed by means of women's needs. Cities inhabitants can be questioned and give advice for improvement regarding the urban infrastructure in a participatory design process. Such an engagement program to design healthier and inclusive communities that already have realised projects in Rotterdam is created by Happy Cities (Happy Cities | Walkable Rotterdam: Bloemhof, n.d.), which is an urban planning, research, and consulting firm based in Canada (Happy Cities | About Us, n.d.). Research could be in collaboration with the experts of SpringCo, a Rotterdam based company specialised in urban analytics to improve the living environment of urban residents. SpringCo gathers data concerning housing, care, facilities, energy transition, mobility, and real estate (SpringCo - Urban Analytics, 2021). An example of SpringCo's studies is the mobility environment, in which it measures mobility quality based on destinations of daily visits of Amsterdam citizens (Croon, 2021). It would be an interesting angle to investigate the impact of gender imbalance in designs of the built environment, based on SpringCo's data, whether architectural firms take

this analysis into account and whether completed environments or development projects meet the criteria for a women-friendly environment.

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7. Appendix

7.1. Interview Guides

Topics	Key words	Questions Female Architects
Homemaker vs. Breadwinner	Socially excepted inequality, dissatisfaction mens perception standardisation globally, the rise of feminism, social recognition and economic independence, 75-25 unpaid work ratio, lower paid&lower skilled work, gender pay gap, less money & less free time	Why did you start working in the architecture? What are advantages to work in architecture? What are disadvantages to work in architecture? How do you combine your personal/private life with your job? Can you describe your typical week? Did you ever experience difficulties to combine your personal life with your job? Can you give me an example? What were/are the solutions? Do you experience differences since you started a family in regards of treatment, financial remuneration, flexibility etc? Can you give me an example? Can you describe the differences and similarities between you and your male colleagues regarding the balance of work and personal life? How can your employer contribute to make it easier to combine your personal life with your career?
the Drawback of a Meritocratic Society	Equity vs. Equality, tailor made solutions, contribution-based rewards, fairness, justice, equity as a illusive goal, human right based equality, male perspective as framework human rights, equality = measurable, equity = subjective, equity as achievement oriented behaviour, equality as autonomy, meritocratic system unworkable, corporate merit inequal financial remuneration, academia dominated by white men, 50% is female of architecture students, 18% female labor participation in architecture, the missing 32%	What are your needs to provide good work at your job as an architecture? Can you explain to me what a job in architecture normally looks like? What is the workload like? Is it a flexible profession? A lot of women study architecture, but most of them will not work as an architecture after they graduate. What is according to you the reason to not to continue this path for women? How is the division of women/men in your office? Are financial rewards normal in architecture? How are these allocated? Do you experience a difference in the allocation of financial rewards based on gender? How do you feel about your chances to participate in the architectural sector? Did you ever experience difficulties in getting a job? do you think it is tough/easy for people to move up within architecture? Why? Can you give me an example?

Gender Segregation

Gender division jobs, sex-role socialisation, competitive/ achievement vs. Noncompetitive service oriented practices, stereotypical, female labour fore decease after age 25, women work in social work men in construction, decrease women labor participation due to pandemic, shecession vs man cession, part-time jobs dominated by women 70%

Do you experience a difference in the work that men and women do in your cluster? Can you give me an example of these tasks?

do you think it is equally tough/easy for both men and women to move up within architecture?

Do you feel like there is a competitive vibe between men and women within the architecture firm? How do you notice this?

What were the effects of Covid on your work in architecture? What did you notice in your working environment and how did you experience it yourself? What changed?

How did you combine your personal life with your job during covid?

What was the role division in your family during Covid and how did you experience this?

Genderinequality in the Workplace of Architectural Firms

Precarious/vulnerable work, wage work, self employment, temporary/ zero hours contracts, low labour income, job security, social protection rights, gender gap hegemonic masculine culture in workplace, difficult to infiltrate for women. hierarchical division gender, men occupying higher positions, 12% women partners, 10% senior positions, women earning 25% less in arch., requirement of flexibility, long working days, standby on weekends, motherhood penalty, fatherhood bonus, low wages,

What do you think that are attractive reasons for women to work in architecture?

What is the division of men/women in the workplace?

Do you experience a difference with working with men or with women? Can you give me an example?

Do you believe that there is a difference in how women and men are treated in the workplace? Can you give me an example?

What do you think that is the difference between men and women in architecture regarding possibilities/status etc.?

Do you believe that the opportunities that men and women have in architecture are equally and fair distributed?

What are the proportions of men and women in the company where you are currently employed?

Do you experience gender-inequality in the workplace? Have you ever experienced gender-inequality during your career?

Is there a gender-based hierarchy organised within your architectural firm?

If I tell you that women in architecture earn 25% less compared to their male colleagues, is this surprising to you? Why? What are your experiences? Do you think men and women are paid equally in this profession?

Do you have any role models in architecture? Can you give me some examples? Why are these people your role models?

what would you have liked to have received as advice when you started in this profession?

Do you feel that you have to pave the way and support young architects since you are an architect? Do you think about gender inclusivity when you do this?

Importance of Gender Aware Urbanism and the Impact of Non Participation in Public Space Different use of urban services, correlation between urban planning and well-being of women, neglecting in transport planning, sexist snow clearing, economical disadvantage, 69% injuries for women, trip chaining, cities and public spaces are designed for men

Can you notice the differences between a design made by women or men and how? What are men key characteristic and what are women characteristics in a design?

Do you think that buildings are in general more often designed by men or by women? What are, according to you, the consequences of a building that is designed by a man or designed by a woman for residents/visitors?

Do you believe that it is important to have a divers workforce in architecture and why?

How does gender-inequality in architecture permeates in the design of public spaces?

What do you think are the key concepts of an inclusive design?

Is there room for a female perspective in the design process?

What are important factors to consider to create a women-friendly design?

How do you think that an architectural firm can contribute in its designs to a more equal society?

Is gender aware urbanism a topic within architecture? How do you experience this?

Are you interested in gender aware urbanism? Why or why not?

Policies female participation (what policies can affect this regime or make the situation better) Breaking traditional barriers, menstruation leave, maternity and paternity leave, quotum women in corporate top positions, economical equality, redivision of unpaid labour, equal society, gender neutral system, closing the gender pay gap How are the regulations within architecture to support women such as long-term maternity leave, full-time/fixed contracts, menstruation leave and a quota of how many women are in the workplace?

How does the architecture firm that you work for contribute to fighting inequality based on gender in the workplace?

How do you think that the future of women in architecture will change due to the pursuit for gender inclusivity/equality?

What kind of policies can improve the current situation in which you work as a female architecture?

what do you think that women can contribute themselves to reach more equality?

How do you stimulate gender inclusivity yourself? What can you do more or better to include people?

What is your advice for women who are aiming to work in architecture?

What would be plus for you to make your work in architecture easier in terms of policy?

Topics	Key words	Questions Male Architects
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Gender Segregatio n	Gender division jobs, sex-role socialisation, competitive/achievement vs. Non-competitive service oriented practices, stereotypical, female labour for decrease after age 25, women work in social work men in construction, decrease women labor participation due to pandemic, shecession vs man cession, part-time jobs dominated by women 70%	Do you experience a difference with working with men or with women? Can you give me an example? Do you experience a difference in the work that men and women do in your cluster? Can you give me an example of these tasks? Do you feel like there is a competitive vibe between men and women within the architecture firm? How do you notice this? Do you think that there is a difference between the chances that women and men have to move up in architecture? Why? Do you believe that there is a difference in how women and men are treated in the workplace? Can you give me an example? What do you think would be an advantage to be a woman in the architectural sector and what would be a disadvantage? What were the effects of Covid on your work in architecture? What did you notice in your working environment and how did you experience it yourself? What changed? How did you combine your personal life with your job during covid?

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If I tell you that women in architecture earn 25% less compared to their male colleagues, is this surprising to you? Why? What are your experiences? Do you think man and women are paid equally in this profession?

Do you see differences through the years you are working as an architect regarding gender inclusivity?

Do you believe that the opportunities that men and women have in architecture are equally and fair distributed?

Do you believe that women have a role in making the workplace more inclusive? What is the role of men to contribute to this?

Do you have any role models in architecture? Can you give me some examples? Why are these people your role models?

Do you feel that you have to pave the way and support young architects since you are an architect? Do you think about gender inclusivity when you do this?

Do you think it is important to have more people with different backgrounds, race, ethnicities, genders etc. to work in architecture? Why?

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Different use of urban services, correlation between urban planning and well-being of women, neglecting in transport planning, sexist snow clearing, economical disadvantage, 69% injuries for women, trip chaining, cities and public spaces are designed for men

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Breaking traditional barriers, menstruation leave, maternity and paternity leave, quotum women in corporate top positions, economical equality, redivision of unpaid labour, equal society, gender neutral system, closing the gender pay gap How are the regulations within architecture to support women such as long-term maternity leave, full-time/fixed contracts, menstruation leave and a quota of how many women are in your workplace?

How does the architecture firm that you work for contribute in fighting inequality based on gender in the workplace?

How do you think that the future of women in architecture will change due to the pursuit for gender inclusivity/equality?

What kind of policies can improve the current situation in which women work as female architectures? Think of quota, better cao/payments, more flexibility etc.

what do you think that women can contribute themselves in order to reach more equality?

What is your advice for women who are aiming to work in architecture?

What would be plus for you to make your work in architecture easier in terms of policy?

How do you stimulate gender inclusivity yourself? What can you do more or better to include people?

7.2. Code List

1. Working in architecture and urban planning sector

- 1.1. Advantages
- 1.1. Advantages: (internat) diversity in projects
- 1.1. Advantages: childhood familiarity
- 1.1. Advantages: climbing up in positions
- 1.1. Advantages: complexity
- 1.1. Advantages: creativity
- 1.1. Advantages: familiarity with firm
- 1.1. Advantages: growth & learning
- 1.1. Advantages: high development of skills
- 1.1. Advantages: indepence/responsibility
- 1.1. Advantages: meaningful work
- 1.1. Advantages: passion/dedication profession
- 1.1. Advantages: possibility of flexibility
- 1.1. Advantages: security as international
- 1.1. Advantages: tangible result
- 1.1. Advantages: technical & math
- 1.1. Advantages: variety of tasks/duties
- 1.1. Advantages: wide variety people
- 1.2. Disadvantages
- 1.2. Disadvantages: all nighters
- 1.2. Disadvantages: bullying
- 1.2. Disadvantages: competitive environment
- 1.2. Disadvantages: contemporary contracts
- 1.2. Disadvantages: high pressure
- 1.2. Disadvantages: imbalance work/private life
- 1.2. Disadvantages: lack of flexibility
- 1.2. Disadvantages: lack of guidance
- 1.2. Disadvantages: lack of opportunities/space to grow
- 1.2. Disadvantages: little/no compensation overtime
- 1.2. Disadvantages: low salary
- 1.2. Disadvantages: no emotions/ sharing personal experiences
- 1.2. Disadvantages: overtime
- 1.2. Disadvantages: toxic work culture
- 1.2. Disadvantages: unsafe/closed environment
- 1.2. Disadvantages: working conditions
- 1.3. Educational system
- 1.3. Educational system: (internat) internships
- 1.3. Educational system: adjustments on new standards
- 1.3. Educational system: all nighters
- 1.3. Educational system: aware of gender-inequality
- 1.3. Educational system: chances in work field/during studies

- 1.3. Educational system: comparison of work culture different countries
- 1.3. Educational system: comparison with internships/work environment
- 1.3. Educational system: comparison with other studies
- 1.3. Educational system: comparison with other work fields
- 1.3. Educational system: competitive
- 1.3. Educational system: crying
- 1.3. Educational system: cultural diversity
- 1.3. Educational system: current situation
- 1.3. Educational system: Dutch students
- 1.3. Educational system: exploitation interns
- 1.3. Educational system: fear
- 1.3. Educational system: female students
- 1.3. Educational system: flexibility
- 1.3. Educational system: future prospect/expectations work culture
- 1.3. Educational system: gender diversity
- 1.3. Educational system: hierarchal culture
- 1.3. Educational system: high workload
- 1.3. Educational system: insecurity
- 1.3. Educational system: international students
- 1.3. Educational system: limiting creativity
- 1.3. Educational system: male students
- 1.3. Educational system: normalising unhealthy work culture
- 1.3. Educational system: outdated standards
- 1.3. Educational system: overachieving students
- 1.3. Educational system: ratio male/female students
- 1.3. Educational system: ratio male/female teachers
- 1.3. Educational system: sexism
- 1.3. Educational system: stress/ high work pressure
- 1.3. Educational system: substantive prep. for career
- 1.3. Educational system: teachers behaviour
- 1.4. Architectural culture
- 1.4. Architectural culture: (gender) diversity
- 1.4. Architectural culture: all nighters
- 1.4. Architectural culture: ambitions
- 1.4. Architectural culture: artists mentality
- 1.4. Architectural culture: awareness gender-inequality
- 1.4. Architectural culture: CAO
- 1.4. Architectural culture: comparison other work fields/other arch. firms
- 1.4. Architectural culture: compensation overtime
- 1.4. Architectural culture: competitive environment
- 1.4. Architectural culture: current situation architecture
- 1.4. Architectural culture: Dutch experiences
- 1.4. Architectural culture: effectiveness & efficiency
- 1.4. Architectural culture: employment various firms
- 1.4. Architectural culture: experiences of internationals
- 1.4. Architectural culture: financial status
- 1.4. Architectural culture: high demanding profession
- 1.4. Architectural culture: incentive arch. firms
- 1.4. Architectural culture: job apply
- 1.4. Architectural culture: lack of flexibility
- 1.4. Architectural culture: leading multiple projects
- 1.4. Architectural culture: loyalty
- 1.4. Architectural culture: nepotism
- 1.4. Architectural culture: opportunities promotion Architectural culture: overtime
- 1.4. Architectural culture: passion
- 1.4. Architectural culture: planning
- 1.4. Architectural culture: ratio male/female architects
- 1.4. Architectural culture: ratio national/international
- 1.4. Architectural culture: rationality/professionality
- 1.4. Architectural culture: role models
- 1.4. Architectural culture: salary
- 1.4. Architectural culture: side tasks
- 1.4. Architectural culture: synergy in team
- 1.4. Architectural culture: work ethic
- 1.4. Architectural culture: workload

2. Urbanism and architecture

- 2.1. Architecture and urban infrastructure: impact gender-inequality
- 2.1. Architecture and urban infrastructure: impact lack of diversity design
- 2.1. Architecture and urban planning projects
- 2.1. Architecture and urban planning projects: awareness gender-inequality
- 2.1. Architecture and urban planning projects: commercial/standardisation objectives
- 2.1. Architecture and urban planning projects: comparison needs men/women
- 2.1. Architecture and urban planning projects: complexity
- 2.1. Architecture and urban planning projects: cultural diversity
- 2.1. Architecture and urban planning projects: flexibility
- 2.1. Architecture and urban planning projects: gender aware urbanism/inclusive design
- 2.1. Architecture and urban planning projects: governmental policies
- 2.1. Architecture and urban planning projects: needs design men
- 2.1. Architecture and urban planning projects: needs design women
- 2.1. Architecture and urban planning projects: needs ethnic groups
- 2.1. Architecture and urban planning projects: social impact
- 2.1. Architecture and urban planning projects: unilateral design
- 2.2. Design process
- 2.2. Design process: approach
- 2.2. Design process: characteristics/perspective design ethnic groups
- 2.2. Design process: characteristics/perspective design men
- 2.2. Design process: characteristics/perspective design women
- 2.2. Design process: comparison designs men/women
- 2.2. Design process: gender-inequality
- 2.2. Design process: guidelines
- 2.2. Design process: participation local residents
- 2.2. Design process: personality
- 2.2. Design process: pre/post design research gender/cultural diversity
- 2.2. Design process: pre/post design research post-growth
- 2.2. Design process: pre/post design research society in general
- 2.2. Design process: pre/post design research sustainability
- 2.2. Design process: reflection
- 2.2. Design process: skills

3. Toxic work culture architecture sector

- 3.1. Missing female architects
- 3.1. Missing female architects: awareness gender-inequality
- 3.1. Missing female architects: bad working conditions
- 3.1. Missing female architects: combination work-life duties
- 3.1. Missing female architects: comparison with other sector
- 3.1. Missing female architects: desire for flexibility
- 3.1. Missing female architects: external factors
- 3.1. Missing female architects: high demanding career
- 3.1. Missing female architects: high masculinity
- 3.1. Missing female architects: historiography
- 3.1. Missing female architects: lack of appreciation
- 3.1. Missing female architects: lack of opportunities
- 3.1. Missing female architects: lack of support
- 3.1. Missing female architects: less supply of female architects
- 3.1. Missing female architects: low payments
- 3.1. Missing female architects: not a feminine profession
- 3.1. Missing female architects: toxic work culture
- 3.2. Salary and promotion
- 3.2. Salary and promotion: comparison men/women promotion
- 3.2. Salary and promotion: comparison raise men/women
- 3.2. Salary and promotion: economic state of office
- 3.2. Salary and promotion: fatherhood bonus
- 3.2. Salary and promotion: gender pay gap
- 3.2. Salary and promotion: lack of opportunities promotion
- 3.2. Salary and promotion: lack validation salary
- 3.2. Salary and promotion: motherhood penalty
- 3.2. Salary and promotion: promotion men
- 3.2. Salary and promotion: promotion women
- 3.2. Salary and promotion: salary internationals
- 3.2. Salary and promotion: salary men
- 3.2. Salary and promotion: salary women

- 3.2. Salary and promotion: stagnation
- 3.3. Stereotyping in work environment
- 3.3. Stereotyping in work environment: characterisics men
- 3.3. Stereotyping in work environment: characteristics women
- 3.3. Stereotyping in work environment: comparison characteristics men/women
- 3.3. Stereotyping in work environment: comparison skills men/women
- 3.3. Stereotyping in work environment: comparison treatment men/women
- 3.3. Stereotyping in work environment: comparison work ethic men/women/internationals
- 3.3. Stereotyping in work environment: division in team
- 3.3. Stereotyping in work environment: mansplaining
- 3.3. Stereotyping in work environment: maternal wall bias
- 3.3. Stereotyping in work environment: men feeling threatened by women
- 3.3. Stereotyping in work environment: sense of reliability
- 3.3. Stereotyping in work environment: skills internationals
- 3.3. Stereotyping in work environment: skills men
- 3.3. Stereotyping in work environment: skills women
- 3.3. Stereotyping in work environment: tasks men
- 3.3. Stereotyping in work environment: tasks women
- 3.3. Stereotyping in work environment: treatment men
- 3.3. Stereotyping in work environment: treatment women
- 3.3. Stereotyping in work environment: work ethic Dutch
- 3.3. Stereotyping in work environment: work ethic international
- 3.3. Stereotyping in work environment: work ethic men
- 3.3. Stereotyping in work environment: work ethic women
- 3.4. Consequences in architecture & urban infrastructure
- 3.5. Consequences in the workplace: neglecting healthy mental condition
- 3.5. Consequences in workplace
- 3.5. Consequences in workplace: (mirroring) outdated standards
- 3.5. Consequences in workplace: accepting poor working conditions
- 3.5. Consequences in workplace: bad working conditions
- 3.5. Consequences in workplace: bullying
- 3.5. Consequences in workplace: burn-outs
- 3.5. Consequences in workplace: closed environment
- 3.5. Consequences in workplace: competition between women
- 3.5. Consequences in workplace: cultural discrimination
- 3.5. Consequences in workplace: demotivating/losing ambition
- 3.5. Consequences in workplace: exploitation employees
- 3.5. Consequences in workplace: fear
- 3.5. Consequences in workplace: grudging team members
- 3.5. Consequences in workplace: hierarchal environment
- 3.5. Consequences in workplace: high masculinity
- 3.5. Consequences in workplace: homogene staff within firm
- 3.5. Consequences in workplace: insecurity about future in firm
- 3.5. Consequences in workplace: lack of actions from management
- 3.5. Consequences in workplace: lack of role models
- 3.5. Consequences in workplace: lack of support from co-workers/partners
- 3.5. Consequences in workplace: lack of trust from partners
- 3.5. Consequences in workplace: lacking overview due to hybrid work
- 3.5. Consequences in workplace: leaving the profession/firm/studies
- 3.5. Consequences in workplace: less chances for women
- 3.5. Consequences in workplace: less diversity in sector
- 3.5. Consequences in workplace: misogyny
- 3.5. Consequences in workplace: patriarchal culture
- 3.5. Consequences in workplace: sexism
- 3.5. Consequences in workplace: tokenism
- 3.5. Consequences in workplace: treatment internationals
- 3.5. Consequences in workplace: unhealthy & unhappy employees
- 3.5. Consequences in workplace: unqualified management/planning
- 3.5. Consequences in workplace: unused qualities of employees
- 3.6. Consequences private life
- 3.6. Consequences private life: feeling guilty towards family
- 3.6. Consequences private life: less investment in social life
- 3.6. Consequences private life: negative effects on family

4. Traditional (gender roles)

4.1. Equity vs. Equality

- 4.1. Equity vs. Equality: 'papa dag' (parenting day for fathers)
- 4.1. Equity vs. Equality: bonuses
- 4.1. Equity vs. Equality: comparison needs men/women
- 4.1. Equity vs. Equality: flexibility
- 4.1. Equity vs. Equality: lactation
- 4.1. Equity vs. Equality: meritocratic system
- 4.1. Equity vs. Equality: need of ethnic groups
- 4.1. Equity vs. Equality: need of men
- 4.1. Equity vs. Equality: need of women
- 4.1. Equity vs. Equality: paternal leave
- 4.1. Equity vs. Equality: pregnancy leave
- 4.1. Equity vs. Equality: production level
- 4.1. Equity vs. Equality: relaxation room
- 4.1. Equity vs. Equality: support partners/management
- 4.1. Equity vs. Equality: working fulltime
- 4.1. Equity vs. Equality: working parttime
- 4.2. Juggling paid work and unpaid work
- 4.2. Paid and unpaid work: cultural differences
- 4.2. Paid and unpaid work: daycare
- 4.2. Paid and unpaid work: hybrid work
- 4.2. Paid and unpaid work: overtime
- 4.2. Paid and unpaid work: support system family/friends
- 4.2. Paid and unpaid work: work-life balance
- 4.2. Paid work and unpaid work: comparison men/women
- 4.2. Paid work and unpaid work: division partners
- 4.2. Paid work and unpaid work: effect on family
- 4.2. Paid work and unpaid work: reintegration after birth child
- 4.3 Traditional gender roles
- 4.3 Traditional gender roles: comparison different countries
- 4.3. Traditional gender roles: feminism
- 4.3 Traditional gender roles: inequality gender
- 4.3 Traditional gender roles: private life
- 4.3 Traditional gender roles: sexism
- 4.3 Traditional gender roles: society

5.1. (Future) improvements

- 5.1. (Future) improvements: actions from management based on new standards
- 5.1. (Future) improvements: advocating for more diversity in architecture
- 5.1. (Future) improvements: awareness mental health
- 5.1. (Future) improvements: better CAO
- 5.1. (Future) improvements: better work conditions
- 5.1. (Future) improvements: changing regulations
- 5.1. (Future) improvements: comparison male/female treatment 5.1.

(Future) improvements: creating healthy balance

- 5.1. (Future) improvements: demanding equality
- 5.1. (Future) improvements: destimulation overtime
- 5.1. (Future) improvements: effectiveness & efficiency in work
- 5.1. (Future) improvements: flexibility
- 5.1. (Future) improvements: healthy & happy work life
- 5.1. (Future) improvements: mentality new generation
- 5.1. (Future) improvements: negotiation with managers
- 5.1. (Future) improvements: permanent contract
- 5.1. (Future) improvements: positive discrimination
- 5.1. (Future) improvements: promotion and paychecks
- 5.1. (Future) improvements: public activism
- 5.1. (Future) improvements: reconsideration gender roles society
- 5.1. (Future) improvements: reconsideration outdated standards
- 5.1. (Future) improvements: refusing overtime
- 5.1. (Future) improvements: resilience of women
- 5.1. (Future) improvements: role models
- 5.1. (Future) improvements: setting boundaries
- 5.1. (Future) improvements: shift in tasks
- 5.1. (Future) improvements: support of co-workers/partners
- 5.1. (Future) improvements: trust of partners

7.3. Recap Table Main Findings

Themes	Concepts	Findings			
Gender-Based Variance in Architectural culture and Work Ethic	Gendered Occupational Segregation	 No occurrence of gender segregation in architecture firms No sex-role socialisation occurs among architects regarding their interest 			
	Gendered Skills Differences	Women are more organised, design for the public functionMen prefer aesthetics			
	Gendered Coping Strategies in the Workplace	 Women are complex and emotional, hard to work with according to partners Men are perceived rational 			
	Gender-based Workplace Discrimination	 Discrimination in contemporary contracts, disadvantages in promotion and salaries, lack of appreciation and flexibility from management, leave arrangements, and career opportunities Partners do not experience discrimination but rivalry among women 			
Toxicity Normalisation: the Origin and Implications	Dysfunctional Educational System	 Teachers project outdated standard on students (all-nighters, high ambitions, high workload, etc.) Normalisation of toxic work culture Historical bias of women labor participation in architecture Courses are still dominated by men Students internalise toxic traits 			
	Toxicity Normalisation in Architecture and Urban Planning	 High demanding career Competitive environment High workload, meagre compensation, working overtime, rivalry Romanticising architecture as way of life Neglecting mental health, accepting poor work conditions, exploitation of employees, negative affects on social life/family 			
	Unqualified Management	 Managers are not educated in management styles Management consist of white men who work full-time and women who adopted work ethic Projection of work ethic (overtime, devotion, low compensation) Dissatisfaction of architects: resonance of problems and/or advises, a lack of understanding and insufficient planning toxic working culture because of poor planning 			
	Diverse Need Comprehension	 CLA not reflected in working culture Lack of understanding management Mostly accurate in the medium firm Need of flexibility, lactation/prayer/meditation rooms, part-time work week, customised arrangements, reintegration time after giving birth 			

Themes	Concepts	Findings			
	Patriarchal Architectural culture	 Gender pay gap Disadvantages career progression and bonuses Sexism, misogyny Mansplaining women High masculinity in working culture Bullying Ignoring women 			
	Discrimination of Internationals, Ethic Groups and Linguistic Bias	 No support in obtaining a work visa Less payment because of linguistic bias Lack of understanding of needs of other ethnic groups Less social contact with Dutch co-workers 			
	Maternal Wall Bias	 Distrust of management Prejudices of mother being less committed Motherhood Penalty and Fatherhood Bonus Re-integration on production level is necessary Refusing employees to work part-time Not stimulation hybrid working 			
	Feminine Drain in Profession	 Lack of flexibility, trust, appreciation Low salary and no opportunities for promotion Toxic work environment Desire for healthy work-life balance 			
	Awareness of Gender-inequality and Tokenism in Architecture	 Partners are not aware of gender-inequality in their offices Partners never experienced gender-inequality Employees, students/new generation are aware of gender-inequality and try to change it by activism Tokenism is present in architectural culture 			
Gendered Urbanism and its Impact	Intersectional Design vs. Commercialised Standardisation	 Awareness human based design should be a priority Developers gain profit from housing Commercialised standardisation of designs of housing exclude diverse needs of various population groups 			
	Impact Gender Imbalance in Built Environment Professions	 Via social sustainability social capital can be improved Requires inclusive urban designs No financial funds for inviting experts, or participatory design process Firms should take economic advantage from diversity among employees 			
Architecture in Times of Crisis		 Architecture is a precarious discipline Economic slowdown means budget cuts on departments such as Human Resources Employees are getting fired Workload increases and working condition worsen 			

Themes	Concepts	Findings
The New Generation Architects		 Students/new generation refusing outdated standards of teachers and management Creating heathy work-life balance, refusing overtime, negotiating with management, expecting normal salary based on skills, studying gender-inequality in architecture

7.4. Participants' Profiles

Table 4. Participants' Profiles	Participants	Position	Age	Male/ Female	National/ International	Size Firm	Years Employed Experience	Date of interview
Group 1: Founders and Partners	Interviewee 1	Partner	58	Female	National	Medium	32	April 6, 2023
	Interviewee 2	Founder	49	Female	National	Micro	25	April 5, 2023
	Interviewee 3	Partner	45	Male	National	Medium	19	April 25, 2023
	Interviewee 4	Partner/Co- Founder	37	Male	National	Micro	11	April 6, 2023
Group 2: Associate	Interviewee 5	Associate Partner	41	Male	National	Medium	15	April 13, 2023
Partners and Senior Architects & Urban Planners	Interviewee 6	Senior Urban Designer	34	Female	International	Medium	11	April 14, 2023
Group 3: Architects	Interviewee 7	Urban Designer	39	Female	National	Medium	15	April 18, 2023
and Urban Planners	Interviewee 8	Designer	31	Female	International	Medium	10	April 18, 2023
	Interviewee 9	Architect	29	Male	International	Small	3,5	April 19, 2023
	Interviewee 10	Architect	31	Male	National	Medium	6,5	April 28, 2023
	Interviewee 11	Architect	36	Female	National	Small	12	April 13, 2023
	Interviewee 12	Sustainable Business Developer	47	Male	National	Small	22	May 4, 2023
Group 4: Junior Architects, Interns, and Students	Interviewee 13	Former Junior Architect	29	Female	International	Micro	1,5	April 12, 2023
	Interviewee 14	Student/ intern	24	Female	National	Micro	-	April 14, 2023