

The 1st MoMoWo conference-workshop, held in September 2015 at the University of Leiden in the Netherlands, presented interventions by holding four interview sessions, one each day. During these interviews we discussed the work and experiences of invited guests about the position of women in design, architecture, and engineering.

First Intervention guest: Christie van der Haak (textile designer)

Second Intervention guest: Ana María Fernández-Maldonado (city planner)

Third Intervention guest: Marlies van Dullemen (designer-engineer)

Fourth Intervention guest Joke Vos (architect)



## The first Intervention Guest was textile designer Christie van der Haak

(http://www.christievanderhaak.nl).

Christie van der Haak lives and works in The Haque, the Netherlands. She studied design and fashion at the Royal Academy of Arts in The Hague, and after graduation became a painter. Her activities included painting ceramic plates with bold patterns, floral as well as other designs, merging painting and decorative art. Since 2003 she has been transforming her paintings into textiles with the help of a computer-controlled Jacquard weaving machine in the Textile Museum in Tilburg, the Netherlands. She has worked with a textile mill that produces wonderful upholstery fabrics and fabrics for wall coverings. Her work is manufactured both mechanically and manually, producing fabrics for mass production and unique fabrics that can be displayed on a canvas stretcher and shown as autonomous artworks at exhibitions. In her designs Christie tries to realise a combination of creating handicrafts in which the patterns are meticulously drawn and painted, and a method of mechanically producing a richness and intensity that is often lacking in today's fast commercial world.

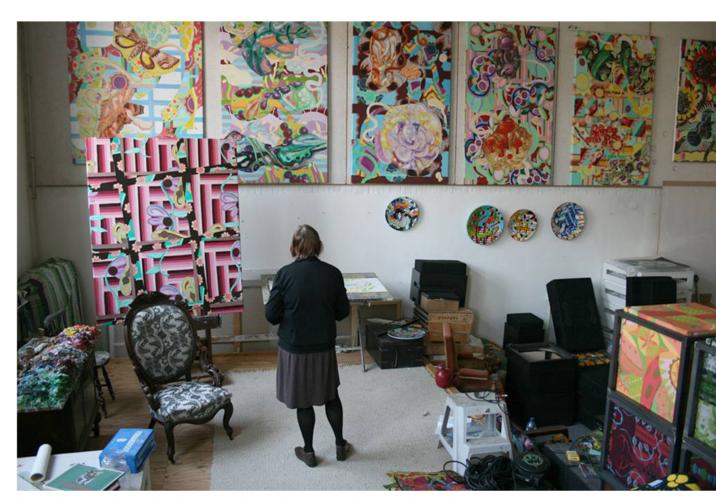


Fig. 1. Christie van der Haak in her atelier. Photograph courtesy Christie van der Haak.



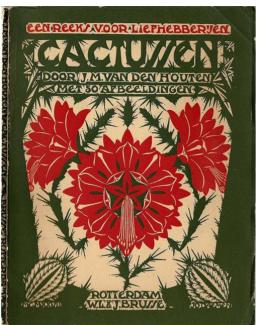


Fig. 2. *Left:* design installation by Christie van der Haak. *Right:* cover design for *Cactussen* by Jo Daemen, 1927. Photographs Christie van der Haak (*left*) and author (*right*).

In the context of the 1st MoMoWo conference-workshop, Christie's works reflect the abstract nature of floral patterns by design reform movements from the 1870s to the late 1920s. Her work is a contemporary translation of these inspiring pre-modernist and modernist historical designs. Clients who buy her work recognise this tradition of decorative modernism in both its early and later stages, with the stylising of natural design motives that may be traced back to the British designer William Morris and the British Arts and Crafts movement between the 1860s and 1890s.

The MoMoWo conference connected her designs to a book cover from the late 1920s by the Dutch graphic designer Jo Daemen (Fig. 2). That design was made for a booklet about cacti and depicted bold blooming red flowers of a cactus. It was also used for the 1st conference-workshop book of abstracts. The design by Jo Daemen was chosen to challenge the firm grip of modernism on the literature of design history. That modernist grip seems to continue to have a hold on a group of designers and architects who for a long time were not well represented in the modernist canon: namely, women. Nowadays the canon of women designers still seems to be formed after the modernist ideology, as reflected in this conference. However, as many theorists argued since the 1980s, modernism as an ideology is still dominated by men. In addition, functionalist-modernism is not the only aspect of modernism. It has a multiplicity of forms. Christie van der Haak is aware of the position of women in this ideological minefield but she believes that she is primarily a designer and should continue to work as such, regardless of the prevailing fashion and discourse about design. Clients who appreciate her work are both men and women.

As far as Christie's work is concerned, people do realise that it is simultaneously new and contemporary. Over the years, she has made a lot of designs for upholstery, wall coverings,





Fig. 3. Gemeentemuseum The Hague (*left*) and lead image of the exhibiton 'Delfts Wit' ('White Delftware') with a fabric by Christie van der Haak (*right*), at https://www.gemeentemuseum.nl/nl/tentoonstellingen/delfts-wit, accessed 28 September 2017.

draperies, tablecloths, table napkins and shawls. In relation to architecture she has executed large commissions in the Netherlands, notably for the Amrath Hotel chain and the Dutch Ministry for Foreign Affairs. The latter commissioned her to renovate Dutch embassies all over the world. She challenged the particular modernist spatiality of the building of the Gemeentemuseum in The Hague built in 1931-1935 after a design by H.P. Berlage, when she designed the 2013-2014 exhibition 'White Delftware' by covering the museums interior structure with colourful patterns. These patterns on columns formed a lively confrontation with the white Delft tin glazed faience from the late seventeenth and eighteenth centuries and with the white modernist museum spaces (Figs. 3 and 4).

Most recently an installation by Christie marked an exhibition on Modern Dutch design at the Wolfsonian-FIU in Miami Beach, Florida that was curated by Silvia Barisione. It offered a similar interplay with architectural volumes and spaces. Both the façade and the entrance hall of this Museum for Decorative and Propaganda Art were covered with different patterned sections. The colourful









Fig. 5. The Wolfsonian–FIU, Washington Avenue 1001, Miami Beach. Original building 1926–1927 by Robertson & Patterson, renovated and enlarged by Mark Hampton in 1993–1995, and decorated with designs by Christie van der Haak for the exhibition *Modern Dutch Design*, November 2016–June 2017. The installation of the corner pattern (*left*) and the finished work (*right*). Photographs author, November 2016 and May 2017.

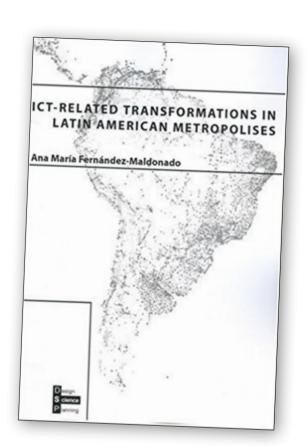
designs interacted with the Art Deco and modernist architectural environment surrounding this former 1927 warehouse on Miami Beach, enthusing many passers-by and museum visitors with their exuberant visual effect (Fig. 5).<sup>1</sup>

## Our second Intervention Guest was city planner Ana María Fernández-Maldonado

Ana María Fernández-Maldonado has worked as a senior researcher at the Spatial Planning and Strategy chair of the Faculty of Architecture of Delft University of Technology in the Netherlands since 1992. She informed the MoMoWo conference about her experiences in the planning of cities within her practice as an architect and urban designer in her own design office; in partnership with two other architects in Lima, Peru; as an urban planner in a district municipality in Lima; and as a

Fig. 6 Cover of *ICT-related Transformations in Latin American Metropolises* (Techne Press, 2004), by Ana María Fernández-Maldonado.

researcher into urban trends in informal settlements of Lima. Her research interest relates to planning and urban transformations of European and Latin American cities. This includes ICT-related transformations (Fig. 6), knowledge-based urban development, telecommunications and urban infrastructures, housing and planning policies and comparative studies. On first coming to the Netherlands she became aware that the problems connected with city planning in this country were very different from those in Peru. It seemed as if everything was perfectly arranged and no planning was needed at all. However, the geospatial situation of both Peru and the Netherlands gives them different urgent issues to deal with and solve with regard to city planning. A comparative perspective is most helpful in



focusing on commonalities and differences and coming up with solutions.

## Our third Intervention Guest was industrial design-engineer Marlies van Dullemen (http://www.npk.nl)

Marlies van Dullemen is a senior designer with npk design, a renowned international design studio in Leiden, the Netherlands. Marlies focuses on exploring new technologies in a social context and has developed dozens of innovative products and services. The scope of her designs ranges from vision and scenario development, work-flow design, product architecture and new technologies right up to engineering development and realisation. She finds inspiration in collaborating with researchers and medical doctors when working on healthcare innovations such as new diagnosis and treatment systems, self-care aids, hospital beds and analytical instruments (Fig. 7). A portable Spülboy glass washer system washes clean without electricity, while saving water (Fig. 8). Marlies graduated from Delft University of Technology in 1984 and worked for General Electric before joining

<sup>1</sup> For this exhibition see Marjan Groot, 'The Wolfsonian-FIU in Miami Beach and Modern Dutch Design', at http://www.designhistory.nl/2017/the-wolfsonian-fiu-in-miami-beach-and-modern-dutch-design/, posted 13 September 2017.





Fig. 7. npk design/Marlies van Dullemen, Eden bed for Jensen, Norway, 2008 (*left*); adjustable hospital bed Plano for Novymed (*right*), 1991, at https://npk.nl/project/jensen/, and https://npk.nl/projects/health-care-design/. Photographs courtesy Jensen (Norway) and Gerrit Schreurs (the Netherlands).





Fig. 8. npk design/Marlies van Dullemen, NU® Spülboy glass cleaner for Schicker & Schäfer, 2013, at https://npk.nl/projects. Photograph courtesy npk design, Leiden, the Netherlands.

the team of npk design. Her work with the npk team has been acknowledged internationally and has won numerous design awards. At the conference Marlies told us about the long and meticulous process of designing and collaborating, striving to meet the demands of clients and dreams of future users. For her and for npk, any design process is a matter of team work and exchange of ideas and thoughts, again and again. She values conversations with users to understand their considerations, which enables for translation towards new purposes of a design.<sup>2</sup> Designs may take several years to be fully realized, and many were patented. Some designs, such as a LifeSlide mass evacuation system for escaping from high buildings in the event of a calamity, were not realized





Fig. 9. npk design / Marlies van Dullemen, LifeSlide mass evacuation system, 2007. Photograph courtesy npk design, Leiden, the Netherlands.

up to now (Fig. 9). The design of this mass evacuation system is a rescue arrangement to rapidly descent from the highest buildings to ground level.<sup>3</sup>

It is clear that women in the design-engineering profession are still a minority. Being in contact with mostly male and some female clients, Marlies finds that this is not a hindrance. She told us that she enjoys coaching young design-engineers and interns who come to work at the studio to build working relationships that value women design-engineers in this predominantly male field.

The presentation and professional activities of Marlies van Dullemen focused the attention of the conference on women as industrial design-engineers. They are a professional group that seems to have been neglected in research, which favours architects and architectural engineers. Unfortunately, and perhaps due to the focus on modernism in architecture and design, there was no conference paper on a female design-engineer of this period. The history of women engineers, however, is a rich one. For example, B. Zorina Khan investigated the women's contribution to technology by analyzing patterns of patenting and commerce between 1790 and 1895, using 4196 patents filed by women in the USA. The formal procedure for filing a patent allowed anyone to do so regardless

<sup>2</sup> See https://vimeo.com > npk design > Videos, accessed 5 October 2017.

<sup>3</sup> Patent number: 8561759 February 27, 2008, Patented October 22, 2013. Assignee: Rapid Vertical Egress System Holding B.V. Inventors: Nicholas Paul Monks, Marlies Van Dullemen, Ingmar Christiaan Maurice, Marte Jeane Den Hollander. At https://patents.justia.com/inventor/marlies-van-dullemen, accessed 5 October, 2017.



Fig. 10. Romanian stamp with a portrait of Josephine Cochrane, inventor of a dish-washing machine, 2013. Web, accessed 20 September, 2015.

of gender or race if they could afford the costs. Women were, of course, a minority: they filed less than 1% of the patents but the number of their patents grew significantly after 1876.4

Deborah Jaffé discussed women who patented their inventions between 1637 and 1914 in her *Ingenious Women from Tincture of Saffron to Flying Machines* (2003). The nineteenth century in particular had many women-inventors. An example is Josephine Cochrane (1839–1913) who invented a dish-washing machine as early as 1886. On the recent centenary of her death in 2013, she was honoured with a postage stamp

issued by her native country, Romania (Fig. 10). After feminist reformer Charlotte Smith argued for the recording of women patentees, the first official list of patents by women inventors in the USA was published in 1888 by the United States Patent Office. 6 Closer to the modernist period in architecture

and design after 1918 is the invention by Mary Anderson in 1903: an automatic 'window cleaning device' of a swinging arm with rubber blade for motorised trams. It was to be universally applied to cars. Another inventor was Amélie Auguste Melitta Bentz from Leipzig, Germany, who patented a coffee filter with a paper disc in Berlin in 1908 as the *Gebrauchsmuster*, thereby laying the foundations of a company that still exists today (Fig. 11).<sup>7</sup> The range of inventions is diverse: shortly before the outbreak of World War I, Kate Jenkins from Sydney, Australia, invented a life jacket made from inflatable cork blocks, Italian physician and educator Maria Montessori held a number of patents for teaching equipment, and in 1914 Dora Lunn from London patented her lightweight Ravenscourt Potter's Wheel.<sup>8</sup>



Fig. 11. Coffee filter device designed by Melitta Bentz, patented in 1908. Web, accessed 24 September, 2017.

- 4 B. Zorina Khan, ' "Not for Ornament": Patenting Activity by Nineteenth-Century Women Inventors', *Journal of Interdisciplinary History* vol. 31, number 2 (Autumn 2000), pp. 159-195, here p. 164.
- 5 More references in Eric S. Hintz, 'Counting Women Inventors', posted on 21 March 2017, at http://invention.si.edu/counting-women-inventors, accessed 20 September 2017.
- 6 Hintz, 'Counting Women Inventors'.
- 7 See the video 'Frische und Geschmack', by Barbara Sichtermann and Ingo Rose at https://youtu.be/eczlJMyxHgl, accessed 20 September 2017.
- 8 Deborah Jaffé, *Ingenious Women from Tincture of Saffron to Flying Machines*, Stroud: Sutton Publishing, 2003, pp. 49–50, 75, 101.

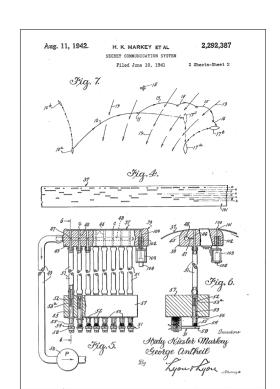


Fig. 12. Patent drawing #2 for the application of Serial No. 397,412, for a wireless 'Secret Communications System' by inventors Hedy Kiesler Markey and George Antheil, June 10, 1941, at https://patentimages.storage.googleapis.com/pages/US2292387-1.png, accessed 29 September 2017.

All these women were true modernists in their contribution of ingenuity and inventiveness to the field of technology. Facilitated by the internet, announcements and patent registrations document more women inventors after 1918, for example at http://www.women-inventors.com/Women-Inventors. asp. An intriguing patent is the one filed in 1941 by Austrian-born actress Hedy Lamarr (b. Hedwig Eva Maria Kiesler) and co-inventor George Antheil. It was for a wireless Secret Communications System 'to provide a method of secret communication which is relatively simple and reliable in operation, but at the same time is difficult to discover or decipher' (Fig. 12). The system manipulated radio frequencies at irregular intervals between transmission and reception to prevent classified messages from being intercepted by enemy personnel.<sup>9</sup> Equally interesting are achievements after 1945, such as those for new materials. In the 1980s Sally Fox from the USA refined cotton seeds through the breeding of brown and green cotton to finally produce naturally colored cotton; more cotton patents by her followed, such as for a naturally flame resistant cotton fiber in 1994.<sup>10</sup> A particular relevant invention in relation to architecture was patented by sculptor Patricia Billings of Kansas City, Missouri. She derived a new indestructible, fire-proof and non-toxic building material from plaster. This was called Geobond® and patented in 1997 (Fig. 13).

<sup>9</sup> Joyce Bedi, 'A Movie Star, Some Player Pianos, and Torpedoes', posted 12 November 2015 at http://invention.si.edu/movie-star-some-player-pianos-and-torpedoes, accessed 6 October 2017.

<sup>10</sup> At http://www.google.com/patents/US5496623, and http://www.inventricity.com/sally-fox-inventor, both accessed 9 October 2017.

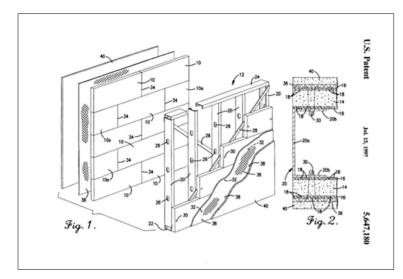


Fig. 13. Patent drawing for the application US 08/523,651, for a fire resistant building panel that can be used to construct load bearing walls and other structural members in various types of buildings, by Particia Billings and Susan Michalski, Jul 15, 1997, at https://patentimages.storage.googleapis.com/pages/US2292387-1.png, accessed 29 September 2017.

## Our fourth Intervention Guest was architect Joke Vos

(mail@jokevos.nl; http://www.jokevos)

Joke Vos studied architecture at the Delft University of Technology. She worked in several Dutch architectural firms – amongst them Wytze Patijn and De Zwarte Hond – before starting her own practice in Rotterdam in 2003. Since 2013 her office Joke Vos Architecten (Fig. 14) has been based in Amsterdam. Joke Vos has long-standing experience in housing design and in small-scale urban design. Striking examples of her work in house design are the 'Periscope Houses' and 'Het Mooie Plan' (Beautiful Plan) in Rotterdam, and 'In the Park' in Etten Leur. In the last of these, art panels were integrated into the façades of 125 houses (Fig. 15). Her design for a data centre for TUd won the Dutch Concrete Award. Currently under construction is The View in Rotterdam, a mixed use development (Fig. 16).

Joke's work is true to the modernist heritage that is still much favoured for Dutch architecture. The rectangular shapes and volumes are indebted to functionalist modernism but she also applies bricks as 'vernacular' material. All of her designs meet today's demands regarding ventilation, energy supplies, application of building materials and the requirements of future inhabitants; there is participation of the people for which she designs. At the conference-workshop, Joke informed the public about the design process and the importance of collaborating with all professionals in the architectural field. Today there are more women architects than ever before and they are not regarded as alien to the profession, as they were in the 1920s and 1930s. However, collaboration on an architectural project requires an attitude of equality and not one of feeling different because one happens to be a female architect. As a woman architect, Joke is aware of her position and knows

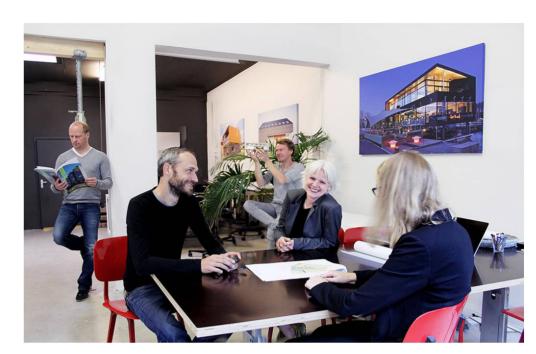


Fig. 14. Joke Vos Architecten, Amsterdam, the Netherlands. Photograph courtesy Joke Vos Architecten.



Fig. 15. Joke Vos Architecten, 'In the Park', Etten Leur, 2015 (design 2007).

Photograph courtesy Joke Vos Architecten.

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Fig. 16. Joke Vos Architecten, 'The View of Rotterdam' (design update 2017). Photograph courtesy Joke Vos Architecten.

that she must approach any project as a professional equal to men. Joke is active in organisational committees as well. She supports her profession as chairman of Architectura et Amicitia, the association for architects and artists, and as a member of the aesthetics committee of Hilversum and of the Committee for Urban Quality in Zoetermeer.

