

Pioneers in Dutch Architecture

The role of women in post-war housing innovations in the Netherlands

Tummers-Mueller, L.C.; Novas, María

Publication date 2021

Document VersionFinal published version

Published in

Veredes, Arquitectura y Divulgacion (VAD)

Citation (APA)

Tummers-Mueller, L. C., & Novas, M. (2021). Pioneers in Dutch Architecture: The role of women in post-war housing innovations in the Netherlands. *Veredes, Arquitectura y Divulgacion (VAD), 2021*(6), 20-32. https://veredes.es/vad/index.php/vad/article/view/vad06-las-precursoras-pioneers-in-dutch-architecture-the-role-of

Important note

To cite this publication, please use the final published version (if applicable). Please check the document version above.

Copyright

Other than for strictly personal use, it is not permitted to download, forward or distribute the text or part of it, without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license such as Creative Commons.

Takedown policy

Please contact us and provide details if you believe this document breaches copyrights. We will remove access to the work immediately and investigate your claim.

Pioneers in Dutch architecture. The role of women in post-war housing innovations in the Netherlands

Pioneras en arquitectura en los Países Bajos. El papel de las mujeres en las innovaciones de vivienda de la posguerra en los Países Bajos Lidewij Tummers | María Novas Ferradás

Received: 2021.09.30 Approved: 2021.12.02

Lidewij Tummers

University of Twente (The Netherlands) post@tussen-ruimte.nl Freelance Researcher, tutor and consultant at Tussen Ruimte, Rotterdam (NL). Her research and publications address low-impact housing, spatial criteria for inclusive design, energy transition, participatory design processes, and a gendered perspective of spatial planning.

María Novas Ferradás

María Novas Ferradás
TU Delft (The Netherlands)
mnovas.f@gmail.com
María Novas is an architect and
researcher currently finalising her
doctoral dissertation in architecture at
the Universidad de Sevilla in Spain. She
also teaches at the Delft University of
Technology in The Netherlands.

Acknowledgements
We thank Fund Creative Industry for a project grant, the Dutch National
Archive for Architecture for enriching collaboration, Elske Schreuder for making available the inheritance of Schreuder-Gratama, the anonymous reviewers and the advisors of Cherchez la Femme! for their feedback.

Abstract

This article approaches post-war housing innovation in the Netherlands from a feminist perspective, shedding light on the hitherto unkown roles played by women architects. It introduces the work of Dutch women architects, some of it acknowledged at the time of its creation, some completely unknown. First, Augustine Schreuder-Gratama, one of the first female students in Delft in the 1920s, and the Women Advisory Committee (VAC) for social housing specifically their role as model homes exhibitions developers in the context of housing industrialisation in the 1950s, in which other organizations have been considered pioneer. Then work of Luzia Hartsuyker-Curjel from the democratization period including the second feminist wave in the 1970s and 1980s is presented. Amongst others, she proposed a 'non-hierarchical dwelling' based on feminist critique of the nuclear family home. Finally, the article presents the work of Ineke Hulshof in the 1990s and early 21st century against a background of neo-liberalism she developed projects for affordable, sustainable housing and new architectural tools to design and cocreate with residents' groups. To conclude, this article argues that their contribution to the evolution of architecture in the Netherlands is underestimated and their role in housing innovation should be better articulated as part of the architectural records.

Keywords: housing innovations; female architects; Netherlands; gender; architecture.

Resumen

Este artículo aborda la historia (e historias) en innovación en el diseño de viviendas en los Países Bajos desde la posquerra, y en ella, el rol desempeñado por algunas arquitectas. El texto recoge el trabajo de varias arquitectas holandesas, algunas reconocidas en su momento, otras completamente desconocidas. Primero, Augustine Schreuder-Gratama, una de las primeras estudiantes en Delft en los años veinte, y el Comité Asesor de Mujeres (VAC) para la vivienda social, y concretamente, su rol como promotoras de exposiciones de viviendas en el contexto de la industrialización de viviendas en los años cincuenta, en el que otras organizaciones han sido consideradas pioneras. La obra de Luzia Hartsuyker-Curjel representa el período de democratización durante los setenta y los ochenta. Entre otras cuestiones, la arquitecta propuso una "vivienda no jerárquica" basada en la crítica feminista a la familia nuclear. Finalmente, el artículo presenta el trabajo de Ineke Hulshof entre la década de 1990 y principios del siglo XXI, estimuladora de la creación de viviendas asequibles y sostenibles y nuevas herramientas arquitectónicas para diseñar y co-crear con grupos de residentes. Por último, este artículo sostiene que la contribución de estas profesionales de la arquitectura en los Países Bajos continúa siendo subestimada, aunque su papel pionero como innovadoras en el diseño de la vivienda debería formar parte de los registros arquitectónicos.

Palabras clave: innovación, vivienda, arquitectas, Países Bajos, género, arquitectura.

Introduction: Feminist framing of architecture

Feminist architecture is not necessarily embodied in a woman architect. But what is "feminist architecture"? And why, after 40 years of genderstudies, the urgency of intersectional feminism and the issues raised by the LGTBIQ+ movement, is it still necessary to talk about 'women' in architecture? In our view, these questions can only be answered in the context of their time. We started our joined endeavour to make visible the contribution of hitherto invisible subjects to the history of architecture by looking at practicing architects, some acknowledged at the time of their professional life, some completely unknown, all (self-)identified as women. We found that their architectural practice does not always happen in a classical architectural firm. We have looked for aspects that are typical for the biography of these professionals in the Netherlands, as well as into their work, highlighting the transformative content of architectural design and buildings. Both the personal trajectories, and the architecture and ideas of these women should be largely explained by the period they live(d) in, and that comprises a generation turn, from the 1940s to the 1990s. The second feminist wave in the 1970s meant an important turning point that influenced many women architects in the Netherlands.

In this article, we apply insights from gender studies to contribute to a new understanding of the position of women in architecture. Amongst the core insights are the marked constructed dichotomy between what has been considered productive (paid) work and reproductive (unpaid or underpaid) work —that is extremely productive, and we will refer as work of social reproduction.¹ Following Silvia Federici, since the primitive capital accumulation, the wealth generated by the work of many, has been accumulated in the salary of priviliged men.² Thus, from remote times, the distribution of wealth has a clear distinction based on the construction of gender. Historically, women were actively excluded from paid professions, and if reached, their work was devalued and underpaid compared to male professionals. Especially after the industrial revolution of the 19th century, this led to narratives of over-recognition of the role of men in paid professions, including the architectural one. In the Netherlands, this material dispossession of women, was codified through the law: for example, women were not allowed to have a bank account and married women were excluded from public service until 1957.

The consequences are still visible today, particularly the unremitting gendered division of labour and the persistence of the vertical and horizontal segregation in the paid and unpaid workforce. Empirical evidence can be found amongst others in the EU Gender Equality index "Use of Time", demonstrating the sub-proportional part of men that perform the work of social reproduction, even in the countries with the most developed index of the Western world.³ Such differences in time-space patterns have informed feminist critique on town planning as well as inspired alternative architectural proposals for the organisation of the work of social reproduction.⁴ In most countries of the world, gender-equal access to urban resources is far from being achieved, and the technical professions, including architecture, are particularly slow to acknowledge the professionalism of women. In this paper we focus on the housing innovations by women architects, to shed light on this phenomenon, convinced that the life and work of the following women brings some valuable remedying insights.

- Tithi Bhattacharya (ed.), Social Reproduction Theory: Remapping Class, Recentering Oppression (London: Pluto Press, 2017).
- 2 Silvia Federici, El patriarcado del salario. Críticas feministas al Marxismo (Madrid: Traficantes de Sueños, 2018).
- 3 EIGE, Gender Equality Index, The Netherlands (2020). Source: https://eige.europa.eu/ gender-equality-index/2020/NL (Accessed November 12, 2021)
- 4 See: Barbara Zibell, Doris Damyanovic and Ulrike Sturm (eds.), Gendered Approaches to Spatial Development in Europe: Perspectives, Similarities, Differences (London, New York: Routledge, 2020); Inés Sánchez de Madariaga and Marion Roberts (eds.), Fair Shared Cities. The Impact of Gender Planning in Europe (Farnham, Burlington: Ashgate, 2013); Helen Jarvis, Paula Kantor and Jonathan Cloke, Cities and Gender. Critical Introduction to Urbanism and the City (New York: Routledge, 2009); Clara Greed, Women and Planning: Creating gendered realities (London, New York: Routledge, 1994) and Susan S. Fainstein and Lisa J Servon, Gender and Planning: A Reader (New Jersey: Rutgers University Press, 2005).

Cherchez la femme!

This article is based on collaborative, interdisciplinary, international and cross-generational research, as well as our respective individual histories as professionals and activists.

Dr. Ir. Lidewij Tummers is a consulting engineer with extensive experience in participatory design and gender perspectives in engineering and planning.

In 2018, she initiated the collection of the archive of the *Vrouwen Bouwen Wonen movement* (VBW), which started the fruitful collaboration with the Dutch Collection for Architecture and Urban Planning, that accompanies our research.

María Novas, with masters in architecture and gender studies, is currently finalising her Ph.D. in Architecture at the Universidad de Sevilla in Spain on the role of women organizations in architecture in the post Second World War period in the Netherlands.

In December 2020, our joined efforts to make visible the history of women architects were awarded a 50.000€ research grant of the *Stimuleringsfonds Creative Industries Fund NL*, *Grant Programme for Architecture*.⁵ Starting point for our *Cherchez la femme!* research project, is the city of Rotterdam, because there a large reservoir of relevant undisclosed information can be found.⁶ Also, we know it well which facilitates contextually interpreting the information.

We set off by constructing a timeline, based on societal landmarks with a special impact on gender-relations, such as the introduction of the right to vote, to own property or to stay in public office after marriage all granted to men before it was a right for women. This in itself is a shift away from the general periodization in architectural thinking.⁷ On this basis, we identified 'generations' of pioneer women architects. From each generation, we are collecting 'longlists' to select a professional that can be seen as representative for the period she was professionally active in.

We are documenting their work through primary sources (archived documents, interviews with the architects, buildings) and secondary sources (literature review, interviews with relatives and colleagues). We use the notion "woman architect" in the sense of Karen Burns: as a conceptual, temporary tool to recognise and organise marginalised groups that does not need identity politics.⁸

We rely on general principles of gender studies to identify aspects typical for the biography of female professionals in the Netherlands; such as the reconciliation of professional and family life; economic independence; legal and cultural discriminatory mechanisms creating the glass ceiling and other obstacles for women to produce architecture under similar conditions as men.

Currently (autumn 2021) our research is in progress, and here we present some preliminary results, focussing on concrete post-war housing innovations in Rotterdam.

- 5 "Stimuleringsfonds Creative Industries Fund NL, Grant Programme for Architecture". Source: https://stimuleringsfonds. nl/en/grants/architecture_grant_scheme/
 (Accessed November 12, 2021)
- 6 More about Cherchez la femme! research project at www. feministarchitect.eu. (Accessed November 12, 2021)
- 7 See for example: Nan Ellin, Postmodern Urbanism: Revised Edition (New York: Princeton Architectural Press, 1996).
- 8 Karen Burns, "Feminist theory and praxis 1991-2003. Questions from the archive". In: Architecture and Feminisms, edited by Hélène Frichot, Catharina Gabrielsson and Helen Runting (Oxon: Routledge: 2018), 17.

1904-1940s: The first generation of graduates

Context

- The first woman to study at a Dutch university was Aletta Jacobs, who graduated in 1878 as a medical doctor.
- Dutch women achieved their right to vote in 1919.
- The Dutch Association of Architects (*Bond van Nederlandse Architecten*, BNA) was founded in 1908.
- Until the 1930s, architects were also urban planners.9

We start our exploration from the creation of the first architecture schools in the Netherlands at the beginning of the 20th century. Two schools of architecture were established: the *Polytechnical School* in Delft was founded in 1864 and introduced a title for architects in 1901. The *Technische Hogeschool* Delft admitted three female students in 1904. Between 1920 and 1940 only four women graduated as architects in Delft and there were no women professors in the institution until 1954. It took 25 years to have a second one.

The "Secondary and Higher Architecture Studies" (*Voortgezet en Hooger Bouwkunst Onderricht*, VHBO) in Amsterdam was founded in 1908. Margaret Staal-Kropholler, considered the first woman architect in the Netherlands, entered in the academic year 1914-1915. She did not graduate but developed her career in the architectural firm from her brother Co and her future husband Frits Staal.¹¹

Augustine Ernestine Frederika Schreuder-Gratama (1897-1976)

Augustine Gratama was one of the few female architectural students in Delft, from 1919. At the University she met Duco Anton Schreuder and they married in 1923. Consequently, Gratama quit her studies and never graduated as an architect.

She remained an active member of the *Delftsche Vrouwelijke Studenten Vereeniging* (DVSV), the women students' association active from 1904 till 1976, and was the president of its *Lustrum Committee* during the DVSV 3rd Lustrum (3^{rd fifth} anniversary) in 1921. (Fig.1)

- 9 Erica Smeets-Klokgieters, "Vrouw in de bouw. De eerste vrouwelijke afgestudeerde architecten in Nederland", KNOB Bulletin 116, 1(2017): 43-57.
 Source: https://doi.org/10.7480/knob.116.2017.1.1727
- 10 See: Marina van Damme-van Weele and Jacobien Ressing-Wolfert, Vrouwen in Techniek: 90 Jaar Delftse Vrouwelijke Ingenieurs (Delft: Deltech, 1994) and Ellen van Kessel and Marga Kuperus, Vrouwen in de (stede)bouw. Wat doen jullie now? (Amsterdam: VU Amsterdam, 1982).
- 11 Marga Kuperus and Ellen van Kessel, *Margaret Staal-Kropholler Architect* 1981-1966 (Rotterdam: Uitgeverij 010, 1991).

Figure 1. Schreuder-Gratama, in the middle, with other members of the DVSV in 1921.

Source: Archive Gratama with kind permission of Elske Schreuder

- 12 Augustine Schreuder-Gratama, "Zelfgebouwde kampeeraanhangwagen", De Vrouw en Haar Huis 28, 5 (1933), 247-51.
- 13 BNA, "Studie-Ontwerpen Duplex Woningen", 1949.
- 14 NVVH, "History".

 Source: https://www.nvvh.nl/html/
 geschiedenis.html
 (Accessed November 12, 2021)

- 15 Unless indicated, all quotes translated from Dutch by the authors: "De bedoeling is n.l. het den huisvrouw van Nederland mogelijk te maken haar stem te laten hooren bij de adviezen die aan het Ministerie van Wederopbouw terzake van de woningbouw zullen worden gegeven". Preface, "Enquete betrefende de Nederlandsche gezinswoning", NVVH in collaboration with M. Staal-Kropholler, 1947.
- 16 "Huisvrouwen Constateren Grote Vooruitgang", *Bouw* 34 (Augustus 1955): 696–97.

After living in the cities of Barendrecht and Breda (during the war), the couple settled in Ulvenhout (Breda) where they build their own house in 1954. Schreuder-Gratama recorded the construction and the architectural final spaces through pictures, which suggest her close involvement in the design and building process. After her husband retired in the late 1960s, they spend holidays in Austria in a small family cottage she designed herself. Earlier, in 1933, she had designed a "self-built camping trailer" for travelling by car anywhere. In 1949, she designed a duplex home for a study that was published by the Dutch Association of Architects (Bond van Nederlandsche Architecten, BNA) as the only one made by a woman architect, among more than 20 male contributions, including Rietveld and Groosman.

Besides dedicating herself to design, Schreuder-Gratama became an expert on housing issues. After marrying, she joined the Dutch Association of Housewives (*Nederlandse Vereniging van Huisvrouwen*, NVVH), founded in 1912.¹⁴ As a trained architect, she kept steadily lecturing on housing issues from 1926 to 1964. She wrote articles about architecture that were published in popular magazines such as *De Vrouw en Haar Huis* (The Woman and Her Home) and the architectural magazine *Bouw* (Building).

Gratama was also involved in the pioneer 1947 post-war survey led by the NVVH and designed in collaboration with Staal-Kropholler

To make the housewife's voice heard in the advice that will be given to the Ministry of Reconstruction.¹⁵

They complained about decision-making procedures and governmental reconstruction policies, and postulated that housewives should not be ignored, since they were the most important stakeholders. The results of the NVVH survey were published in the magazine Bouw on the 8th November 1947.¹⁶ In the following Bouw issue, one month later, Schreuder-Gratama analysed the results more in-depth, together with the housing inspector W. Ploegsma-Bentum, and the statistician W. H. Somermeyer. Ploegsma-Bentum was a member of the Women Advisory Committee for social housing (*Vrouwen Adviescommissie voor de Woningbouw*, VAC) in Rotterdam in 1946.

In the 1950s Schreuder-Gratama finally obtained formal —although probably unpaid— expert positions at a national level. She became the representative of the NVVH, first at the Housing Committee of the Dutch Household Council (*Nederlandse Huishoudraad*, NHR), and in 1955 at the first, provisional, Housing Council to advice the minister of Public Works and Reconstruction (*Raad voor de Volkshuisvesting*). The Housing Council comprised four more representatives of women's organizations as well as more than 20 men from the construction world.

The unknown and unprecedent history of Schreuder-Gratama reveals that a considerable number of women experts have contributed to the improvement of housing standards and the innovation of housing typology. To do so, they created organisations and initiated applied research that enabled them to develop and publish their ideas and confront the building sector that was considered 'not fit for women'. These organisations became particularly important in the post-war reconstruction period, as we discuss in the following section.

1945-1960s: Post-war reconstruction

Context

- After the Second World War, gender segregated education was promoted in the Netherlands. Students from so-called High School for Girls at those schools were not admitted to Technical Universities, thus, the presence of women remained lower than one percent.¹⁷
- Until 1957, women who married could no longer work in public office.
- A large share of the housing stock was destroyed, particularly in the Rotterdam bombardment of 1940, fast production of housing became a priority from 1945. A team of architects and planners had been working on a new urban plan for Rotterdam, and the industrialization of housing became an important strategy to speed up its realisation.

The Women Advisory Committee (VAC): Domestic work on the agenda!

One of the few visible prominent women in architectural history is Lotte Stam-Beese¹⁸ who worked in the Rotterdam Planning department between 1946 and 1968. This was exceptional in a period when women were explicitly expelled from paid jobs, to make room for returning soldiers. However, this did not prevent women from acting collectively and forming organizations to make professional but unpaid contributions which led them to work in close collaboration with architects, researchers, developers and municipalities. To this day, their work is widely unknown. One of such organisations was the Women Advisory Committee (*Vrouwen Adviescommissie*, VAC),) in Rotterdam.

The VAC created a network structure that mainly looked after the interest of residents in caring for quality in housing construction.¹⁹ Local commissions were to "advise" architects, civil servants and politicians in all issues of housing design. Although limited documentation is preserved from its origins in 1946, it is clear that the work of the VAC Rotterdam varied over the years. Before it was formally established as VAC, it was mostly a study and research group and municipal commission of the Public Works Housing Department (*Dienst voor Volkshuisvesting*, DVV) for providing advice on social housing, always addressing the work of social reproduction performed by women.

In 1946 they urge the Municipality to take responsibility: "Laundry is definitely a social issue!" and discussed the best solutions to alleviate the burden of housewives. Some of the recorded works from this first period include reviews and reports on washhouses and bathhouses that existed in housing clusters and were of special interest to working-class women.

In the following years, discussions centred on the provision of storage space, closets, or the integrated kitchen, and were informed by excursions to existing buildings and the collection of other study materials, carefully preserved in their *portfolio*. Until 1950 the commission performed many surveys and wrote more reports in direct connection to the housing projects developed by the DVV (single-family homes for workers). In December 1950 they postulate once again:

Women's voices in housing must be heard.

17 Frida de Jong, "Standhouden in Delft" (Surviving in Delft), *Gewijna* 20 (1997): 227-42.

- 18 Hélène Damen and Anne-Mie Devolder. Lotte Stam-Beese, 1903-1988: Dessay, Brno, Charkow, Moskou, Amsterdam, Rotterdam (Rotterdam: Devoider, 1993).
- 19 Lily Hutjes, Vrouwen Advies
 Commissies voor de Woningbouw
 in Nederland (Utrecht: Stichting
 Landelijk Contact van de
 Vrouwenadviescommissies voor de
 Woningbouw, 1987).

20 VAC Rotterdam, "Men vraagt zich dan af, of het niet mogelijk is, Gezinshulp (Raadhuis) in deze te laten helpen. Deze instelling werkt al wijk-gewijs; de was is toch een sociale aangelegenheid!" Minutes, October 23, 1946, 2.

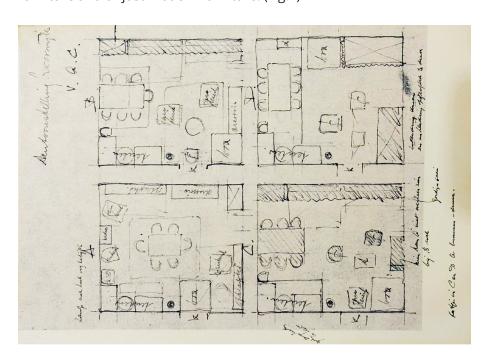
21 VAC Rotterdam, "De talloze klachten in het verleden van huisvrouwen over onvolmaaktheden in haar woning -haar werkterrein en de gezinsbasis- geven ons de overtuiging, dat de stem van de vrouw bij de woningbouw moet worden gehoord. Door in contact te treden met vrouwen van de meestuiteenlopende levensbeschouwing en van veel vrouwen organisaties, hebben we in overleg met Ir. Bos een gemeentelijke commissie samengesteld, die na enige jaren van voorstudie in staat en bereid is adviezen te geven aan de Dienst van Volkshuisvestingen grevraagd en ongevraagd". Minutes, December 14, 1950.

Figure 2. One of the sketches done by the VAC shows different furnishing possibilities for the model home exhibition in Crooswijk. Source: Minutes, February 24, 1955. 608 Archief van ir. W.C.M. Jansen, architect, ca. 1930-1980, Schiedam Gemeentearchief kind permission of HTF Jansen. Together with engineer Bos, then head of the department, they achieved a formal position:

After several years of preliminary study, a municipal committee has been assembled to give commissioned and unsolicited qualified advice to the DW.²¹

For acquiring this final official status at the municipal department, in 1951 they wrote the statutes of the *Vrouwen Advies Commissie Huisvestingsproblemen* (Women Advisory Committee on Housing Problems). Besides advising on housing issues to the DVV in Rotterdam they aimed to inform the people of Rotterdam on housing matters after consultation with the DVV. Their training agenda, including the study of literature, visiting housing complexes (excursions) and attending lectures and conferences, had already intensified.

1951 was the year when the VAC realized that organizing exhibitions were a good way to interact with people. The model homes designed by *Goed Wonen* (good dwelling) from the mid-1950s and 1960s are well-known in the Netherlands, however, before 1955 the VAC had already organized several exhibitions in Rotterdam and its sourroundings: model homes in collaboration with the department store *De Bijenkorf*: in 1952 in Overschie (which attracted around 3.000 people); in 1953 in Hoogyliet, Zuidwijk (around 2.700) and Schiebroek (1.500), etc. In those new homes, they showed traditional furniture, a combination of modern and traditional furniture and or just modern furniture. (Fig.2)



There seem to have been some tensions between Goed Wonen and VAC, for example In December 1955, apparently an article released by Goed Wonen claimed they were the first ones in organizing exhibitions in the field of home furnishing in the Netherlands, which provoked discussion in one of the VACs meetings.²²

This example shows that the VACs were among the first in innovating housing, particularly from the perspective of social reproduction and creating homes to facilitate such (unwaged) labour.

22 VAC Rotterdam *Minutes*, December 15, 1955.

However, their status in the Netherlands is ambiguous, and reactions to their work ranged from "hobby-club" to "nuisance in the way of architectural creativity" as well as being highly appreciated in its detailed evaluation of design proposals. Their work is still today in the process of being documented.²³

23 Doctoral thesis in progress by María Novas Ferradás at Universidad de Sevilla and work in process by Carolina Quiroga at Universidad de Buenos Aires.

1970-1980s: Democratization and feminism

Context

- After May 1968, the democratization movement slowly reached architectural institutions; architecture remained an elite profession for most of the 20th century.
- In 1967 Joke Smit publishes the article "Het onbehagen bij de vrouw" (The discomfort of women) in the literary magazine De Gids. This article triggers the second wave of feminism in the Netherlands, particularly growing since 1969.
- Feminist architects in the USA started to make their voices heard in the 1970s. Among them, Denise Scott Brown starts questioning the myth of the genius "Starchitect".²⁴
- Female students and junior Staff at TU Delft started a *Vrouwen Studies* (Women's Studies) seminar and obtained a position as Women's Studies section in 1986.
- Feminist activism directed at architecture and urban planning started in the 1980s and became organised in the *Stichting Vrouwen Bouwen Wonen* (Foundation VBW) active in the 1990s. VBW published surveys, recommendations, guidelines and a journal. It also issued advise to institutions and municipalities and was (financially) supported by the regional offices for emancipation.²⁵

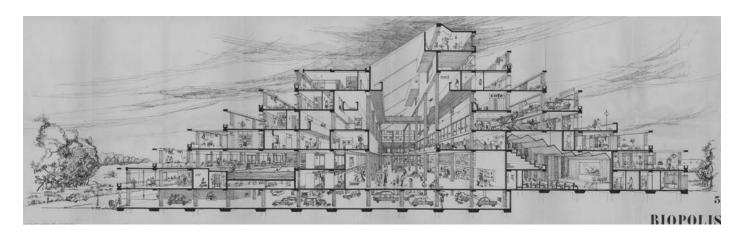
Luzia Hartsuyker-Curjel: Acknowledging diversifying lifestyles

Luzia Curjel (1925-2011) was born and raised in Germany. In the 1930s, the family moved to Switzerland, to escape from the Nazi regime. While studying at the ETH Zürich, she met Enrico Hartsuyker whom she married in 1951. In the following year, attracted by the creative atmosphere, the couple opened an architectural firm in Amsterdam. Enrico also worked at the Department of Public Infrastructures of the same city.

In her practice, Luzia Hartsuyker used to be critical to the CIAM principle of the functional city and proposed the integration of dwelling, working and recreation. In her first design proposal in 1965 for a sustainable and integrated city called *Biopolis*, she projected an offshore urban extension of The Hague that followed these principles.²⁶ (Fig.3)

- 24 Denise Scott Brown, "Room at the Top? Sexism and the Star System in Architecture", in Architecture: A Place for Women, edited by Ellen Perry Berkeley and Matilda McQuaid (Washington DC: Smithsonian Institution Press, 1989), 237-246.
- 25 Tummers (forthcoming) "How activists became cultural heritage" contribution to: Santos Pedrosa, Patrícia Eliana Sousa Santos, Daniela Arias and Nuria Lombardero (eds.) CIDADES, Comunidades e Territórios, special issue on the history of female architects (2022).
- 26 Hartsuyker, Luzia and Enrico Hartsuyker. "Biopolis", De Europese Gemeente. Officieel Orgaan van de Raad der Europese Gemeenten 5 (1969): 19-20.

Figure 3. Sketch for Biopolis designed by Luzia Hartsuyker-Curjel with Enrique Hartsuyker in 1965. Source Collectie Het Nieuwe Instituut, HART, t49-4.



The couple was extremely critical of Dutch housing standards at the time and developed several alternative strategies. Hartsuyker-Curjel addressed the restricted surface regulation creating maximized spatiality through split-level and openness. The flexibility of use was an important issue for her, culminating in the 1980s with her design for "the alternative 3 or 4 room apartment", a non-hierarchical housing unit. (Fig.4)

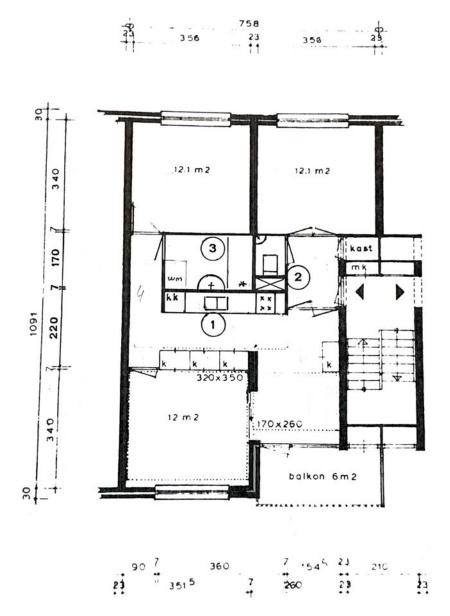


Figure 4. Floorplan of the 'nonhierarchical housing unit' by Luzia Hartsuyker-Curjel. Source Collectie Het Nieuwe Instituut, HART D70

27 Archief Burgerziekenhuis Voor Vrouwen Bedrijvencentrum Voor Vrouwen, inv. nr IIAV00000274 collectie Internationaal Archief voor de Vrouwenbeweging (IAV) in Atria, kennisinstituut voor emancipatie en vrouwengeschiedenis.

The proposal was inspired by feminist criticism on the nuclear family and the absence of "a room of one's own" for housewives. The clever spatial arrangement enables multiple uses while fitting into the constrained housing standards set for subsidized social housing. In the early 1990s, several clusters that included this typology have been built in several towns such as Almere and Apeldoorn.

On top of this, together with feminist organisations, Hartsuyker-Curjel transformed the former *Burgerziekenhuis* in Amsterdam into an industrial building for women entrepreneurs (1985-1992).²⁷

The project was awarded the Dutch National Renovation Price in 1992. All in all, while women still were a minority in architectural practice, architect Hartsuyker-Curjel did not hesitate to address feminist concerns in speeches or through housing design and town planning.

1990-2010s: Neoliberalism, sustainability and self-building

Context

- After a period of (over-)regulation, subsidized social housing in the Netherlands was transferred from municipalities to semi-public housing associations.
- In the 1990s, housing associations were privatized, consequently made a priority of merging and growing, and often replaced participatory renovation processes with commercial and market-prone approaches.
- Housing production took place primarily in suburbs and, mostly, private developers owned the land.
- In 2000, a new National law on Private Commissioning was approved, expanding possibilities for residents to develop their own home (until then, self-procurement was mostly limited to the highest incomes). The primary aim of this law was to increase the percentage of homeownership in the Netherlands.

Ineke Hulshof: Renovation and co-creation

Graduated as engineer in 1979 from TU Delft, Ineke Hulshof (1954) opened an office in Rotterdam with two partners in 1981. Seven years later, the partners each went their way, and she has led the firm *Hulshof Architecten* until her retirement in 2020. In her practice, despite the power of housing institutions and developers, Hulshof was convinced that joint action and smart design made affordable tailormade housing feasible. She showed that making residents the "client in charge" leads to the best and most sustainable housing design.

Her ideas were implemented in numerous projects including, between 1982 and 2010 manifold transformation of housing blocks for Housing Communities in Rotterdam and a series of collaborative housing projects in Delfshaven (the historical area of Rotterdam). In addition, her office realised projects of social rental flats for vulnerable groups such as young singles, refugees or the elderly. On top of this, Hulshof insisted on care for the environment and applied the most sustainable components available and affordable at the time, before "sustainability" became a familiar term in architecture.

In her practice, Hulshof advocated and put into practice an innovative approach, to work with groups of households to develop collective housing projects within the urban fabric. One of Hulshof's guiding principles is sharing knowledge and technical support with all parties involved during the design and building process. This counters a culture of competition and deceit, particularly present in the Dutch building sector during the turn of century. Another important concept that Hulshof promoted was the division between the role of "programmatic commissioners", i.e. the future residents, and that of the financial and legal commissioners, i.e. the investor and legal owners of the land and (future) real-estate. Rather than mystifying the differences of interest, she insisted on transparency in decision making, creating design alternatives to achieve widely supported solutions.

This method was applied during the construction of a new housing building located in New Terbregge, a development area in the North of Rotterdam along the river Rotte.

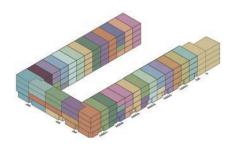
28 Culminating in a parliamentary investigation into corruption in the building sector 2002-2003.

Source: https://zoek.
officielebekendmakingen.nl/kst-28244-6.html
(Accessed November 12, 2021)

Finished in 2002, Terbregse.nl was the first larger-scale collaborative housing project in Rotterdam that followed the Private Commissionar Law. The project includes 41 housing units for individual homeowners and some shared facilities.

Parallelly to the participative design process, the project entailed the development of a modular system for the construction of the houses that enable individual choices in layout. This experience served as a pilot project for the city to develop collaborative housing policy.

Another extremely interesting example is the renewal of the so-called *Wallisblok* (2004-2007).²⁹ Hulshof succeeded in creating a new community attracting creative middle-class households to renovate a dilapidated and half-empty estate in the poorest and roughest district of the city at that time. This experience established a vibrant community. (Fig.5)



29 See: Urban Transformers,

Placemaking Alternatives in the

Case 4, 99-121. And Renee

Netherlands (Seoul: Nexpo, 2018)

Nycolaas et al. Sustentabilidade e

Habitação de Interesse Social (Porto

Alegre: EDIPUCRS, 2014), 161-180.

Figure 5. Re-designing Wallis Blok

Rotterdam, 2004-2007, by Ineke Hulshof.
Source: personal archive, kind permission of Ineke Hulshof.



Figure 6. Entry of Hulshof office for the all-female competition IBA Emscher Park in Ruhr area, 1991
Source: personal archive, kind permission of Ineke Hulshof.



More importantly, it had a large impact on Rotterdam's urban renewal policy, which then developed a new program that addresses housing needs combined with upgrading urban districts.

Besides, Hulshof engaged in several professional organisations, as well as in the *Vrouwen Bouwen Wonen* movement. She organised events and seminars and participated in the editorial board of the VBW Journal *Klinker*. She participated in design competitions exclusively for women architects. (Fig.6)

Despite winning several prices such as regional good quality housing award and sustainability distinctions, she was rather oriented towards making an impact on urban quality than on making a name. The innovative character of her practice is still underestimated.

Final remarks

This article analysed the personal achievement and the transformative impact of a persons' presence in architectural of practice in the Rotterdam region. First, we uncovered the history of Schreuder-Gratama, unveiling the role of an anonymous housewife and non-graduated architect in post-war housing. She was one of many women experts, such as the ones involved in the Women's Advisory Committees, who performed as unpaid professionals on post-war social housing production. As representative of the democratization period, which included the start of the second feminist wave in the Netherlands, we presented some of the ideas of Hartsuyker-Curjel, followed by Hulshof who despite a neo-liberal turn in policies continued the trend, innovating participatory design and engaging with the Women Building Housing movement. Based on this research, we argue that all these women played a key role in housing innovation practices, which until now has not been properly recorded.

By contextualising their work in the societal gender roles of their time, we understand better how the quality of their work is determined by their status as professional women. For example: Gratama's marriage implied exit her professional career, whereas Hartsuyker-Curjel ran an office with her husband, and Hulshof choose not to raise a family. What they have in common is that their contribution to the evolution of architecture in the Netherlands is underestimated and it is very likely this is connected to their social position as women.

How do these facts and insights help?

First, we need them to improve and complete the biographies of single architects and their work, both male and female. Second, a gender-based approach could lead to different periodization, more inclusive, rigorous and comprehensive, and less biased history of architecture. We recommend that future research abandons the culture of highly individualised agency in architecture in favour of a feminist understanding of the production of space.

Third, our research project interacts with, and has an impact in the Dutch national archive of architects and urban planners. Not only are they proactively diversifying their collection, but in a parallel program "collecting otherwise" also raising questions such as

What is production of architecture? Is it only done by certified architects in architectural firms?

The examples in this article, especially the VAC, show that this is not the case. The implications for selecting what to archive in the architecture institute —hence what becomes the image of architecture available for future researchers— are significant. At this moment in time, it is still necessary to make the extra effort and highlight the work of "women architects". Without that, for example, the work done by Schreuder-Gratama as one of Delfts' first female students, would continue to remain in the shadows.

Bibliografía

- BNA, "Studie-Ontwerpen Duplex Woningen", 1949.
- Bhattacharya, Tithi (ed.). *Social Reproduction Theory: Remapping Class, Recentering Oppression*. London: Pluto Press, 2017.
- Berkeley, Ellen Perry & Matilda McQuaid (eds). *Architecture: A Place for Women*. Washington DC: Smithsonian Institution Press, 1989.
- Burns, Karen. "Feminist theory and praxis 1991-2003. Questions from the archive". In: *Architecture and Feminisms*, edited by Hélène Frichot, Catharina Gabrielsson and Helen Runting. Oxon: Routledge: 2018
- Brouwer, Jan and Ed Melet, Bovenstad: het ontdekken en maken van de gelaagde stad. Den Haag: Sdu Uitgevers, 2008.
- Damme-van Weele, Marina van and Jacobien Ressing-Wolfert. Vrouwen in Techniek: 90 Jaar Delftse Vrouwelijke Ingenieurs. Delft: Deltech, 1994.
- Damen, Hélène and Anne-Mie Devolder. *Lotte Stam-Beese, 1903-1988: Dessay, Brno, Charkow, Moskou, Amsterdam, Rotterdam.* Rotterdam: Devoider, 1993.
- "De Huisvrouw Spreekt Zich Uit. Uitslag van een enquête van de Nederlandse Vereniging van Huisvrouwen," *Bouw* 45 (November 8, 1947): 367-370.
- Ellin, Nan. *Postmodern Urbanism:* Revised Edition. New York: Princeton Architectural Press, 1996.
- Fainstein, Susan S. and Lisa Servon (eds.). *Gender and Planning: A Reader.* New Brunswick, New Jersey and London: Rutgers University Press, 2005.
- Federici, Silvia. *El patriarcado del salario. Críticas feministas al Marxismo*. Madrid: Traficantes de Sueños, 2018.
- Greed, Clara. Women and Planning: Creating gendered realities. London, New York: Routledge, 1994.
- Hartsuyker, Luzia and Enrico Hartsuyker. "Biopolis", *De Europese Gemeente. Officieel Orgaan van de Raad der Europese Gemeenten* 5 (1969): 19-20.
- Hutjes, Lily. *Vrouwen Advies Commissies voor de Woningbouw in Nederland.* Utrecht: Stichting Landelijk Contact van de Vrouwenadviescommissies voor de Woningbouw, 1987.
- Jarvis, Helen, Paula Kantor, and Jonathan Cloke. *Cities and Gender. Critical Introduction to Urbanism and the City.* New York: Routledge, 2009.
- -Jong, Frida de. "Standhouden in Delft", Gewijna 20(1997): 227–42.
- Kessel, Ellen van and Marga Kuperus. *Vrouwen in de (stede)bouw. Wat doen jullie now?* Amsterdam: VU Amsterdam, 1982.
- Kuperus, Marga and Ellen van Kessel. *Margaret Staal-Kropholler. Architect 1981-1966*. Rotterdam: Uitgeverij 010, 1991.
- Nederlands Architectuur Instituut. "Biopolis. Stad van de 21 eeuw", 2011, http://archief.nai. $nl/content/1088975/biopolis_stad_van_de_21ste_eeuw.$
- Nycolaas, Renee et al. *Sustentabilidade e Habitação de Interesse Social* (Porto Alegre: EDIPUCRS, 2014), 161-180.
- Quiroga, Carolina. "Wilhelmina Jansen y VAC -Comité Asesor de Mujeres- Rotterdam: vigencia de un diseño feminista en vivienda colectiva," *Hábitat Indusivo* 17 (2021).
- Sánchez de Madariaga, Inés and Marion Roberts (eds.). Fair Shared Cities. The Impact of Gender Planning in Europe. Farnham, Burlington: Ashgate, 2013.
- Schreuder-Gratama, Augustine. "Zelfgebouwde kampeer-aanhangwagen", *De Vrouw en Haar Huis* 28, 5 (1933), 247-51.
- Smeets-Klokgieters, Erica. "Vrouw in de bouw. De eerste vrouwelijke agestudeerde architecten in Nederland", KNOB Bulletin 116, 1 (2017): 43-57, https://doi.org/10.7480/knob.116.2017.1.1727
- Urban Transformers Placemaking Alternatives in the Netherlands. Seoul: Nexpo, 2018.
- Zibell, Barbara, Doris Damyanovic and Ulrike Sturm (eds.). *Gendered Approaches to Spatial Development in Europe: Perspectives, Similarities, Differences.* London, New York: Routledge, 2020.