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How was involvement of female architects in the design of modernist residential complexes in Warsaw related to emerging concept of feminist design?

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ABSTRACT

This paper investigates the impact of incorporating a female perspective on housing and settlement design in Warsaw, Poland, examining the periods of early modernism (1918–1939) and late modernism (1945–1989). The study focuses on how modernism's influence during Warsaw's rapid post-sovereignty development provided an opportunity for women architects to contribute to – and shape – the urban landscape. By analysing key figures such as Barbara Brukalska, Helena Syrkus, and Halina Skibniewska, the paper identifies factors that enabled these pioneers to gain recognition in a predominantly male field. It explores how collaborations with male counterparts and an emphasis on niche areas like interior design, furniture, and landscape architecture supported their professional success. Moreover, the paper addresses the role of political engagement in advancing their careers and highlights how these contributions laid the foundation for inclusive and feminist design practices. Finally, it compares that context to challenges within contemporary architectural discourse.

KEYWORDS: architecture, female architects, modernism, modernism in Warsaw, Barbara Brukalska, Helena Syrkus, Halina Skibniewska, feminist design, inclusive design

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1. Introduction

1.1. Definitions and note of translation

Specifically in relation to the design and involvement of women in that profession this paper refers to the term feminist design. Feminist design is understood as a part of inclusive design, where the group which perspectives are included in the design process is women.

If the translation of quotes and texts from discussed architects, as well as names of projects and movements is provided by the author of the paper, it is stated so. In case it refers to the translation used in one of the reference sources, the paper keeps the translation provided by the source. In addition to that the paper keeps the basic grammar structure of surnames as they are used in their original language, for example Polish surname 'Brukalski' is used as following: male version *Brukalski* (Stanisław Brukalski), female version *Brukalska* (Barbara Brukalska), plural version *Brukalscy* (Stanisław and Barbara Brukalscy). To refer to his/her/their project etc. the paper uses the following structure: *Brukalski's*/*Brukalska's*/*Brukalscy's*.

1.2. Historical outline for involvement of female architects in the design of modernist residential complexes in Warsaw

Gender roles over the XX century has transformed significantly. That means that female perspective today is vastly different to female perspective in the 1920s or 1960s and so would be the understanding of the input that first female architects had on transforming the built environment. The paper aims to investigate the role that inclusion of women architects' perspective played in development of design processes in the past, specifically in the field of housing and settlements since gender roles in the past gave women different angle in understanding that sector. On a significant scale, woman started to actively participate in architecture formally as architects in early modernism period, which is why the paper focuses on that time as well as on late modernism to analyze the aspect of legacy of the beginnings of feminist design. Therefore the discussed period of time is 1918-1939 and 1945-1989. It also aims to focus on female architects related to architectural circles of Warsaw, Poland. That city is one of the few big European cities vastly defined by ideas of modernism due to its rapid expansion in that time after the country of Poland restored its sovereignty and the development of Warsaw was no longer withheld by regulations

applied by Russia in XIX century. In the closing part the paper investigates how involvement of female architects influenced inclusivity in design in Warsaw.

1.3. Overview

Throughout centuries of development of European cultural circles women had very limited influence on the built environment. The first admission of a female student to an architectural education institution took place in the end of XIX century. It has been since then that women started slowly pursuing careers in that field, however it is until now that there are many inequalities between male and female architects and designers. Recent trends of limiting women's rights or abandoning efforts towards building diversity, equity and inclusion that are present in many places over the world are a possible signal to raise awareness of consequences of lack of representation of different groups in the workforce onto our society and its well-being.

Awareness of the importance of inclusive design has been validated by many researchers of many fields. As Waller, Bradley, Hosking, and Clarkson (2015) state, 'every design decision has the potential to include or exclude customers' (Waller et al., 2015, 'Abstract') and moreover, 'products that are more inclusive can reach a wider market, improve customer satisfaction and drive business success' (Waller et al., 2015, para. 1). It has been though understood more often in the context of age and disabilities, which is well reflected in the profound study on inclusivity by Clarkson, Coleman, Keates and Lebbon (2013). Leslie Kern (2020) proves that there is a strong connection between one's experience of a space and one's gender. She argues (Kern, 2020) that a truly safe and enjoyable for its users urban design is possible only due to including various (also female) perspectives through which the users (also women) are interacting with their surroundings. Kern's work (2020) is dedicated to raising the issue of feminist design as part of inclusive design.

However, when women were entering the profession of architecture, the concept and understanding of the urgency of inclusive design was very limited. That is why this paper aims to analyse how chosen female architects improved the inclusivity by bringing their feminist perspective into the design. For reasons described in chapter 1.2. Warsaw was picked as a case for this study. The paper includes analysis on work of Barbara Brukalska, Helena Syrkus, Halina Skibniewska and mentions some other female architects remaining relevant for modernist Warsaw.

2. Part I. Female architects and urban designers in early modernist Warsaw 1918-1939

[Barbara Brukalska:] This is a result of combining my professional interests with housekeeping. I understand the role of a well-designed kitchen in a home and I dream that all newly built apartments will finally be equipped with truly modern installations.

[Interviewer:] We all dream about it.’¹

2.1. Presence of women in design professions

The first female architect in Poland graduated from Warsaw University of Technology in 1922, only a year after first male students of its faculty got their degrees. After that the university saw many women – however not many of them joined the workforce, usually due to gender discrimination. By 1939 13% of all graduates of that faculty were women (Tomaszewicz, Majczyk, 2022).

Despite growing number of female architecture graduates, the situation of female architects was to a larger extent poor. Many women didn’t follow their chosen path and those who did in majority were working as assistants or on non-decisive positions. That situation continued throughout the Polish People’s Republic, after the Second World War (Marciniak, 2017). As a background to that situation, society openly was questioning women’s capabilities for engineering occupations and discriminative behaviour, such as taking down drawings prepared by female students from exhibitions by their male co-students (Tomaszewicz, Majczyk, 2022), was common.

In the light of such practices it might be surprising that some women still gained recognition in the field of architecture. In the 20s and 30s on the forefront are coming Barbara Brukalska, Helena Syrkus or Anatolia Hryniewiecka–Piotrowska. They all had very successful careers, however they all early in their work married a male architect. In addition to that they were a part of much more liberal avangard movement in Poland. Brukalska, Syrkus and Hryniewiecka-Piotrowska co-created Praesens group, which became a main connection between Polish architectural scene and the

¹ Jabłowska, I. (1928) Nowe Drogi. Rozmowa z panią Barbarą Brukalską/New Ways. Interview with Mrs. Barbara Brukalska *Kobieta współczesna: Ilustrowany tygodnik społeczno-literacki*. R. 2, nr 33 p. 16 (translation – A.N.S.)

Congrès Internationaux d'Architecture Moderne (CIAM). In fact Praesens represented Poland during CIAM congresses since 1928, which opened huge possibilities for many careers, including Helena's (compare chapter 2.3).

However such a precedence of female architects succeeding on a national or international level was rather exceptional. The reality for most of architecture graduates consisted of little independent activity and vastly being reduced to a role of an assistant. Barbara Brukalska in 1928 (*Kobieta Współczesna*, 1928, p. 15) reflected in an interview on the fact that, as much as she sees many talented female students at the faculty of architecture, they usually take positions of helping certified architects rather than seeking opportunities of individual practice. Despite clearly stating that she is more interested in built environment aspects of architecture (*Kobieta Współczesna*, 1928, p. 15), she highlighted that fields where women face less competition and could work on their own terms are mostly interior design rather than architecture itself.

2.2. Women claiming a niche in design

Clearly one of the options to pursue a career in architecture for women in the first half on XX century was to focus on these aspects of design that would overlap with role assigned to women in that society. The development of trends in architecture at the time popularized the idea of total design – architect was ideally involved in designing every aspect of a project – from design of cities and landscapes to the smallest detail of a handle and a furniture. Traces of that approach can be easily found in Gropius' manifesto and Bauhaus principles (Gropius, 1919). And since technical aspects of architecture were still often reserved for male designers and women were considered unfit for them by the society of the time (Tomaszewicz, Majczyk, 2022), they needed to look for alternative paths within architecture. The belief about being more qualified to different aspects of design than men was to some extent shared by women themselves – Barbara Brukalska in an interview in 1928 said that 'women in general have more innate aesthetic needs than men do' (*Kobieta Współczesna*, 1928, p. 15 – translation A.N.S.). A phrase that in XXI century would be categorized as a misleading and discriminative generalization, at the beginning of XX century was creating an open field for women to explore new opportunities in for example interior design. She stressed that it gives women a chance to work independently, on their own rules and brought her own experience as an example (*Kobieta Współczesna*, 1928, p. 15). While she was still studying Brukalska did multiple projects both on her own and with Brukalski from a field of interior design for shops, exhibitions and others.

Naturally, she was not limiting herself to that field. She was not only one of the most renowned architects of her time, but also one of the most versatile, leaving behind designs of furniture, whole residential settlements and plenty of theoretical work on urban planning. Nevertheless, the role of the niches in design that could be more associated with female domain, played a significant part in her career. She herself pointed out that she was constantly getting offers of designing exhibitions and boutiques (*Kobieta Współczesna*, 1928, p. 15), but what is even more interesting when analysing her accomplishments, is the way she stood out in one of the biggest projects in Warsaw that she was participating in together with her husband Stanisław and architects Bruno Zborowski, Jan Chmielewski and Juliusz Żakowski – The Warsaw Housing Cooperative (WSM) (translation following Tulkowska, 2019) in Żoliborz. WSM was a big residential complex designed as affordable yet good-quality housing for working families with low income. Despite Brukalska's huge input into studies on optimization and functionalism of compartments (Tulkowska, 2019) at the time – for example to magazine *Dom, Osiedle, Mieszkanie* in 1929 (*Dom, Osiedle, Mieszkanie*, 1929, p. 8-11) – she was writing about the proposal of kitchen for these compartments, which suggests that it was understood that she had the most authority over that particular, 'feminine', topic. Even though she spoke of Stanisław as a co-author of the design, she remains the one remembered from that project, which is now often referred to as 'Brukalska's kitchen'.

Brukalscy's kitchen is a very interesting case for inclusive design (see Figure 1). Early modernism under the influence of Le Corbusier popularised the idea of functionalism and home serving as a machine for living. Kitchen was a very important part of the house with its role increasing even more with progressive democratization of the society – there was a whole new group of people no longer living in poverty yet classified as low-earners, whose both living conditions and leisure activities became a new interest of architects. Families in that group often had both parents working and were not able to afford a house help, therefore making a kitchen an important aspect of a family life – hence, important aspect of architect's interest. However, kitchen was still understood as a female domain. That is exactly why studies on functionalism of the kitchen, advertised as a kitchen for a modern woman, were mainly conducted by women. It was them who were by society obliged to prepare meals for the family, it was then them who knew the subject well enough to design a comfortable and efficient – or as modernists would say, *functional* – kitchen. Interestingly enough one could draw a parallel between the need for efficient housework that women were doing and the increasing amount of women deciding to go to work. The first proposal for modern kitchen was presented by Margarete Schütte-Lihotzky in 1926. Brukalscy's design though had a one significant difference – the couple proposed an open kitchen, connected with a family room. As Brukalska explained in 1929 '(...) a center of gravity is moving towards functional rooms'

(Brukalska, 1929) like kitchen. She compared it to the laboratory and stressed that having an open kitchen is essential for maintaining a clean and healthy household. In 1928 Brukalska said that the design of the kitchen was a result of her two interests, occupational and domestic (*Kobieta Współczesna*, 1928, p. 16). Considering the fact that she introduced a perspective that a male architect of the time would not have due to differences in gender roles, today her input would be referred to as feminist design.

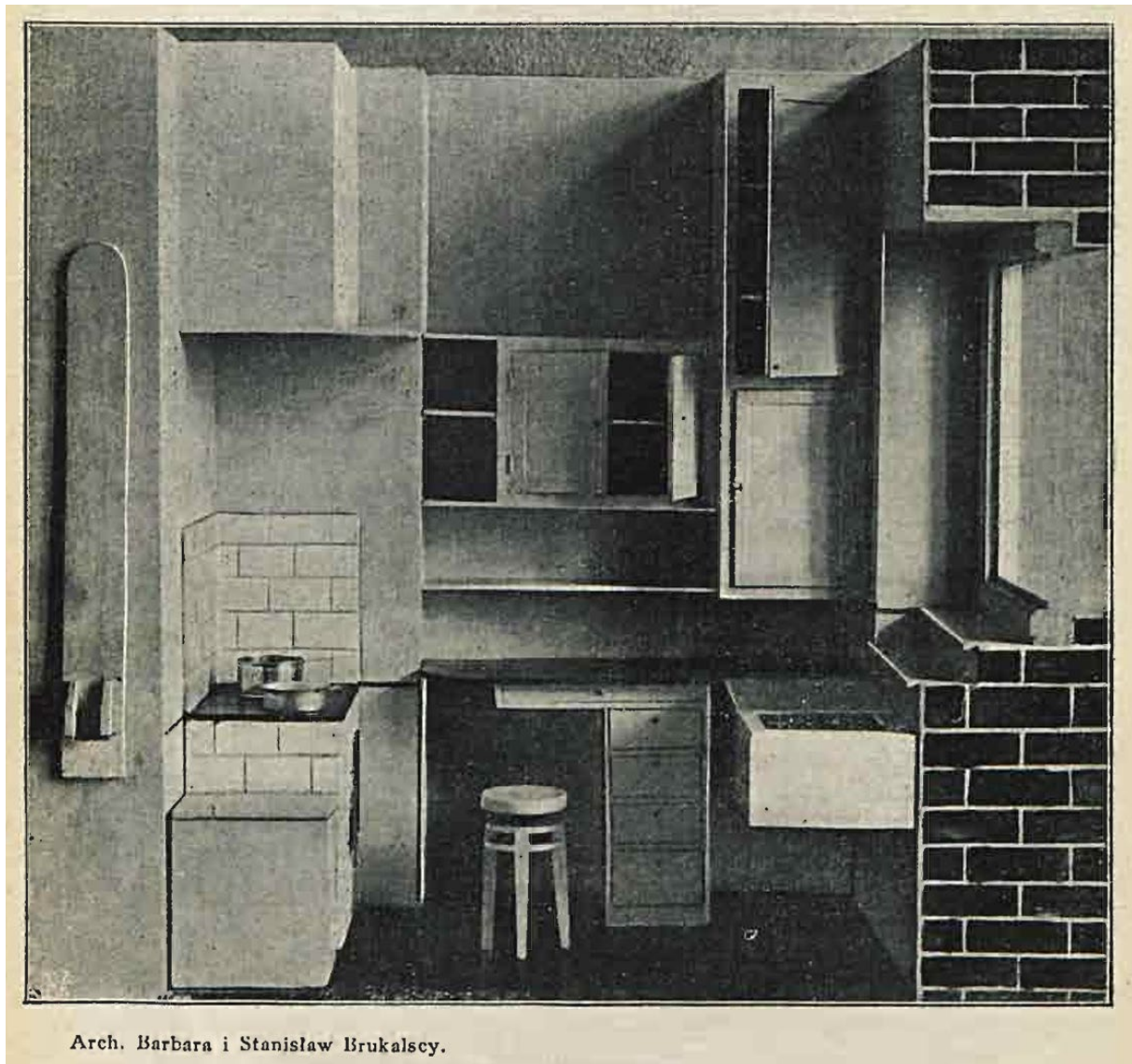


Figure 1. Model of a kitchen designed by Barbara and Stanisław Brukalscy. Source: Brukalska, B (1929) *Kuchnia współczesna/Modern kitchen*, in Jankowski, J. (Ed.), Toeplitz, T. (Ed.), & Rutkowski, S. (Ed.). (1929). *Dom, Osiedle, Mieszkanie, Issue No. 1*. Warszawa: Towarzystwo Wydawnicze "Rój."

2.3. Non-architectural skills paving the way towards architecture

It is very important when discussing female's influence on development of any trends in architecture, to take into account all aspects of gender roles that were associated with being a woman at the time. One of those aspects is the function of secretary, that was more available for women and therefore often pursued by them as the only career option that could open them the doors to be present at the process of decision-making and eventually maybe lead to their voice being taken into consideration in that process. One of female architects whose success and involvement in architecture started this way was Helena Syrkus, born Eisenberg. She started her architectural studies in 1918, yet decided to stop them before graduating in 1922. One could only speculate whether discriminative environment at the faculty mentioned in the previous chapter had an impact on it or not. She took up a position of a translator and in 1925, proficient in very demanded at the time and not yet common skills of stenography and steno-typing as well as in English, French, German, Russian, Italian, Bulgarian and Latin languages, she secured a job of a secretary in architectural office of Szymon Syrkus. That was a milestone in both her professional and personal life. In 1926 Helena married Szymon Syrkus and in the same year they co-founded a Praesens group, becoming a part of the key avant-garde association of architects in the country. At this point the couple was co-creating designs of their studio and very soon they started officially co-signing their theoretical work (Kędziorek et al., 2019, p. 360).

Praesens opened the path for Polish architects to join more international movements of avant-garde. In 1928 in La Sarraz, Switzerland the first meeting of *Congr s Internationaux d'Architecture Moderne* (CIAM) took place and even though there wasn't any representant from Poland at the time, just two weeks after the congress finished, Swiss art historian Sigfried Giedon invited Syrkus to form the Polish representation. The architect did so, basing the new body on Praesens cooperative. Already in 1929 both Helena and Szymon participated in convention of CIRPAC, an executive group of CIAM, in Basel. Helena attended the meeting initially as a wife of Szymon, only accompanying her husband, but for the second time in her life her linguistic and stenographic skills proved crucial to her career – she received a job as a secretary of CIAM. Consequently almost two decades later in 1947 her position has grown to the rank of vice-president of the organization.

It was during the spouse's CIAM activity that Helena developed a very close relationships with many influential figures of the European scene of modernism. She was not only responsible also for Szymon's correspondence and often replying in his name, but as well maintaining personal relations with Sigfried Giedion, Carola Giedion-Welcker, Walter and Ise Gropius, Laszlo Moholy-Nagy, Cornelis van Eesteren and Frieda Fluck, Le Corbusier, Ernest Weissmann and many others.

These connections have been crucial to development of her and Szymon's architectural practice and theoretical works, shaping their designs and became one of the factors that shaped modernism not only in Warsaw, but in their whole country. It is truly fascinating how that could have happened thanks to the skills that women like Helena Syrkus or Ise Gropius needed to gain in order to find a place in a male-dominated environment. It was stenographic skills that in the first place enabled Helena to get a position of a secretary in Szymon's office and in CIAM, and it was a role that as a qualified in steno-typing person she took to handle her husband's correspondence – which was analogical for many couples of CIAM, including Walter and Ise Gropius (Kędziorek et al., 2019, p. 370) – that finally shaped her path towards architectural and theoretical practice, when she continued to use her skills to maintain a close network of relations with the most important architects of the period.

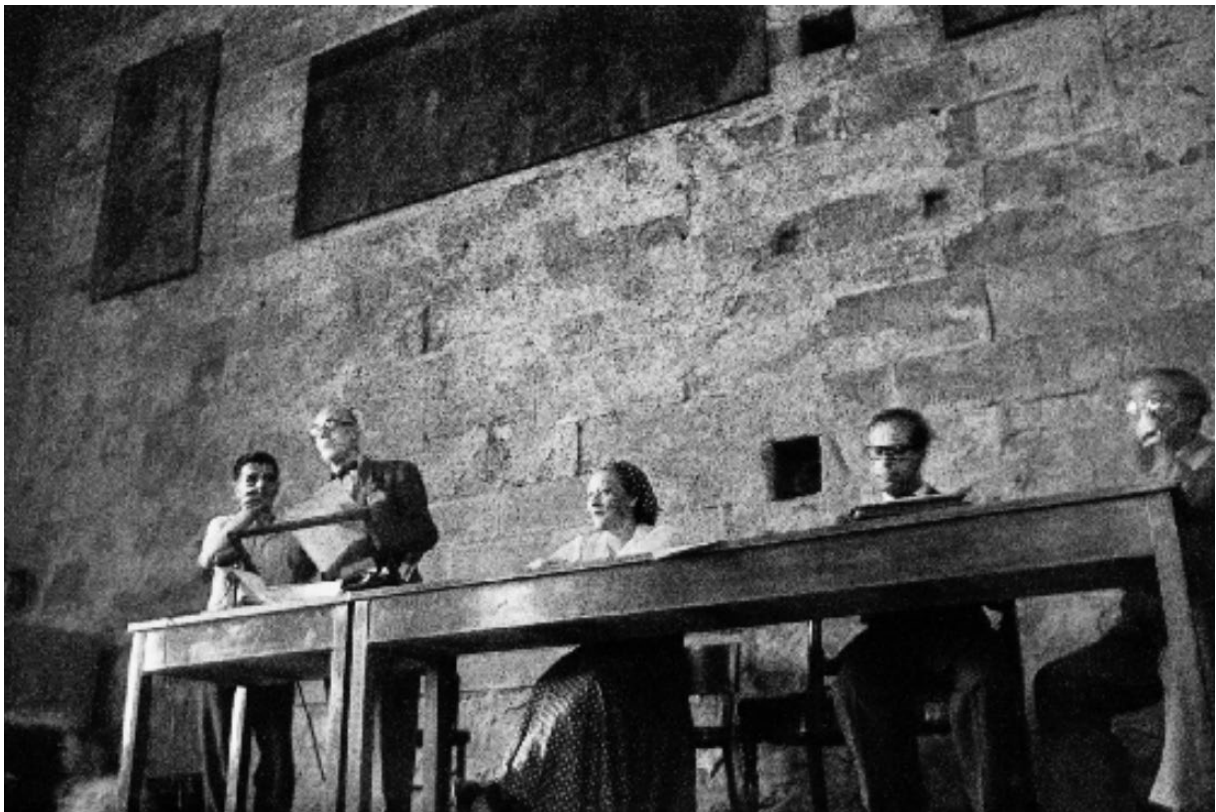


Figure 2. From left: NN, Le Corbusier, Helena Syrkus, Josep Lluís Sert, Sigfried Giedion at 7th CIAM congress in Bergamo, 1949. Source: Kędziorek, A., Uchowicz, K., & Wirkus, M. (2019). *Archipelag CIAM: listy Heleny Syrkus*. Narodowy Instytut Architektury i Urbanistyki, p. 367

3. Part II. Late modernism in Warsaw 1945-1989

‘Your letter is very hard to answer, but then, it wasn’t really a letter, was it? After having known you for so many years and having heard so many good personal and professional discussions between you and Symon and Walter we do not want to start to speak to each other through a megaphone in the language of political treatises and clichés. But I am afraid that is exactly what you have done in your letter though you may not realize it.’²

3.1. Gender roles in the context of political and societal transformations

A geopolitical shift in Europe after the year 1945 has placed Poland within the ideological influence of USSR. System built on the narrative appealing to the social stratum which had both men and women working to earn a living, as a natural extension of its origins was firmly promoting employment among females. Slogans about equal rights became a part of public propaganda. An image of working women with rolled up sleeves was broadly used not only on political posters but also in art and architecture. Finally once Polish People’s Republic – an autocracy under the leadership of a communist party – was officially set in 1947, the claims of equality of men and women were entered into the state’s constitution.

The slogans, however, were where equality ended. Even though the employment rate among women in communist Poland was very high – reaching 70% by the 1970s and 77% among knowledge workers (Marciniak, 2016, p. 8) – the lack of female representation in management positions was evident. As late as 1983, women held only 35,6% of all managerial roles (Marciniak, 2016, p. 8). In architecture the gender discrimination was even more explicit. While by the end of the 1960s more than 40% of graduates in the field were women (see Table 1 and Figure 3), and within the next ten years that proportion reached 50%, until 1968 there were no female project managers in the state architectural office in the city of Poznań which staff was in 46% female (Marciniak, 2016, p. 8). Marciniak (2016) points out that other units of state architectural studios had a similar situation and that women were treated there as a cheaper workforce without prospects for promotion.

² Gropius, Ise. *Letter to Helena Syrkus*. Historic New England: Gropius Family Papers, November 1950. From: Ranocchi, E. (2019) In Aleksandra Kędziorek, Katarzyna Uchowicz, Maja Wirkus (a cura di), *Archipelag CLAM. Listy Heleny Syrkus / CLAM Archipelago. The Letters by Helena Syrkus*, Narodowy Instytut Architektury i Urbanistyki, Warszawa 2019, pp. 421. *Pl.it*, 10, 139–143

One of the most direct reasons for such disproportion, except for the traces of patriarchal structures within a workplace, was a continuation of organization of domestic life on women's labour in a house. While economic situation and official narrative was in favour of women getting a job, both conservative patterns in the society and – again – official narrative was putting a pressure on women to raise children and take care of their household while they maintain their occupational duties. A fight with the system of promoting men rather than them was an additional burden that not many decided to take. However within that adverse circumstances some conditions occurred for a narrow groups of women which enabled them building a career and getting an authority in the field of architecture.

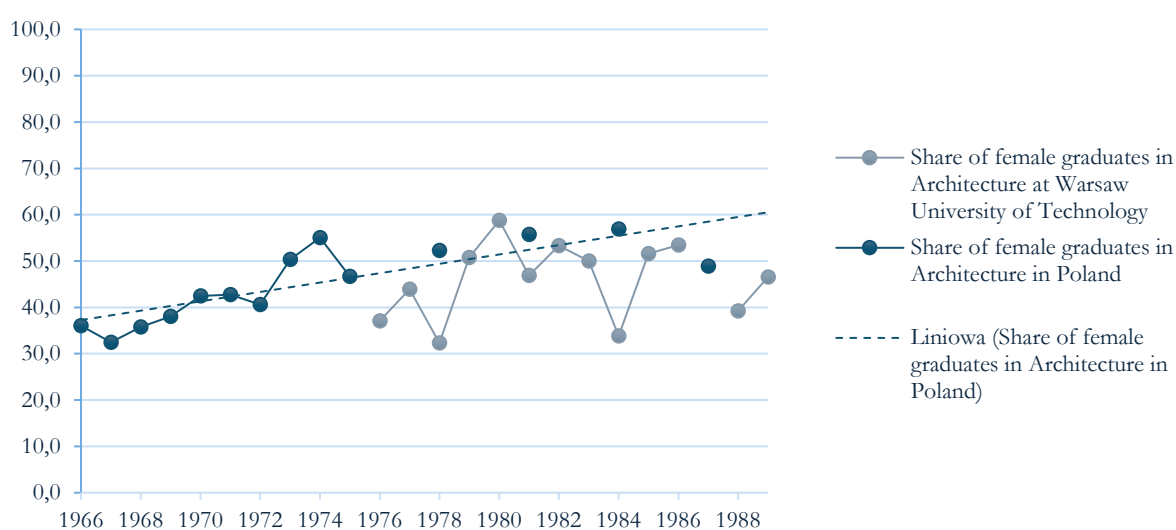


Table 1. Share of female graduates in Architecture in Poland and at Warsaw University of Technology 1966-89. Own elaboration

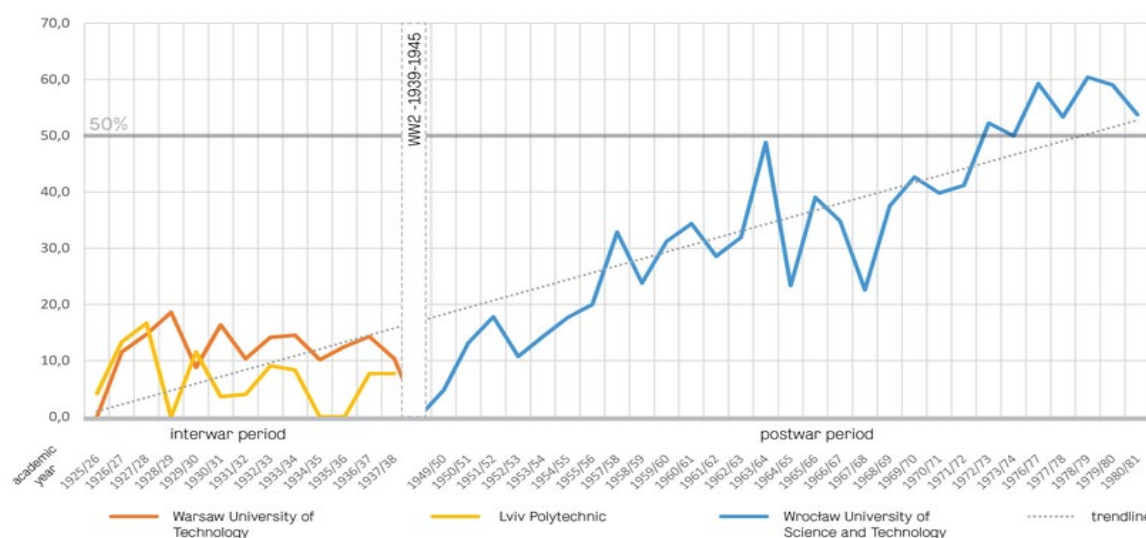


Figure 3. The percentage of female architecture graduates in Poland in years 1925-1981. Source: Tomaszewicz, A., & Majczyk, J. (2022, September). *Pioneers: Polish modernist female architects. The centre and peripheries.*

3.2. Involvement in politics in Polish People's Republic and political aspects of modernist residential settlement

With mentioned transformation of the geopolitical scene in Europe in countries falling under Eastern bloc art and architecture became a form of expression for governmental propaganda. In Poland one of the crucial factors for being allowed to work as an architect became involvement in the communist party.

That political dependence became clear as soon as Second World War ended. As the country entered 'the Stalin era', the academical structures faced censorship. Barbara Brukalska, already a renowned architect known for contributions to social housing and since 1948 a first female professor of architecture at Warsaw University of Technology, did not align with the emerging government. In the same year she authored a book *Social rules for designing residential settlements* which was immediately banned (Syrkus, 1976, p. 370). Both her and her husband remained in architecture, but focused on smaller scale and independent activity in the field rather than complied with a mainstream work in state architectural offices (Marciniak, 2017).

Very differently fate turned out for Helena Syrkus. Her connections and quite radical left views after the Second World War opened a path for her and Szymon to bridge the growing divide between the West and Eastern bloc. For the communist authorities, Helena, with her international connections and membership in the communist party, appeared to be an ideal candidate to compete in international narrative. In 1946 the couple went to the United States to lead a series of lectures promoting a vision of a modernist plans for Warsaw (Syrkus, 1976). In her book she published few decades later, she provides an explicitly insightful perspective on a factor of human scale and 'technical scale' that were competing at the time in the cities in the United States (Syrkus, 1976). Traces of the experience the couple collected during that excursion are visible in the way they prioritize the community-building aspect of public spaces that they designed in late 1940s in The Warsaw Housing Cooperative (WSM) in Koło district – with the high-quality spaces for children and families to spend time outside and integrate with neighbourhood.

It was also a time when couple's connections with members of CIAM were crucial. As it appears from Helena's letter to Stanisław Tolwiński from 4th of April 1946 the leaders of the organization were very determined to keep the contacts within the countries of Eastern bloc (Syrkus, 1976, p. 383). The letter states:

'Gropius, with whom we discussed CIAM matters at length and in detail, wrote a credo together with us, which begins with the words: 'Every effort should be made to

reintegrate architects from the Soviet Union into the collaborative framework, even if this necessitates significant amendments to the CIAM statute.”³

These efforts failed. CIAM dissolved soon after. During the congress in 1949 in Bergamo Helena Syrkus as the vice-president of the organization made a speech directly referring to communist ideology and social realism aesthetics (Kędziołek, 2019, p. 373-375). Just one year later her radicalised views became a reason for breaking connections with some of her closest friends from the organization, Walter and Ise Gropius. In 1950 Ise Gropius accused Helena of advocating for communist propaganda (Ranocchi, 2019). ‘Your letter (...) wasn’t really a letter, was it?’, she criticizes and declares: ‘(...) we do not want to start to speak to each other through a megaphone in the language of political treatises and clichés’ (Ranocchi, 2019, p. 142). The two women stopped communication for 15 years marking an inevitable split in relations between architecture of West and Eastern bloc. Only after Szymon Syrkus passed away Helena and Ise resumed their correspondence friendship. Helena’s radical views relented with time, especially after the death of Stalin (Marciniak, 2017, p. 66), which might have influenced the reunion. As Kędziołek (2019, p. 302-305) brings up, in 1966 Ise wrote to Helena: ‘Innumerable books are written by people who were not even there and who, true, can research naked facts, but do not know the atmosphere that was there and the motives that existed’. Helena during the last decades of her career focused on teaching⁴ and research rather than on political activity and returned to many of CIAM design principles, working on developing innovative building methods and promoting sensitivity towards human needs and variety of context (Marciniak, 2017, p. 66). She criticized the transformation of Warsaw into a “vertical city” (Syrkus, 1976, p. 338), advocating instead for architectural design that respects and relates to the human scale. In her book *Towards the Idea of a Social Settlement* (Syrkus, 1976), Helena Syrkus openly condemned many of the residential housing developments constructed in Warsaw after 1945 for failing to provide adequate services to residents. She emphasized the importance of accessible infrastructure such as libraries, schools, youth lounges, laundry facilities, and spaces designed to meet the demands of a diverse population – residents of various ages and professions (Syrkus, 1976, pp. 338–373). Her work represents strong support for the emerging concept of inclusive design, honouring needs of children and household maintenance.

³ Gropius, I. (1950) Letter to Helena Syrkus in Ranocchi, E. (2019) *Rassegna italiana di argomenti polacchi* In A. Kędziołek, K. Uchowicz, & M. Wirkus (Eds.), *Archipelag CIAM. Listy Heleny Syrkus / CIAM Archipelago. The Letters by Helena Syrkus*, Narodowy Instytut Architektury i Urbanistyki, Warszawa 2019, pp. 421. Pl.it, 10, 139–143

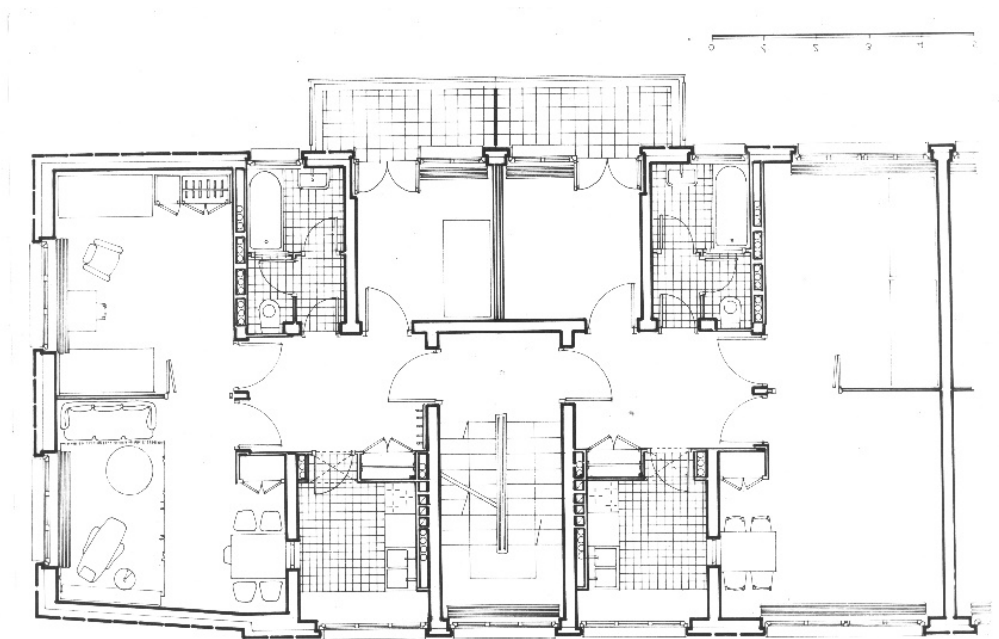


Figure 4. Floor plan, one of the buildings of WSM Kolo settlement. Source: Muzeum Architektury we Wrocławiu. (n.d.). MAT-IIIb-835-2-F [Digital image]. <https://ma.wroc.pl/pl/kolekcja/obiekt/mat-iiiib-835-2-f/>



Figure 5. Building XXIII in WSM Kolo settlement and a park nearby. Source: Photographer Ciszek, R. (1969). Syrkus, H., & Syrkus, S. *Osiedle WSM na Kole w Warszawie, II kolonia. Budynek XXIII* [Photograph]. Muzeum Architektury we Wrocławiu. <https://ma.wroc.pl/pl/kolekcja/obiekt/mat-iiiib-840-7-f/>

Political engagement thus both closed and opened doors for Syrkus. Another acclaimed female architect whose career according to Marciniak's study (2017) benefited from party ties was Halina Skibniewska. Though married to a fellow architect, she practised independently (see chapter 3.3). A more significant impact on her career came from her active membership in the Communist Party, with her profound involvement eventually leading to her appointment as Deputy Marshal of the Polish Parliament from 1971 to 1985. While some criticized her politics, she leveraged her influence to aid political prisoners (Kucza-Kuczyński, 2006) and to advocate for better housing standards (Marciniak, 2016, p. 11). Her Sady Żoliborskie settlement (1958-1973) became a model project in terms of housing standards in the following years (Marciniak, 2017, pp. 68-69). Architect implemented her studies on adaptability of a compartment for changing needs, delivering a combination of architectural space and furniture design. She also actively fought to preserve the site's greenery – contrary to prevailing practices at the time – and succeeded. However, perhaps the most revolutionary aspect of her architectural legacy is her pioneering support for designing with disabled users in mind. She was not only among the first architects in Poland to engage with this emerging topic, introducing the concept of inclusive design to the architectural discourse in Warsaw, but also one of the few able to implement these principles in the built environment.



Figure 6. Sady Żoliborskie settlement, birdview, 1958-73. Source: Marciniak, P. (2016). Sławne, pracowite i zapomniane? Architektoniczna działalność kobiet w okresie PRL. *Kwartalnik Architektury i Urbanistyki*, 61(4), p. 12

3.3. Spousal collaborations amongst second generation of modernists

Throughout 1918–1989, Poland's architectural scene featured many successful spousal collaborations. After Stanisław (1894-1967) and Barbara (1899-1980) Brukalscy and Helena (1900-1982) and Szymon (1893-1964) Syrkusowie first worked together and won international acclaim, later generations followed their example. Among these were Zofia Garlińska-Hansen (1923-2013) and Oskar Hansen (1922-2005), Hanna Adamczewska-Wejchert (1920-1996) and Kazimierz Wejchert (1912-1993), Regina Pawuła-Piwowarczyk (1925-2008) and Zdzisław Piwowarczyk (1926-2001), Kazimierz (1919-2010) and Maria Piechotka (1920-2020), Małgorzata Handzelewicz-Waławek (1922-1996) and Zbigniew Waławek (1917-1987) – and all these names are overlapping with the list of the most renowned architects of that generation with few names of solo working architects missing. Considering the large amount of architects that started their career by marriage within that particular generation of people entering the workforce shortly after World War II, it is interesting to investigate the trend and whether it was only dictated by benefits it gave to women determined to secure their place in the workforce this way or was it also for some reason opted for by young male architects to enter this kind of spousal collaboration. Marciniak (2017) identifies this pattern, especially unique in the Eastern Bloc. He suggests (Marciniak, 2017) the possibility of that occurrence being related to relatively strong position of Catholic Church in Polish society at the time – which was affected by them taking a public political stand as opposition towards communist government – leading therefore to lower rate of divorces. That means that couples married during or shortly after studies could be more likely to stay together. However, Marciniak (2017) does not express a definitive opinion on the matter.

Second possibility is that the occurrence might have been related to a trend of entering an early marriage and starting a family known as post-World War II compensating baby boom. The sociological reasons that apply to it might have had an analogical effect on amount and durability of marriages taken on during the studies – in that case among architecture students.

There is also another angle to look at this: status that Syrkusowie and Brukalscy as well as other international male-female famous collaborations within the previous generation gained as architects in Poland (for example Alvar (1898-1976) and Aino (1894-1949) Aalto, Mies van der Rohe (1886-1969) and Lilly Reich (1885-1947) or Le Corbusier (1887-1965) and Charlotte Perriand (1903-1999)) might have not only convinced female architects to seek collaborative work as a way to be able to work in chosen field, but it could have influenced male architects to do so as a way to build certain credibility. It was also Marciniak who drew attention to the fact that 'memoirs of this period also recall the numerous married couples working in supportive roles on the large projects in a

positive light, because they were perceived to foster a more mature, cohesive atmosphere among all the members of a design team.’ (Marciniak, 2017, p. 72). Such opinion was definitely helping younger architects and it would be a logical conclusion to assume that both parties were benefiting from spousal collaboration.

Barbara Brukalska herself described her collaboration with Stanisław saying: ‘We are basically a company, a professional company (...). Our recent collaboration is preparing a polish pavilion for press exhibition in Cologne, and the most pleasant one – a project of our home in Żoliborz’ (*Kobieta Współczesna*, 1928, p. 15 – translation A.N.S.). She not only stresses the professionalism of their work, but notices how it is an extension of couple’s shared interests. In their home they designed not only a living, but a working space as well, creating an environment in which they both could grow as architects, supporting each other on that path – which was also what Brukalska did in mentioned interview. The success of many couples working together in architecture influenced well inclusivity in the design process and resulted in many major projects in the country representing both male and female perspectives.

However it must be mention here that sadly at the time very often women were not being recognized for their achievement and many designs were associated just with the male author, despite being signed by both parties, and very often even despite continuous insistence of the male designer to bring the recognition to his female co-designer as well. Springer (2013) in his book dedicated to Hansen couple is quoting Oskar Hansen’s words: ‘I did not design, we designed; it’s about a number of co-authors, particularly (...) my wife, brilliant architect Zofia Garlińska-Hansen’ (Springer, 2013 – translation A.N.S.). Meanwhile Marciniak (2017, p. 73) brings up an example of Wejcherts’ marriage and collaboration with other designers in a team, where Hanna Adamczewska-Wejchert was considered by their coworkers to be an assistant to her husband rather than an executive designer. This suggests that even in positions of authority, female architects could be easily relegated to a supporting role within broader architectural narratives.

4. Part III. Emerging concept of feminist design

‘Pregnancy and motherhood made the gendered city visible to me in high definition. I’d rarely been so aware of my embodiment. Of course my gender is embodied, but it’s always been there. Pregnancy was new and it made me see the city in new ways.’⁵

4.1. Importance of inclusiveness and threat of mono-perspectives in design

XX century was the first time in history where women were being recognized for space-creation. As Leśniakowska (2005) noticed within classical dimension of architecture women are either invisible or passive. Leśniakowska (2005) brings up examples as old as Vitruvius’s text, a milestone in the history of architectural narrative, where a description of a house is entirely subordinated to the lifestyle of its male inhabitant – bringing female life to merely a tolerated background. That narrative is repeated throughout the centuries. ‘Girls and maids and the whole swarm of the rest of the family that is constantly buzzing, should be separated from the affairs of the lord of the house’ writes Leon Battista Alberti in *De re aedificatoria* in XV century (from Leśniakowska, 2005 – translation A.N.S). ‘The whole house of the wife should be completely separated from the house of the prince, except for the internal apartment and the marriage bedroom’, he continues (from Leśniakowska, 2005 – translation A.N.S). Meanwhile Andrea Palladio in XVI century does not even use a word ‘woman’ in his works (Leśniakowska, 2005, p. 32). It is clear that a concept of residential architecture was limited to a very narrow group that wealthy men were. It was not until XX century when democratization of the society broaden that perspective by poorer classes (compare Figure 7.) and rising amount of women entering the workforce of architecture fought their way into being recognized in architectural narratives.

Exactly that shift Barbara Brukalska summarized with her claim about a center of gravity moving towards functional rooms (Brukalska, 1929 – see chapter 2.2). That process was accompanied at the beginning by occurrence that Leśniakowska (2005) called female amateur-engineers. Before amount of women working in architecture rose up, the amount of female clients of architects increased significantly (Leśniakowska, 2005). The researcher analyzed some of these collaborations and from various memoirs recognized a pattern of female clients being more interested in practical aspects of a house that concern housework (Leśniakowska, 2005). Particular was a fragment from

⁵ Kern, L. (2020). *Feminist city: Claiming space in a man-made world*. Verso, p. 23

Rybczyński and the construction of his house – he recalled getting an unexpected client in a person of his wife, who would question the functional aspect of his designs to the point that the project became an extension of her knowledge about actual work that needs to be performed to maintain a household rather than his abstract vision (Leśniakowska, 2005). On exactly that ground the concept of feminist design, followed by broader inclusive design, has emerged.

A fascinating study about current challenges of feminist design has been conducted by Leslie Kern in her book *Feminist City: Claiming space in a man-made world* (2020). She writes about understanding space in feminist perspective, providing a profound study on how it influences a sense of safety that women have in public spaces, how women are adjusting to functioning in cities that are ‘man-made’ and even on how raising a child or pregnancy has a direct impact on perceiving the surroundings (Kern, 2020). ‘Pregnancy was new and it made me see the city in new ways’, she writes (Kern, 2020, p. 23). The conclusion of the book is that representation of women in making the world, the surroundings, by actually reaching out to their experience rather than following settled by men rules, is inevitable to creating a safe and democratic urban space.



Figure 7. Brukalska, B., & Brukalski, S. (1927-1928) Architects' own house, Niegolewskiego 8 St., Warsaw. View from the couple's studio on the 1st floor towards the open hall.

In the XX century a project of a house for an average representant of a middle class became an object of interest of architects rather than typical villa following Palladio style.

Photographer NN (1935) *Architektura Polska*, p. 69. Retrieved from:
<https://www.warszawa1939.pl/galeria-powiazany/niegolewskiego-8-wnetrza>

4.2. Female architects in Poland nowadays

As for today in Poland most architecture students are female. However when it comes to people working in the profession, the share is lower by almost 10 percentage points (table 2). And even though share of female architects in Poland is as well around 10 percentage points higher than average for EU countries (table 2), the Gender Pay Gap index is significantly worse for women in Poland comparing to EU average and very close to the result the least in favor for women, Bulgaria (table 3). The Glass Ceiling Index in architecture and urbanism in Poland was 1,29 in 2022 which is the best amongst all engineering and technical disciplines, with 41% of professors being female.

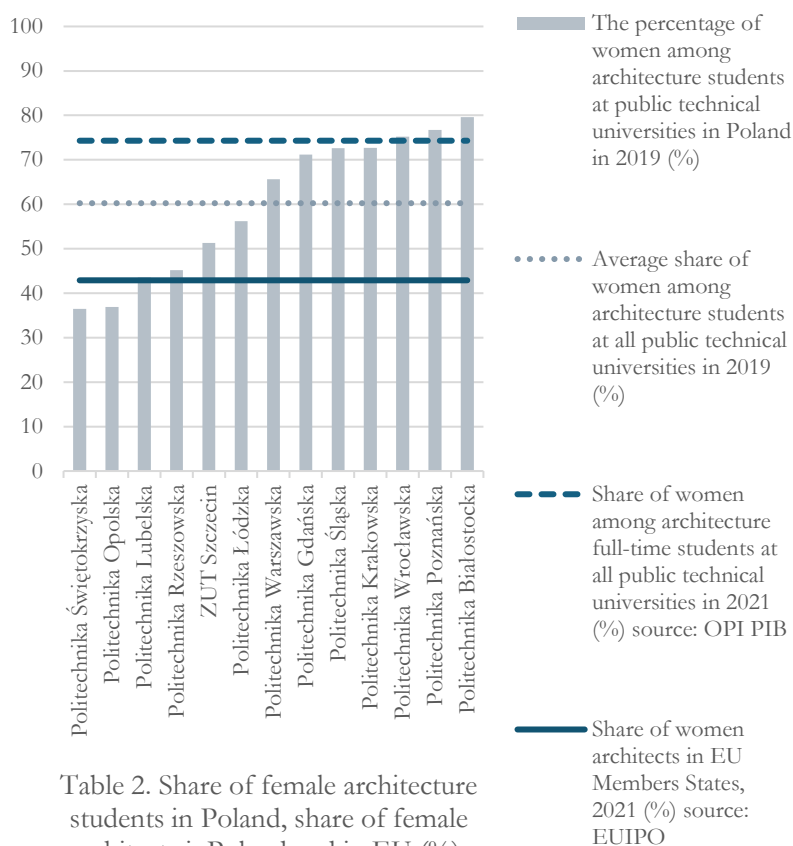


Table 2. Share of female architecture students in Poland, share of female architects in Poland and in EU (%). Own elaboration

■ Unadjusted Gender Pay Gap in design professions, 2021 (%) source: EUIPO

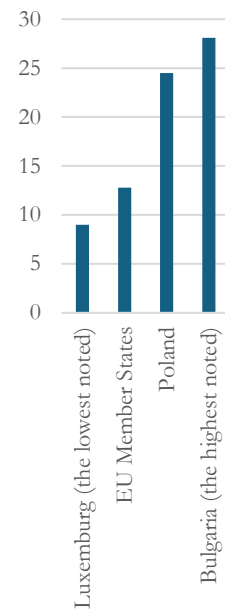


Table 3. Unadjusted Gender Pay Gap in design professions, 2021 (%). Own elaboration

In 2013 architect Jadwiga Grabowska-Hawrylak (1920-2018), the first woman to receive the SARP Honorary Award⁶ in 1974 made rather personal claim that despite architectural graduates being mostly women, architecture remains a field in which most achievements are assigned to men (Marciniak, 2016, p. 17-18).

⁶ A prominent architectural prize awarded by the Association of Polish Architects (SARP).

5. Conclusions

This paper analyses chosen women architects who despite unfavourable circumstances gained a recognition and success in their architectural careers and were able to represent their female perspective and reflect it onto the design process. It focuses on Barbara Brukalska, Helena Syrkus and Halina Skibniewska as well as few other Varsovian modernist architects. The paper describes factors that led female architects to recognition in a male-dominated field and how did that influence their designs.

During the period 1918-1939 first women started engaging in architecture on a professional level in Poland. Despite difficulties followed by patriarchal structure of the society, some female architects were able to have a successful career. Collaborating with a male partner had a big impact on it, yet women were also often choosing paths that were new and not dominated by men, for example interior design, designing furniture or landscape. In case of famous kitchen designed by Brukalscy, a practical knowledge of cooking practices had been a key element in increasing functionality of the project. It was also the first in the country proposal of an open kitchen, which was solving a problem of isolating women while they were preparing meals for their families. Such an approach, having in mind a perspective of women until then overlooked in design process is an example of feminist design.

After 1945 the gender roles in the society were still similar to these from before the war, however much more women were taking education and entering the workforce, a trend which was visible also in the field of architecture, thanks to the achievements of a previous generation. A significant number of female architects became renowned for their contributions towards architecture, yet most of them were collaborating with their spouse. In case of Halina Skibniewska and some other architects, an important factor that led them to being able to put their design ideas into practice was active involvement in politics.

Today the remains of unfavourable for women system are still visible, especially when it comes to gender pay gap and female architects being recognized for their work and becoming acclaimed in the profession.

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7. List of tables

Table 1

Year	Share of female graduates in Architecture at Warsaw University of Technology (source)	Page nr	Share of female graduates in Architecture in Poland (source)	Page nr
1989	46,5 (Rocznik Statystyczny Województwa Stołecznego Warszawskiego. R. 14, 1989 - Mazowiecka Biblioteka Cyfrowa)	312		
1988	39,2 (Rocznik Statystyczny Województwa Stołecznego Warszawskiego. R. 13, 1988 - Mazowiecka Biblioteka Cyfrowa)	326		
1987			48,9 (Rocznik statystyczny szkolnictwa. 1987/88 - Mazowiecka Biblioteka Cyfrowa)	211
1986	53,4 (Rocznik Statystyczny Województwa Stołecznego Warszawskiego. R. 11, 1986 - Mazowiecka Biblioteka Cyfrowa)	474		
1985	51,6 (Rocznik Statystyczny Województwa Stołecznego Warszawskiego. R. 8, 1985 - Mazowiecka Biblioteka Cyfrowa)	460		
1984	33,8 (Rocznik Statystyczny Województwa Stołecznego Warszawskiego. R. 9, 1984 - Mazowiecka Biblioteka Cyfrowa)	322	56,9 (Rocznik statystyczny szkolnictwa. 1984/85 - Mazowiecka Biblioteka Cyfrowa)	227
1983	50,0 (Rocznik Statystyczny Województwa Stołecznego	285		

	Warszawskiego. R. 8, 1983 - Mazowiecka Biblioteka Cyfrowa)		
1982	53,3 (Rocznik Statystyczny Województwa Stołecznego Warszawskiego. R. 7, 1982 - Mazowiecka Biblioteka Cyfrowa)	232	
1981	46,9 (Rocznik Statystyczny Województwa Stołecznego Warszawskiego. R. 6, 1981 - Mazowiecka Biblioteka Cyfrowa)	223	55,7 (Rocznik statystyczny szkolnictwa. 1981/82 - Mazowiecka Biblioteka Cyfrowa) 219
1980	58,8 (Rocznik Statystyczny Województwa Stołecznego Warszawskiego. R. 5, 1980 - Mazowiecka Biblioteka Cyfrowa)	407	
1979	50,7 (Rocznik Statystyczny Województwa Stołecznego Warszawskiego. R. 4, 1979 - Mazowiecka Biblioteka Cyfrowa)	381	
1978	32,3 (Rocznik Statystyczny Województwa Stołecznego Warszawskiego. R. 3, 1978 - Mazowiecka Biblioteka Cyfrowa)	356	52,3 (Rocznik statystyczny szkolnictwa. 1978/79 - Mazowiecka Biblioteka Cyfrowa) 195
1977	43,9 (Rocznik Statystyczny Województwa Stołecznego Warszawskiego. R. 2, 1977 - Mazowiecka Biblioteka Cyfrowa)	363	
1976	37,1 (Rocznik Statystyczny Województwa Stołecznego Warszawskiego. 1976 - Mazowiecka Biblioteka Cyfrowa)	320	
1975			46,7 (Rocznik statystyczny szkolnictwa. 1975/76 - Mazowiecka Biblioteka Cyfrowa) 212

1974	55,0 (Rocznik statystyczny szkolnictwa. 1974/75 - Mazowiecka Biblioteka Cyfrowa)	209
1973	50,4 (Rocznik statystyczny szkolnictwa. 1973/74 - Mazowiecka Biblioteka Cyfrowa)	241
1972	40,6 (Rocznik statystyczny szkolnictwa. 1971/72 - Mazowiecka Biblioteka Cyfrowa)	221
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Table 2

Ośrodek Przetwarzania Informacji – Państwowy Instytut Badawczy (2022). *Studenci uczelnie techniczne 2022* [Report]. Retrieved from https://radon.nauka.gov.pl/raporty/studenci_uczelnie_techniczne_2022

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Table 3

European Union Intellectual Property Office. (2023). *2023 report on women in design: Full report* [PDF]. https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2023_Report_on_Women_in_Design/2023_Report_on_Women_in_Design_FullR_en.pdf

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Figure 2. From left: NN, Le Corbusier, Helena Syrkus, Josep Lluís Sert, Sigfried Giedion at 7th CIAM congress in Bergamo, 1949. Source: Kędziorek, A., Uchowicz, K., & Wirkus, M. (2019). *Archipelag CIAM: listy Heleny Syrkus*. Narodowy Instytut Architektury i Urbanistyki, p. 367

Figure 3. The percentage of female architecture graduates in Poland in years 1925-1981. Source: Tomaszewicz, A., & Majczyk, J. (2022, September). *Pioneers: Polish modernist female architects. The centre and peripheries*.

Figure 4. Floor plan, one of the buildings of WSM Koło settlement. Source: Muzeum Architektury we Wrocławiu. (n.d.). MAT-IIIIB-835-2-F [Digital image].
<https://ma.wroc.pl/pl/kolekcja/obiekt/mat-iiib-835-2-f/>

Figure 5. Building XXIII in WSM Koło settlement and a park nearby. Source: Photographer Ciszek, R. (1969). Syrkus, H., & Syrkus, S *Osiedle WSM na Kole w Warszawie, II kolonia. Budynek XXIII* [Photograph]. Muzeum Architektury we Wrocławiu.
<https://ma.wroc.pl/pl/kolekcja/obiekt/mat-iiib-840-7-f/>

Figure 6. Sady Żoliborskie settlement, birdview, 1958-73. Source: Marciniak, P. (2016). *Sławne, pracowite i zapomniane? Architektoniczna działalność kobiet w okresie PRL*. *Kwartalnik Architektury i Urbanistyki*, 61(4), p. 12

Figure 7. Brukalska, B., & Brukalski, S. (1927-1928) Architects' own house, Niegolewskiego 8 St., Warsaw. View from the couple's studio on the 1st floor towards the open hall. Photographer NN (1935) *Architektura Polska*, p. 69. Retrieved from:
<https://www.warszawa1939.pl/galeria-powiazany/niegolewskiego-8-wnetrza>