

Storia, Critica artistica e del restauro

*History, Art and Restoration
criticism*

Saggi

Essays

- 30 **Redefining Modernism through textiles: five women at the crossroads of fashion and architecture**
Paula Arning
- 39 **Moda e cultura insulare. La ricerca materico-espressiva di Marella Ferrera**
Rossella Piediscalzi, Francesca Trovato
- 51 **Spatial idea of Fashion Shows: the concept of an industry-specific temporality and the dynamisation of spatial heritage**
Manuela Koenig

REDEFINING MODERNISM THROUGH TEXTILES

Five women at the crossroads of fashion and architecture

Paula Arning

TESSUTI, ARCHITETTURA, MODERNISMO

Qual è il ruolo dei tessuti nell'architettura? L'interazione tra il design tessile e l'architettura modernista rappresenta un aspetto spesso trascurato del patrimonio culturale. Questo articolo esamina come cinque pioniere del design modernista – Eileen Gray, Sonia Delaunay, Lilly Reich, Otti Berger e Grete Reichardt – abbiano creato un dialogo rivoluzionario tra tessuti, moda e spazi architettonici che continua a influenzare il patrimonio del design contemporaneo. Attive tra il 1910 e il 1980, queste donne hanno trasformato i materiali tessili da artigianato domestico a sofisticati elementi di design che hanno modificato radicalmente l'esperienza spaziale sia negli ambienti privati che in quelli pubblici. Il loro lavoro sfida le categorizzazioni tradizionali, rappresentando un esempio dello scambio di codici estetici tra la moda e il patrimonio architettonico. Il contributo indaga come queste designer abbiano avviato le proprie attività e pratiche espositive, creando modelli economici che hanno permesso loro di mantenere la propria autonomia contribuendo al contempo al movimento d'avanguardia. L'articolo esamina inoltre come i disordini politici, in particolare le due guerre mondiali, abbiano influenzato le loro carriere e le abbiano costrette ad adattamenti strategici, compresa la migrazione. Poiché le case di moda contemporanee traggono sempre più ispirazione dal patrimonio architettonico, l'approccio pionieristico di queste cinque donne nell'integrare tessuti e spazio offre preziosi precedenti storici per comprendere la sinergia odierna tra moda e patrimonio culturale. Il loro lavoro, un tempo marginalizzato nella storia del design, costituisce oggi un patrimonio culturale fondamentale conservato nelle collezioni museali di tutto il mondo, dimostrando come la rivalutazione contemporanea del rapporto tra moda e patrimonio culturale più ampio possa recuperare contributi precedentemente trascurati.

TEXTILES, ARCHITECTURE, MODERNISM

What role do textiles play in architecture? The interaction between textile design and modernist architecture represents an often-overlooked aspect of cultural heritage. This paper examines how five pioneering female modernist designers – Eileen Gray, Sonia Delaunay, Lilly Reich, Otti Berger and Grete Reichardt – created a revolutionary dialogue between textiles, fashion and architectural spaces that continues to influence contemporary design heritage. Operating between 1910 and 1980, these women transformed textiles from domestic craft to sophisticated design elements that fundamentally altered spatial experiences in both private and public environments. Their work challenges traditional categorisations, exemplifying the exchange of aesthetic codes between fashion and architecture heritage. This paper investigates how these designers established their own businesses and exhibition practices, creating economic models that allowed them to retain agency while contributing to the avant-garde. The paper further examines how political disruptions – particularly both World Wars – impacted their careers and forced strategic adaptations, including migration. As contemporary fashion houses increasingly draw inspiration from architectural heritage, these five women's pioneering approaches to integrating textiles and space offer valuable historical precedents for understanding today's fashion-heritage synergy. Their work, once marginalised in design history, now constitutes vital cultural heritage preserved in museum collections worldwide, demonstrating how the contemporary revaluation of fashion's relationship to broader cultural heritage can recover previously overlooked contributions.

Paula Arning

School of Art History and Cultural Policy, University College Dublin, Ireland.

ERC-Project: Expanding Agency: Women, Race, and the Global Dissemination of Modern Architecture

paula.arning@ucd.ie

REDEFINING MODERNISM THROUGH TEXTILES

Five women at the crossroads of fashion and architecture

Paula Arning

What role do textiles play in architecture? Textiles and their designers have historically been relegated to the sphere of women's work, which has often been dismissed as merely decorative or ornamental, even as clutter. Practices such as weaving, knitting, mending, sewing and embroidery were long considered domestic work, secondary to the structural concerns of architecture. It is no longer a secret that women in the early years of the Bauhaus were, with only few exceptions, assigned to the textile workshop, limiting their access to architecture and confining them to the domain of fabric. Modernist architecture and design is often defined through the visions of its most prominent male figures, such as Le Corbusier's dictum that "the house is a machine to live in," or Ludwig Mies van der Rohe's minimalist ideal of "skin and bones" architecture.

Yet, this marginalisation of textiles and those who worked with them overlooks deeper historical truths. As early as 1851, in *The Four Elements of Architecture*, German architect Gottfried Semper argued that architecture's origins lay in woven materials: "The use of wickerwork for setting apart one's property, the use of mats and carpets for floor coverings and protection against heat and cold and for subdividing the spaces within a dwelling in most cases preceded by far the masonry wall" (Semper 103). Semper's theory invites us to reconsider textiles not as embellishment, but as structure. While Semper drew a distinction between structure and cladding, his theory highlights the foundational importance of textiles to the definition of architectural space. Unlike rigid walls, textiles offer flexibility: they can affect the atmosphere of a room by reducing sound, controlling smell, or partitioning space as desired. Most importantly, Semper highlighted, "hanging carpets remained the true walls, the visible boundaries of space" (Semper 104).

Where does this leave us when dominant architectural discourse has long treated masonry as structural and authoritative, while relegating carpets and curtains to the realm of the decorative, the soft and the secondary? This contradiction exposes the gendered and material hierarchies embedded in our understanding of space: what is seen as architecture versus what is dismissed as ornament. If textiles are, in fact, spatial boundaries – movable, flexible, sensory – then the very foundation of architectural thinking requires re-examination.

Sonia Delaunay, Eileen Gray, Lilly Reich, Otti Berger and Grete Reichardt found ways to transcend these gendered and material boundaries. Despite working in the shadow of their more widely recognised male contemporaries, these women made lasting contributions to both architecture and textile design, including fashion.

These designers bridged the divide between textiles and architectural practice. Each of them, in different ways, worked across both areas. Exploring this connection reveals the gender dynamics of the period and the persistent stereotypes that female designers had to navigate. Fabrics and textiles have long been associated with fashion – a domain traditionally coded as feminine. In fact, textiles can be understood as a means of creating a dialogue between architecture and fashion – two disciplines that often seem worlds apart but share concerns with form, structure, movement and space. As soft, flexible materials, textiles inhabit both the body and the built environment. They drape, cover, divide and define space, whether as garments or as interior elements like curtains, upholstery or wall hangings.

Furthermore, the careers of these women were shaped by their personal backgrounds and interrupted by major political events, including both World Wars. Migration emerges as both emancipatory and demanding. Eileen Gray moved from Ireland to Britain and then to France; Sonia Delaunay migrated from what is now Ukraine to Russia, Germany and eventually France. Otti Berger fled Germany for England shortly before the outbreak of World War II, only to return to her native Yugoslavia to care for her sick mother. In contrast, Lilly



1
Eileen Gray, E.1027,
view from the garden,
Roquebrune-Cap-Martin,
France, 2024.
Image by author

Reich remained in Germany for the duration of her career, as did Grete Reichardt, who even exhibited her work in Mussolini's Italy. While three of these women lived until old age, two died prematurely. Berger was murdered in the Holocaust, while Reich survived the war by only two years. Notably, none of these women had children, except for Delaunay, who had a son. These personal and political experiences were not just background details; they directly shaped the design practices of these women. Migration and political upheaval often demand new forms of flexibility, resilience and innovation, which can be traced in their shifts in style, technique and professional strategies.

Sonia Delaunay is perhaps the best-known designer of the group. Her work spanned painting and textiles as well as fashion, including costume design. Together with her husband, Robert Delaunay, she coined the Simultaneous Style. She is among the first and "most fruitful" modern European artists to make abstract art (Damase 6). In a lecture called 'The Influence of Painting on the Art of Clothes,' which Delaunay gave in 1927, she emphasised the fluidity between the different mediums: "A movement is now influencing fashion, just as it influences interior decoration, the cinema, and all the visual arts, and it overtakes everything that is not

subject to this new principle which painters have spent a century seeking; we are only at the beginning of the study" (Damase 59). Her view of art as an interconnected and evolving field shaped her innovative approach to fashion, where textiles played a key role in the language of modernism. This idea is echoed by Stempniak, who notes that the "reciprocal connection between the home and the body, both of which can be 'dressed' with textiles, suggests a modernist conception of the interior as not simply an enclosed space, but also a fluid one encompassing materials and flesh alike" (Stempniak 249). Delaunay's practice embodied the modernist idea of the *Gesamtkunstwerk*, a total work of art in which clothing, interiors and visual art coalesced into a unified aesthetic vision. Through her, art left the confines of the canvas and entered lived space. This perspective affirms the integration of textile design into architectural thinking, showing how garments can function as mobile and spatial compositions. Delaunay's understanding of clothing as a three-dimensional, dynamic artwork aligns directly with modernist design's broader interest in total environments and formal coherence.

Delaunay's career exemplifies how women in the early twentieth century carved out spaces of creative and financial autonomy within male-dominated cultural industries. Her founding of *Casa Sonia* in Madrid and later *Maison Sonia* in Paris marked a deliberate effort to take control of both the production and distribution of her work. These boutiques were more than just commercial enterprises – they embodied her artistic vision, seamlessly blending fine art with fashion, interior design and everyday objects. By establishing her own platforms, Delaunay asserted her dual role as artist and entrepreneur. Her integration of avant-garde aesthetics into wearable and liveable forms presented a radical model for female autonomy in the modernist era, bridging the divide between high art and commerce on her own terms.

Self-taught architect Eileen Gray is best known for her villa E.1027 (1926-29) located in Roquebrune-Cap Martin (Fig. 1). Before becoming an architect, she was known for her lacquer and textile work. Already before World War I, Gray demonstrated a striking sense of entrepreneurship and independence, carving out space for herself – and other women – in the male-dominated world of design. Together with British textile designer Evelyn Wyld, she founded an atelier for carpets and wall hangings in 1910 in Paris. As the pair employed other women, this was a business run by women, for women. Jennifer Goff notes, "The label on the rugs read 'Designed by Eileen Gray at the workshop of Evelyn Wyld'" (Goff 163) – a testament to her early assertion of authorship within a collaborative, women-led creative space. In 1922 Gray opened her own shop in Paris called 'Jean Désert.' She chose a male name for the shop to give it "a more serious tone" (Adam 110). However, it is worth noticing that Gray is the only woman of the group this paper examines who enjoyed a lifelong financial autonomy that enabled her to pursue design on her own terms.

Gray's clever and thoughtful integration of textiles into architectural spaces becomes especially evident in E.1027, where carpets and curtains define space as much as walls do. Some of her rugs were conceived as architectural plans, blurring the line between surface ornament and spatial blueprint (Goff 169). Within the villa, textiles function not only as decorative elements but also as spatial markers that respond to the house's seaside location. The overall aesthetic evokes the streamlined elegance of an ocean liner, with carpets and curtains reinforcing this nautical atmosphere. For instance, a deep blue carpet in the living room area visually separates zones and subtly recalls the expanse of the sea just beyond the windows (Fig. 2).

Gray's use of textiles in E.1027 also influenced one's sensory experiences of light and sound within the interior. She gave agency to the dweller by providing them with the opportunity to alter the space according to their needs. A moveable screen to separate the guest alcove from the living room area, for instance, created privacy as desired. This emphasis on agency stands in contrast to canonical modernist architecture, which often favoured fixed, rational designs intended to objectively meet the needs of occupants, as exemplified by figures like Le Corbusier. Just as Gray's furniture often folded, rotated, or slid, her use of textiles allowed for modular shifts in privacy, openness and spatial mood, anticipating modern ideas of flexible



2
Eileen Gray, E.1027,
living room space,
Roquebrune-Cap-Martin,
France, 2024.
Image by author.

living. By elevating the role of textiles to a structural principle in E.1027, Gray reclaimed a 'feminine' medium as a source of architectural agency.

Lilly Reich's work bridges both domestic spaces, such as the Tugendhat House (1929-30) (Fig. 3), and public exhibition design, like the Velvet and Silk Café (1927). In the latter, she used silk drapes not only as display material but also as spatial dividers, blurring the boundary between decoration and architecture, and enveloping the viewer in a carefully curated, sensory-rich environment. While it is challenging to make a distinction between Mies van der Rohe's and Reich's design outputs during their collaboration, it is well established by now that Reich was responsible for the drapes and curtains but also designed some pieces of furniture, previously ascribed to Mies (Lange 2006).

Reich used curtains and colours to structure the experience of space, which brings us back to Gottfried Semper's argument. Not only do they add a homely, more liveable touch

to Mies's known skin-and-bone-architecture, but they also had an impact upon sound and smell, as the Tugendhats themselves noted and documented. The Tugendhat House is quite exposed with its large window fronts. However, thanks to the curtains by Reich, it is possible to create a more private and secluded space.

Reich began her career as a crank embroiderer. In 1911 she founded her own atelier for interior design and fashion. For Reich, the commercial and industrial dimensions of design were central; as an exhibition designer, she expertly staged products and materials to communicate modernity, efficiency and economic progress. She was the first woman to join the board of the Deutsche Werkbund and in 1932, she was appointed by Mies to direct the weaving workshop at the Bauhaus. As opposed to Gray, who was financially much more flexible, Reich had to work for a living. After Mies left for the US, she stayed in Germany, where she participated, as Mies and Gropius had also done, in Nazi sponsored exhibitions in Germany. In her case, this included the 1937 World Fair in Paris.

Otti Berger studied at the weaving workshop of the Bauhaus Dessau from 1927 until 1930. She led the weaving workshop for a short while before Lilly Reich took over. They briefly collaborated at the Bauhaus but apparently had disagreements concerning the affordability of their designs (Raum 20). What is striking about Berger is that she was the only weaver who patented her designs at the Bauhaus during the 1930s (Raum 29). In doing so, she claimed legal and intellectual ownership over her work, asserting a rare degree of autonomy within an institution that emphasised collective authorship and aesthetic anonymity. Her pursuit of patents reflects a deliberate positioning against the erasure of individual contribution in

3
Tugendhat House,
Brno, Czech Republic,
living room space.
photo by Lehotsky, 2012.
Wikimedia Commons,
CC BY-SA



modernist production and instead foregrounds a model of authorship grounded in material expertise and creative control. In 1932, she decided to leave the Bauhaus and open her own textile atelier in Berlin. However, the outbreak of World War II forced her to close it, and she attempted to rebuild her career in England – an effort that ultimately failed. Struggling with language barriers due to a hearing impairment, she returned to her native Croatia to care for her sick mother. Tragically, at the age of forty-five, she was deported and murdered in Auschwitz (Smith 2014).

One of the clearest articulations of the collapsing boundary between fashion and interior space comes from Berger herself, who conceived fabrics “both for fashion and interiors” (Raum 24). This dual functionality reflects a broader tendency among the designers examined in this paper to reject rigid categories and instead foreground the material and conceptual flexibility of textiles. For Berger, textile design was not a subordinate decorative art but a medium capable of shaping both architectural atmospheres and personal identity. Her work at the Bauhaus and beyond – combining experimental materials, industrial techniques and tactile aesthetics – positions her at the intersection of avant-garde design, architectural modernism and fashion innovation.

Grete Reichardt might be the least known designer of the group. Yet, she played a crucial role in developing the iron yarn for Marcel Breuer’s famous Wassily Chair, even today, one of the most well-known pieces of the Bauhaus. Notably, iron yarn, coming from the Bauhaus in Dessau was also used for the production of aircraft seats by Junkers, which was located in Dessau as well. Uwe Schierz further highlights the industrial aspect of Reichardt’s work, writing “In addition to her Bauhaus work in cellophane and *eisengarn*, Reichardt also developed fabrics with sound-absorbing and light-reflecting properties” (Schierz 164). Evidently, Reichardt’s practice moved well beyond decorative textile design into industrial and architectural applications. After leaving the Bauhaus she founded her own atelier in Erfurt. Notably, she taught her husband, Hans Wagner, how to use the looms (Schierz 170). This is interesting considering that he took on an assistant role in her business.

However, despite the technical sophistication and functionality of her work, Reichardt remains far less recognised than female contemporaries such as Sonia Delaunay, Eileen Gray, or Anni Albers. As opposed to the other women this article mentions, Reichardt’s career thrived even during wartime: she exhibited internationally and was honoured with prestigious awards, including a prize at the 1937 World Expo in Paris, an honorary diploma at the Berlin Exhibition of Arts and Crafts the same year, and a gold medal for industrial textile design at the 1940 VII Triennale in Milan (Schierz 170). Given this timeline, it is worth asking whether Reichardt’s relative absence from the postwar design canon may be linked not only to gendered historiography or her orientation toward industrial production, but also to discomfort around her position during the Third Reich and her relative isolation in postwar East Germany. Her continued success and international visibility during the Third Reich and her location afterwards have contributed to a more complicated postwar reception – particularly in contrast to peers who were displaced, persecuted, or outspokenly antifascist.

The textile innovations of these women were both conceptual and technical. Only recently have they begun to receive increased attention through exhibitions and publications (Cooke 2023, Dorogova 2024). This paper has aimed to provide these women with the recognition they deserve. It has focused on two key aspects that unite these five figures: Firstly, the artistic dimension of their textile work; and secondly, the technical and industrial innovations they introduced. Delaunay created wearable art, or even wearable abstraction. Abstract and modern art entered everyday life through fashion, as seen in her dresses and through interior design. Delaunay expressed her ideas across various media, even painting cars with her abstract patterns. This shows the exchange of aesthetic codes taking place. Likewise, Gray, through her abstract carpet designs, conceived habitable abstraction.

However, their designs were not purely decorative and beautiful, as one might expect from a medium so closely related to art. Designers like Berger and Reichardt also pushed the boundaries of textile technology, merging aesthetic and structural functions. Berger, notably,

filed patents to protect her textile innovations, a rare move for a woman designer at the time and a clear indication of her technical inventiveness and industrial foresight. Reichardt's use of iron yarn was not merely decorative but highly functional, offering both durability and sheen in upholstery for modernist furniture but also for mass produced, industrial airplane seats. This emphasis on materiality illustrates how these women were not only innovating stylistically but also redefining the very fabric of modernist design – challenging the long-standing separation between 'soft' domestic crafts and 'hard' architectural forms. Similarly, Reich, through her use of curtains as architectural elements, redefined spatial experience by replacing solid partitions with flexible, sensorially rich textile interventions. Her contributions, spanning avant-garde interiors to major industrial exhibitions, underscore how textiles could structure, soften and even politicise modernist space, reflecting her deep engagement with both the aesthetic and commercial dimensions of design.

The work of Delaunay, Gray, Reich, Berger and Reichardt disprove enduring presumptions about modernist architecture and design. It compels us to fundamentally rethink the role of textiles in architecture – not as peripheral decoration, but as central to the shaping of spatial experience. Their innovations form a cultural and design heritage that connects fashion, architecture and art in a shared material vocabulary. These women challenged the gendered and material hierarchies that traditionally separated architecture from so-called 'women's work,' demonstrating that textiles are not only aesthetic surfaces but also architectural tools: they structure space, modulate light and sound and offer a dynamic, flexible alternative to rigid forms. Their practices collapsed the boundaries between art, design, fashion and architecture, offering a multidimensional approach to modernism that was at once conceptual, technical and deeply personal. By reclaiming textiles as architectural media, their work lays the foundation for a heritage that remains active – carried forward in contemporary practices that value flexibility, sensorial design and the blurring of boundaries between disciplines.

This project has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (Grant agreement No 101019419).

References

- ADAM, Peter. *Eileen Gray: Her Life and Her Work*. London: Thames & Hudson, 2019.
- COOKE, Lynne and Elissa AUTHER. *Woven Histories: Textiles and Modern Abstraction*. National Gallery of Art, 2023.
- DAMASE, Jacques. *Sonia Delaunay: Fashion and Fabrics*. Paris: Thames and Hudson, 1991.
- STEMPNIAK, Kasia. "Redefining the Interior: Sonia Delaunay's Concept of Dwelling." In *Sonia Delaunay: Living Art*, edited by Waleria Dorogova and Laura Microulis. Bard Graduation Center, 2024.
- GOFF, Jennifer. *Eileen Gray: Her Work and Her World*. Sallins: Irish Academic Press, 2015.
- LANGE, Christiane. *Ludwig Mies van der Rohe & Lilly Reich: Furniture and Interiors*. Ostfildern: Hatje Cantz Verlag, 2006.
- RAUM, Judith. *Otti Berger: Weaving for Modernist Architecture*. Hatje Cantz Verlag, 2024.
- SCHIERZ, Uwe Kai and Patrick ROESSLER. *Vier Bauhaus Maedels: Gertrud Arndt, Marianne Brandt, Margarete Heymann, Margarethe Reichardt*. Dresden: Sandsteinverlag, 2019.
- SEMPER, Gottfried. *The Four Elements of Architecture and Other Writings*. Cambridge University Press, 1989.
- SMITH, T'ai. *Bauhaus Weaving Theory: From Feminine Craft to Mode of Design*. Minnesota: University of Minnesota Press, 2014.